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ANNUAL REPORT

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OF THE

COMMISSIONER OF PATENTS

FOR

THE YEAR 1892.



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REPORT
OF THE
COMMISSIONER OF PATENTS
TO CONGRESS,
FOR THE YEAR ENDING DECEMBER 31, 1892.

Laid before the Senate by the Vice-President January 31, 1893, referred to the Committee on Patents, and ordered to be printed.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., January 31, 1893.

*To the Senate and House of Representatives of the
United States of America in Congress assembled:*

This report is rendered in compliance with the following section of the Revised Statutes:

Sec. 494. The Commissioner of Patents shall lay before Congress, in the month of January, annually, a report giving a detailed statement of all moneys received for patents, for copies of records or drawings, or from any other source whatever; a detailed statement of all expenditures for contingent and miscellaneous expenses; a list of all patents which were granted during the preceding year, designating under proper heads the subjects of such patents; an alphabetical list of all the patentees, with their places of residence; a list of all patents which have been extended during the year, and such other information of the condition of the Patent Office as may be useful to Congress or the public.

The detailed statements and lists of patents and patentees above specified will be found at the end of this report, following what is intended to be such "information of the condition of the Patent Office as may be useful to Congress or the public."

MORE ROOM NEEDED.

Secretaries of the Interior and Commissioners of Patents again and again have given voice to the crying need for more breathing-space for the men and women who work in the Patent Office, and however much of sameness it may entail, an ever-present menace to the health and safety of these people makes it the imperative duty of this report to present this matter again and first of all. On high authority an office occupant needs four thousand cubic feet of air space in a room having "ordinary ventilation," which he occupies two successive hours. Two hundred and seventy people in the examining force of this Bureau have but nine hundred feet of air space each, in rooms which they occupy for seven consecutive hours, and one hundred and ten persons in the assignment and draftsman's divisions have less than five hundred feet of air space each, in rooms which they occupy for the same length of time, and the ventilation is not "ordinary"; it does not rise to that dignity.

Originally the corridors in the Patent Office building ran to the exterior walls, where there are windows admitting light and air; but supposed necessity has since located a room at each extremity, converting the corridors into dead-air spaces, needing artificial light at noonday. The corridor-walls are lined on both sides with unsightly wooden closets and file-cases filled with record-papers. A great number of the force work in basement and sub-basement rooms, intended simply for storage purposes in the original planning of the building.

There are stored more than a thousand tons of cop-

ies of patents on five different floors, tucked into every nook and corner where an eager eye can discover a few feet of available space, so disconnected in order and arrangement that it not infrequently happens that to select two copies standing next each other in number one must travel from the sub-basement to the galleries, four stories above. These copies are stored upon these galleries beyond the limit of safety, the worst overloading being directly over the Commissioner's room, and in that near vicinity the cracking of the roof-supports gives daily evidence of the danger which constantly threatens all below.

The situation is serious. It is one which in reason demands immediate relief. The present Secretary of the Interior, commenting in appreciative and generous phrase upon this matter in his letter to the President of the Senate, dated March 18, 1893, says:

It is imperatively necessary that the Department of the Interior should be granted a public building in which to do its work and preserve its archives commensurate with the important service demanded and the great national services devolved upon it. As it is, burdens of material are not only heaped upon the buildings the Department occupies, beyond their strength, but burdens of labor are imposed upon the officials without regard to human endurance.

It would seem that no reasonable question can be made but that the permanent solution of the difficulty is thus correctly stated; but the Patent Office ought to have relief meanwhile. The immediate relief, which is possible, and which Congress has apparently approved in the past, is the present and entire removal of the General Land Office from the structure commonly known as "the Patent Office building."

By act approved March 3, 1887, it was enacted:

That as soon as practicable after the completion as provided for in the sundry civil act approved August fourth, eighteen hundred and eighty-six, and not later than December first, eighteen hundred and eighty-eight, the Secretary of the Interior shall cause to be removed to the Pension Building the General Land Office, Bureau of Education, Office of Commissioner of Railroads, and Bureau of Labor, and vacate the buildings rented for and now occupied by said offices and Bureaus, or portions thereof.

But under the act approved October 2, 1888, it was—

Provided, further, That so much of the act approved March third, eighteen hundred and eighty-seven, as requires the removal of the General Land Office and the Bureau of Education to said Pension Building be, and the same is hereby repealed.

Congress, however, said this, by act approved March 3, 1891:

For rent of buildings for the Department of the Interior, namely: For the Bureau of Education, four thousand dollars; Geological Survey, ten thousand dollars; Indian Office, six thousand dollars; General Land Office, sixteen thousand dollars; in all thirty-six thousand dollars.

It is understood that less than \$5,000 of the \$16,000 thus appropriated for the rent of the General Land Office was used.

Now that the business of the Land Office is radically diminishing, and in the nature of things must soon become a small matter and so remain, while the business

of the Patent Office steadily increases and must continue so to do, the attention of Congress is earnestly called to this mode of relieving the Patent Office from its great trouble. In this connection it is fair to say that the entire structure now occupied in part by the Patent Office was planned as a Patent Office, and its construction begun under an act approved July 4, 1836. Hundreds of thousands of dollars of patent fees have been incorporated into that building, and inventors have now lying in the United States Treasury more than four millions of dollars, not raised under the taxing power of Congress, but realized under that clause of the Constitution which says that—

Congress shall have power * * * to promote the progress of science and useful arts by securing for limited times to * * * inventors the exclusive right to their * * * discoveries.

MORE FORCE NEEDED.

The number of applications for patent on hand and awaiting action July 1, 1890, was 6,585; the number July 1, 1891, was 8,911. During that year the work fell behind 2,326 cases. At the latter date ten persons were added to the examining corps and four persons to the clerical force. The present Commissioner began his duties August 1, 1891. His last annual report, that for the year ending December 31, 1891, said:

Within the latter half of the year just passed ten persons have been added to the examining corps and four persons to the clerical force of the Patent Office, under provision made for that purpose by the last Congress, and that addition is a most grateful one. But it is not all that is needed. The experience of the last few months shows that the present examining corps may possibly be able to keep the work from falling behind to a greater degree than it is at present, although that is by no means sure.

The number of applications on hand and awaiting action January 1, 1893, was 9,011, showing an increase as compared with July 1, 1891, of 100 cases—that is, the Office had fallen behind to that degree in a year and a half. This comparison seems to show that the present examining force of the Patent Office is about adequate to the performance of the work as it comes in. It really lacks adequacy in a more substantial degree, for a large part of the examining corps has been worked over time since October 1, 1892, by special order. It ought not to be necessary to force the examining corps to work over time. It is believed that no like number of men in the world, assembled in one body, has to perform duties as delicate and difficult as those which are performed by the examining corps of the Patent Office.

There are one hundred and ninety-nine of these Examiners. They have before them, in round numbers, forty thousand applications for patent a year, on which are made something over one hundred and forty-five thousand separate actions, giving each Examiner an average of seven hundred and thirty actions on applications made yearly. In addition to this, they hear and decide a variety of motions, chief among them those for dissolution of interferences, which are argued by counsel, *pro* and *con*, and which require the same study, thought, and deliberation for proper decision as a case in a court of law. They make answers to interlocutory appeals and to appeals on the merits. The Principal Examiners keep the efficiency records of their divisions, and they keep the data for and render a number of reports. There is a variety of duties performed by the Examiners outside of the regular actions on the applications for patent. The United States Supreme Court

has repeatedly spoken of patent law as the “metaphysics of the law,” and that it is. A competent Examiner must possess a wide range of scientific and technical knowledge, a trained capacity for analysis and comparison of mechanism, a fair knowledge of law in general, and a thorough knowledge of that patent law which the Supreme Court says is the “metaphysics of the law.” The code of procedure and practice in the Patent Office is more complicated than that of any court of law, and necessarily so. The necessity inheres in the nature of the work. It is a pleasure to be able to say that the great majority of the Examiners in the Patent Office are competent, and to repeat the statement that it is believed that there is no similar number of men in the world, gathered into one body, performing duties as delicate and difficult as those performed by the examining corps of the Patent Office. Men who do work of this character ought not to be obliged to work over time. Experience in various fields of mental labor has shown that ninety per cent. of all errors are made after five hours of continuous work. The Examiners ought to have ample opportunity for thought and deliberation, and the pace asked of them ought to be one that can be reasonably kept from day to day and year to year. Moreover, their salaries, fixed at their present figure a generation ago, should be properly increased.

Something important remains to be said. At the close of the calendar year 1891 the Patent Office had issued 476,271 mechanical patents, constituting a vast field, some particular lines in which have to be explored from first to last in connection with every one of the forty thousand applications for patent which are made each year. At the close of the calendar year 1892 the Patent Office had issued 498,932 patents. Twenty-three thousand new patents are added to this vast field of exploration yearly.

In order to make this exploration possible, the patents are divided into classes. But the classes necessarily so overlap each other that each class needs to be digested by itself, so that each Examiner in passing upon the novelty of an improvement presented for patent can examine all the classes where he is at all likely to find the improvement in question. Let this proposition be illustrated: One of the Examiners of the Office, as a matter of private enterprise, lately prepared and published a digest of cycles and velocipedes, making 1,503 pages, contained in two volumes. Under the classification of the Office all these improvements are supposed to be found in the sub-classes of Velocipedes and Tires, which are a part of the division of Carriages and Wagons. In order, however, to perfect the compilation, the Examiner found it necessary to read from one hundred and fifty thousand to two hundred thousand patents, comprised in one hundred and fifty other sub-classes, and in almost every one of these one hundred and fifty other sub-classes he found devices which it was necessary to include in his digest. Only two or three such digests exist, and they are the product of private enterprise. If all the classes of invention were thus digested, the work of examination into novelty would be wonderfully facilitated, and at the same time made more thorough than is now possible. The situation is such as to demand the making

of these digests. It is earnestly recommended that thirty-two additional Fourth Assistant Examiners (one for each division) be authorized by law expressly for this work; that sixteen additional Fourth Assistant Examiners be authorized for the purpose of bringing the current work up to date and keeping it there, and that \$25,000 of annual appropriation be made to begin the publication of the digest.

FOR THE GOOD OF THE NATION.

It would almost seem as if there were a halt in the workings of that practical wisdom with which the nation has hitherto treated its inventors. The fathers who builded the Constitution with such rare foresight as to compel the admiration of the world in ever enlarging degree as we recede from the day in which they wrought, gave Congress the power to promote the progress of the useful arts by securing to inventors for limited times the exclusive rights to their discoveries. The Congress of 1790 promptly made a patent law in pursuance of that power. The Congress of 1793 revised it. The Congress of 1836 broadened the foundations of the system, created the Commissioner of Patents, and ordered the building of the Patent Office, substantially as it now exists. The Congresses of 1842, 1861, and 1870 added features of improvement.

The results have more than justified the constitutional provision and the legislation following in its wake. America has become known the world around as the home of invention. We march in the van of human progress. Now and then a great invention, like the telegraph or the telephone, leaps ahead of the line, but thousands upon thousands of busy inventive brains add each its mite of improvement, and before we know it the whole line has moved out to where the product of mighty genius but a little while ago stood alone. A vastly larger number of inventions are of real value than the great public dreams, and those which seem to fall dead contain within them the seed of suggestion which later lives and grows to rich fruition. There is a sad procession of martyrs mingled with the great inventive host; but the country and the world profit by their sacrifice.

Our inventors are the true nation builders, the true promoters of civilization. They take nothing from the public; they ask nothing from the public; they simply add to the sum of human knowledge, to the sum of human possessions, and to the sum of human happiness. With the Ruler of the Universe they share in humble degree His high prerogative of creation, and they but ask to enjoy for a little time the use of the valuable thing they create. The Greeks reserved their highest honors for inventors, and we shall sometime attain to a civilization of like degree.

Into every department of industry and into every possible thing that can conduce to human comfort American inventive genius has entered, to cheapen and to beautify. The Western farmer may know it not, but the inventor of the compound marine engine is possibly the best friend he ever had, and that farmer will find his reward in ascertaining for himself what its effect in cheapening transportation across the ocean has been upon his fortunes. Another example,—a single generation ago our carpets were made for us by foreign hands and the prices were excessive. A great

American inventor produced the Bigelow carpet-loom; building upon the faith of an American patent a million dollars in one instance and a million and a half in another were risked upon the experiment. The result to-day is that our carpets cost about one-third of what they did, and less than one-hundredth of them are made by foreign looms. Had there been no patent law, these millions would never have been risked in the experiment so rich in result to the American people. If to-day the sewing-machine were produced for the first time and we had no patent law, its inventor would hawk it in vain up and down the land to find that foolish man who would risk a half-million dollars in its commercial development, with the certainty that success would but invite a ruinous competition.

If there be one class of men above all others to whom the American nation and the American people are in debt, it is the American inventors. Why not grant them the poor boon of expending for their benefit the moneys they pay?

THE CLASSIFIED SERVICE.

The officials and employés of the Patent Office are 605 in number, classified as follows:

Commissioner	\$5,000
Assistant Commissioner	3,000
Chief Clerk	2,250
Two law clerks	2,000
Three Examiners-in-Chief	3,000
Examiner of Interferences	2,500
Thirty-two Primary Examiners	2,500
Thirty-four First Assistant Examiners	1,800
Thirty-eight Second Assistant Examiners	1,600
Forty-three Third Assistant Examiners	1,400
Fifty-two Fourth Assistant Examiners	1,200
Financial clerk	2,000
Librarian	2,000
Three chiefs of divisions	2,000
Three assistant chiefs of divisions	1,800
Five clerks of Class 4 (one application clerk)	1,800
Machinist	1,600
Six clerks of Class 3 (one translator)	1,600
Fourteen clerks of Class 2	1,400
Fifty clerks of Class 1	1,200
Skilled laborer	1,200
Three skilled draftsmen	1,200
Four draftsmen	1,000
Messenger and property clerk	1,000
Twenty-five permanent clerks	1,000
Five model attendants	1,000
Ten model attendants	800
Sixty copyists (five of drawings)	900
Seventy-six copyists	720
Three messengers	840
Twenty assistant messengers	720
Forty-five laborers	600
Forty-five laborers	480
Fifteen messenger boys	360

The following are appointed by the President, by and with the advice and consent of the Senate, (S. 476, R. S.):

Commissioner	\$5,000
Assistant Commissioner	3,000
Three Examiners-in-Chief	3,000

All of the remainder are in the classified service, and appointed through the medium of the Civil Service Commission, except the following, 138 in number, who are appointed by the Secretary of the Interior upon the nomination of the Commissioner of Patents, (S. 476, R. S.):

Chief Clerk	\$2,250
Two law clerks	2,000
Examiner of Interferences	2,500
Financial clerk	2,000
Three chiefs of divisions	2,000
One clerk of Class 1 (Commissioner's secretary)	1,200
Messenger and property clerk	1,000
Three messengers	840
Twenty assistant messengers	720
Forty-five laborers	600
Forty-five laborers	480
Fifteen messenger boys	360

If any but good results have flowed from the establishment of the classified service in the Patent Office, they do not readily rise to mind. There is no proper place for politics in the Patent Office from top to bottom, and if, with the exception of the Chief Clerk, the law clerks, the financial clerk, and the personal clerk of the Commissioner, all who are now in the unclassified service were made a part of the classified it would be a measure of great practical value. One thousand applications a year is a reasonable estimate of the number of those made to the Commissioner for appointment in the unclassified service. By making the change suggested this tax on the time and feelings of the Commissioner—and it is the hardest thing he has to meet in a volume of work that is both great and severe—would be eliminated, and a similar tax on the time and attention of persons whose “influence” with the Commissioner is sought would suffer the same fate.

THE COMMISSIONERSHIP.

As the present Commissioner will soon cease to be such, the situation affords an opportunity for some remarks about the Office, which, it is believed, will find a decided and assenting echo in the minds of the great majority of inventors, of lawyers who practice before the Patent Office, of manufacturers, and of all Americans who take an intelligent interest in the Patent Office and in the advancement of the useful arts. The appointment of the Commissioner of Patents and the Assistant Commissioner ought at once and forever to cease to be political, their salaries should be increased, and they should hold office on the tenure of good behavior. These positions are, first of all judicial in their nature. During the calendar year 1892 the Commissioner and Assistant Commissioner heard or read arguments on and made written decisions in eight hundred and eight cases. Not infrequently there is an array of eminent counsel on both sides of these cases, and the hearing occupies the larger part of a day. If this volume of judicial work is surpassed in amount or importance by that of any other two persons in the land, it would not be easy to demonstrate the fact. Unless the persons who make these decisions have a previous training and education fitting them for these judicial duties, their performances are but a cruel travesty of true judicial action. Given fitness, it is still in the highest degree important that the lines upon which these judicial decisions are rendered should be stable and certain and not liable to change as the Office shifts from person to person at short intervals. There have been ten Commissioners since November 1, 1874, giving each an average term of a little less than two years. Again, the procedure of the Office is so intricate and peculiar that no Commissioner can master it at the moment he begins his duties. It requires an apprenticeship. Still again, the proper discipline and management of the Office force require stability in the tenure of the Commissioner. Under the present practice there must necessarily be a degree of demoralization in this regard for a period of time immediately preceding the retirement of a Commissioner and for a like period of time immediately succeeding the accession of a new one. The

Patent Office is no more political in its nature than is a well-regulated court of law, and it would be just as reasonable to appoint and remove the judges of the Federal courts on a political basis as it is to do that same thing by the Commissioner of Patents. The fortunes of a political party cannot be advanced or retarded by what is done in the Patent Office. It is a business office, in close touch with the business interests of the country, and everything in and about it should proceed upon a business basis.

THE PATENT OFFICE AT THE WORLD'S COLUMBIAN EXPOSITION.

For more than a year past the preparation of a Patent Office exhibit for the World's Columbian Exposition at Chicago has been in progress. It has required the expenditure of a great amount of care, thought, and labor, which the Office could not afford to spare; but the result is gratifying. The exhibit comprises upward of twenty-five hundred models, nearly all of them working machines in all except size. They are divided into groups or classes as follows:

Plows (including Cultivators)	43
Harrow and Diggers	34
Seeders and Planters	22
Harvesters	58
Fences and Gates	25
Excavating	44
Bridges	8
Fire Escapes and Ladders	4
Centrifugal Machines	15
Boot and Shoe Machinery	111
Leather-Working Machinery	18
Screw-Making Machines	106
Nail-Making Machines	27
Horseshoe-Making	9
Chain-Making	5
File-Cutting and Gear-Cutting	17
Wire-Working	26
Sheet-Metal Working and Soldering	46
Punching and Shearing	13
Brick and Tile Making	96
Paper-Making	61
Electric Dynamos and Motors	93
Telegraphy	30
Electric Lighting	19
Telephony	40
Printing	106
Steam-Engines (including Locomotives)	206
Steam-Steering	8
Injectors and Ejectors	57
Locks	43
Carding and Combing	50
Spinning	23
Cordage	32
Weaving	50
Knitting and Netting	33
Cloth-Finishing (including Cloth-Measuring)	60
Felting and Fulling (including Hat-Making)	28
Marine-Propulsion	283
Ships	84
Ordnance	117
Firearms	160
Sewing-Machines	103
Thrashing	35
Mills (including Grain-Weighing)	10
Laundry	43
Washing Apparatus	21
Refrigeration	13
Aeration and Bottling	7
Wood-Turning	13
Woodworking Machines	21
Wood-Sawing	6
Type-writing Machines	36
Tanning	32

The models in each group are arranged in chronological order, beginning with the first crude implement and ending with the latest improvement. While omitting many details in various lines of improvement, these models constitute as a whole a most valuable and, as it is believed, a hitherto unequalled representation of the development of invention. The models necessary to illustrate the development of a number of the arts of greatest general interest have been selected with care from those on file in this Office, and these have been supplemented by building

such models as were found necessary to represent early inventions not in the possession of the Office. They have been further supplemented by loans from inventors and manufacturers of models of later patented inventions not represented in the Office by models. The responses made by inventors and manufacturers to requests of the Office for loans of this sort have been remarkably generous, and the Commissioner takes this occasion to heartily thank each and all of those who have made these loans for their cordial co-operation. The entirety forms a collection of very great cost, value, and beauty.

In the lines of inventions which are distinctively American, those which had their inception and highest development in this country under the encouragement afforded by our patent laws, such as the harvester, the sewing-machine, and the telephone, the exhibit has been made especially full.

In *harvesters*, an invention the value of which to the American farmer cannot be overestimated, the exhibit begins with a model representing a "header" used in Gaul in the first century, a model of Boyce's mowing-machine, patented in England in 1799, and several models illustrating early unsuccessful attempts at a mowing-machine made in this country. The stages through which the art advanced are shown by the Hussey mower of 1833, the McCormick reaper, patented in 1834, (two inventions which marked the beginning of the modern art,) the Mann harvester of 1850, the "New Yorker" reaper, manufactured and sold prior to 1850, the first knotter for self-binders—that patented by Behel in 1860—and many other of the pioneer inventions in this art. The growth of the art is traced through these inventions to its development in the latest complete machines which will be used in harvesting the crops of 1893. In this history of the harvester it has been necessary, on account of the destruction of models by the fire of 1877, to build a number of the earlier models and to ask the loan of others; but with these additions the history is believed to be full and accurate. To illustrate the growth of this art, there have been selected twenty-seven models from those on file in the Office; four have been built, and twenty-seven have been loaned for the purposes of this exhibit by inventors and manufacturers. Some of these last have been built by manufacturers at their own very considerable expense especially for this exhibit.

The exhibit of the growth of the *sewing-machine* begins with the earliest attempt at mechanical sewing devices of which there is a clear record, the Greenough machine of 1842, and the first machine of practical value as a sewing-machine, the invention of Elias Howe, patented in 1846. The successive steps of improvement from this beginning are illustrated each by a working model to the final development in the perfected machines manufactured under existing patents. To show this history of the sewing-machine, seventy-seven models have been selected from those on file in the Office and twenty-six, mostly modern machines now on the market, have been loaned by manufacturers and inventors. This is believed to be such a showing of the growth of the sewing-machine as can be furnished by no other institution in this or any other country.

In *telephones* substantially the whole history of the art is presented in the exhibit, beginning with the Bell telephone of 1876 and showing the important improvements down to the latest telephone used to-day. In this exhibit of the models on file in this Office twenty have been selected, and nearly twenty more are to be loaned by manufacturers.

In *agricultural implements other than harvesters*—such as plows, cultivators, and like implements—forty-three models, eleven of them loaned, illustrate the development from the primitive Egyptian and Assyrian plows down to the modern sulky-plows and cultivators. Twenty-two models of seeders and planters, three of them loaned, show the development of the latest practical devices in that line, and the development of the modern harrow is illustrated by twenty-eight models, seven of them loaned. Farm fences and gates are shown in improved forms by twenty-five models, two of which were loaned to the Office by inventors. A special effort in preparing this exhibit has been made to show the value of the patent system to the farmer, stimulating, as it has, the great improvements which give the American farmer of to-day the best implements to be found in the world. In harvesters, as well as in plows and cultivators, no substantial improvement took place from the beginning of the Christian era until the establishment of our patent system. Under this system the improvement has been continuous. This exhibit shows that fact, and it is a convincing proof of the value of the patent system to the farmer.

In *ordnance* a full history of the growth of the art to its development in the modern rapid-fire revolving cannon is shown, beginning with a model of the early Chinese wooden cannon used before gunpowder was known to Europeans. The successive stages of the growth of this art are illustrated in one hundred and fourteen models selected from those on file in this Office, supplemented by the models built expressly for the exhibit.

In *firearms* the inception of the art is shown by models of the early pyrotechnic hand weapon, fired like a Roman candle from the muzzle, and the hand culverin of the Middle Ages. The advance through the successive stages of the match-lock, the fire-lock, the flint-lock, the early percussion-lock, and the crude form of breech-loader is fully shown. The final development in the modern repeating breech-loader is shown by means of guns of the latest model, which have been furnished by the manufacturers. This history of the small-arm is shown by one hundred and thirty-eight models selected from those on file in the Office and twenty-two others, two of which have been built and twenty loaned from various sources.

In the *art of spinning* the exhibit begins with models of the ancient distaff and spindle, the early East Indian spinning-wheel, and the English spinning-wheel used in this country in Colonial times. Models of Hargreave's spinning-jenny of 1763, the first practical spinning-machine made, and Arkwright's water-frame of 1769, the first practical roller spinning-machine, are shown. The growth of the art since the beginning of the American patent system down to the latest self-acting mules is shown by fourteen

models selected from those on file in the Office. The earlier art is shown by nine models which have been built for this purpose.

In the *art of weaving* the history is shown from the ancient Egyptian and Roman looms, the primitive East Indian loom, and the Navajo Indian loom, through the successive stages of advance to the final development in the power-looms of recent date for weaving carpets and other figured fabrics of complicated structure and pattern. In this history are used forty-two models from the Office and eight models constructed especially for the exhibit.

The growth of the *art of printing* under the stimulus afforded by the wise provisions of the patent laws is represented by models of the Gutenberg press, the Franklin, and other early presses, showing what the art was before the beginning of our patent system, and a series of models of patented improvements in printing-presses, from the Adams press of 1830 down to the latest perfecting newspaper-press of the present day. One hundred and one models from the Office files are used in this history, supplemented by five furnished by inventors or manufacturers.

In *steam-engines* the exhibit shows the early forms of the engine, including Hero's aeropile of 150 B. C., the engines of Papin, Savery, Newcomen, and Watt, the early locomotive-engines of Trevethick, Stephenson, and others, down to the modern steam-engine and the modern locomotive. In this history of the steam-engine two hundred and six models are used ten of which were built expressly for the exhibit and ten others loaned by inventors.

In the other important arts the same growth under the encouragement afforded by our patent laws could be shown were it not for necessary limitation in exhibition space.

In each art in which an exhibit is made the models have been selected with a view to showing the history of the art as correctly as possible. Those inventions only have been selected which have had a direct bearing on the advance of the art toward its final development. And while, on account of the destruction of the Office models by the fire of 1877, the history cannot in all cases be as full as could be desired, yet, taken as a whole, they present a grand historical exhibit of the progress of the useful arts, which will not only show what has been done by our patent system, but will, it is believed, be of great interest not only to inventors and manufacturers, but to the public generally. The total number of models selected from the Office for the exhibits in all the arts enumerated is two thousand four hundred and fifty; the number of models built is fifty, and the number of models loaned to the Office is two hundred and fifty.

The preparation of this exhibit has only been made possible by the unwearying and unselfish labor of the Patent Office committee with the Assistant Commissioner at their head, who have had it in charge, and it is with pleasure that the great value of their services is hereby specially recognized.

LEGISLATION DESIRED CONCERNING INTERNATIONAL MATTERS.

In the year 1883 an International Union for the Protection of Industrial Property was concluded at Paris

through the agreement of several nations. The United States of America became a member of that union in 1887 by virtue of proceedings in the nature of an international treaty. Thereupon the articles of this union became a part of the fundamental law of the land under that clause of the Constitution which says that—

all treaties made or which shall be made under the authority of the United States shall be the supreme law of the land.

But no statutes have been enacted in this country to enforce and carry out the provisions of this treaty. There is ground for difference of opinion as to just what laws ought to be made by the United States of America for this purpose; but there is no question but that some laws are needed, and at present the United States is open to the charge of non-fulfillment of its treaty obligations.

The condition is thought to be one that calls for careful and considerate inquiry as to the legislation which is necessary and desirable. Of course a committee of Congress can make that inquiry, or a commission might be created for that purpose, or the Commissioner of Patents might be called upon to report specifically in the matter, and possibly there are other modes of properly conducting such inquiry. Attention is thus called to the matter at this time for the purpose of earnestly urging that Congress prepare the way for early legislation by adoption of some measure adapted to elicit the desired information. If it shall thereby appear that our treaty obligations can be met without impairing the efficiency of our present laws, the way would seem to be clear for the enactment of appropriate legislation. If, on the contrary, the obligations which our Government has assumed are found so at variance with existing law that legislation to enforce them will materially impair our system, it may be found best to abandon the convention which imposes such obligations. The next conference of the international union will convene at Brussels in 1894, and it is to be hoped that then the American delegates may be able to show to the other nations which are members of the union that the Congress of the United States of America is fully sensible of the obligations assumed by the Government and is prepared to execute them, or else that, finding them inconsistent with our law, it has determined to withdraw from the union.

There is another matter of an international character which ought to have instant attention. Our patent law is exceptionally liberal toward foreigners. A foreign patent is no bar to a subsequent similar grant in the United States. Like liberality is not, as a rule, extended to American inventors by foreign countries. In the recent German patent law a provision exists apparently designed to ameliorate the present hard condition of American inventors by providing that an official publication of the specification of a patent shall not bar the grant of a subsequent patent in Germany if application is made in the latter country within three months from and after such publication, provided that the country in which the publication is made confers the reciprocal privilege on Germans. This privilege is conferred by our Government, and therefore our citizens are entitled to enjoy the benefit of this German

statute. It happens, however, that the German law of contains the additional proviso that the existence of the required reciprocity shall be certified by proclamation of the Imperial Chancellor, and although the German law has been in force for a year and a half that official has hitherto neglected or refused to make the publication which is necessary in order to enable American citizens to enjoy its benefits. Such an amendment to our patent law should immediately be made as will restrict the enjoyment of its privileges in this regard to the citizens or subjects of such states as shall grant reciprocal privileges to American citizens.

The following bill for this purpose is now pending before the Senate, and it is hoped that it may at once become a law:

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That no patent shall be granted for an invention which has been patented or officially made public in any foreign country, unless such country shall grant the same privilege to citizens of the United States, or unless the application shall be made under a treaty or convention between the United States and such country.

OTHER DESIRED LEGISLATION.

The following amendments to the patent law and the trade-mark law are recommended:

First. An amendment to the effect that no improvement shall be patentable which has been for more than two years before application for patent thereon disclosed in any patent or printed publication issued in this country. Under existing law two years of public use in this country creates such a bar, and on principle two years of disclosure in a patent or printed publication should be put upon the same footing.

Second. An amendment to the effect that a patent shall not expire with the expiration of a prior foreign patent for the same invention. The existing law upon this subject has been found to work confusion, uncertainty, and fraud.

Third. An amendment compelling an applicant to take action upon his application at least once in every six months, in lieu of once in two years, as at present, and a further provision that a patent shall in no case live for more than twenty years from the date of the first application therefor. The adoption of such amendments would put an end to keeping applications for patents pending many years prior to issue.

Fourth. An amendment requiring patent licenses to be recorded the same as assignments and grants. Licenses are often so drawn as to convey away the whole substance of a patent, and yet under existing law they do not need to be recorded. The same reason that calls for the recording of assignments and grants calls equally for the recording of licenses.

Fifth. An amendment putting aliens upon the same footing as citizens as to the filing of caveats. In all other respects than this our patent law makes no distinction between citizens and aliens, and the retention of this distinction in the statute is clearly an oversight.

Sixth. An amendment abolishing interference contests in the Patent Office and relegating them to the courts. These interferences are, to all intents and purposes, lawsuits between two or more parties who are seeking to patent the same invention. The Patent Office has not the power to compel witnesses to behave properly in these matters. It has not the tribunals adequate for the trial of these causes, and they

entail a grievous burden of work upon the Office, which, distributed among the different courts, would not be felt as a sensible addition to their labors. Moreover, a court adjudication of one of these cases would be of great practical value to an interference contestant, which value is wholly lacking in an adjudication given by the Patent Office, and the cost of the litigation in a court could not be greater than it is at present.

Seventh. An amendment providing that no damages or profits shall be recovered in a suit for infringement, except such as accrue within the six years last preceding the bringing of the suit. The reason for the enactment of this statute of limitations is apparent without detailed explanation.

Eighth. A statute providing that an injunction issued by a court against the transfer of a patent may be registered in the Patent Office and thereupon be constructive notice to all the world. It is believed that the propriety of such a provision is obvious.

Ninth. A statute giving courts of equitable jurisdiction power to pass the title to Letters Patent in a proper case without any action on the part of the defendant. Now the courts must act in such a case by compelling the defendant to sign the necessary conveyance, and a defendant can readily defy the court by putting himself outside of its territorial jurisdiction.

Tenth. A provision in the law to the effect that the Commissioner of Patents may refund to the payer money paid into the Patent Office by mistake. This is the present practice of the Office—a practice founded in equity; but it ought to have the express sanction of law.

Eleventh. A permanent provision in the statute defining the duties of the Assistant Commissioner of Patents.

Twelfth. An amendment to the trade-mark law permitting registry of trade-marks which are used in commerce between the States, the permission now being restricted to trade-marks used in foreign commerce or in commerce with the Indian tribes.

RECEIPTS.

Detailed statement of all moneys received for patents, for copies of records or drawings, or from any source whatever.

Applications:	
Cash received.....	\$1,114,795 00
Cash refunded.....	3,740 00
Net cash.....	1,111,055 00
Certificates of deposit.....	42,368 95
Total cash and certificates.....	1,153,423 95
Copies:	
Cash received.....	102,355 01
Cash refunded.....	5,716 53
Net cash.....	96,638 48
Certificates of deposit.....	869 35
Total cash and certificates.....	97,507 83
Recording assignments:	
Cash received.....	22,479 20
Cash refunded.....	1,227 85
Net cash.....	21,251 35
Certificates of deposit.....	203 00
Total cash and certificates.....	21,454 35

Subscription to Official Gazette:	
Cash received.....	13,620 79
Cash refunded.....	79 79
Net cash.....	13,541 00
Certificates of deposit.....	128 70
Total cash and certificates.....	13,669 70
Registration of labels:	
Cash received.....	2,868 00
Cash refunded.....	2,610 00
Net cash.....	258 00
Certificates of deposit.....	18 00
Total cash and certificates.....	276 00
Aggregates.	
Cash received.....	\$1,256,118 00
Cash refunded.....	13,374 17
Net cash.....	1,242,743 83
Certificates of deposit.....	43,588 00
Total cash and certificates.....	1,286,331 83

EXPENDITURES.

Amount expended by this Office under the several appropriations from January 1, 1892, to December 31, 1892.

Salaries.....	\$673,478 70
Official Gazette.....	55,668 80
Photolithographing.....	99,168 84
Scientific library.....	2,376 56
Transportation of publications to foreign governments.....	319 27
International Union for Protection of Industrial Property.....	681 76
Total.....	831,693 93

*Approximate amount reported by the Department of the Interior as expended on account of this Office from January 1, 1892, to December 31, 1892.**

Stationery.....	\$10,623 10
Postage on foreign matter.....	2,415 00
Printing and binding.....	240,171 97
Watch force.....	16,600 00
Furniture.....	2,800 66
Carpets.....	2,013 90
Ice.....	275 12
Telephones.....	468 00
Washing towels.....	132 00
Sundries.....	3,545 56
Total.....	279,045 31
Aggregate amount of expenditures.....	1,110,739 24

RECEIPTS OVER EXPENDITURES.

Total receipts.....	\$1,286,331 83
Total expenditures.....	1,110,739 24
Receipts over expenditures.....	175,592 59

Statement of balance in the Treasury of the United States on account of the patent fund.

Amount to the credit of the fund January 1, 1892..	\$4,004,317 67
Amount of receipts during the year 1892.....	1,286,331 83
Total.....	5,290,649 50
Deduct expenditures for the year 1892.....	1,110,739 24
Balance January 1, 1893.....	4,179,910 26

SUMMARY OF THE BUSINESS OF THE PATENT OFFICE.

Number of applications for patents for inventions.....	39,514
Number of applications for patents for designs.....	1,130
Number of applications for reissues of patents.....	109
Total number of applications.....	40,753

Number of caveats filed.....	2,290
Number of applications for registration of trade-marks.....	2,179
Number of applications for registration of labels.....	458
Number of disclaimers filed.....	7
Number of appeals on the merits.....	1,025
Total.....	5,959

Total number of applications, etc., requiring investigation and action.....	46,712
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Number of patents issued, including designs.....	23,478
Number of patents reissued.....	81

Total.....	23,559
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Number of trade-marks registered.....	1,737
Number of labels registered.....	6

Total.....	1,743
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Number of patents expired during the year.....	13,291
Number of patents withheld for non-payment of final fees.....	3,836

PATENTS ISSUED.

Patents to citizens of the United States, with the ratio of population to each patent granted.

States and Territories.	Patents and designs.	One to every—
Alabama.....	104	14,548
Arizona Territory.....	16	3,726
Arkansas.....	102	11,060
California.....	652	1,852
Colorado.....	225	1,831
Connecticut.....	781	955
Delaware.....	33	5,105
District of Columbia.....	185	1,245
Florida.....	65	6,021
Georgia.....	95	19,340
Idaho.....	18	4,688
Illinois.....	2,170	1,763
Indian Territory.....	7	.....
Indiana.....	653	3,357
Iowa.....	417	4,584
Kansas.....	287	4,972
Kentucky.....	240	7,744
Louisiana.....	122	9,168
Maine.....	146	4,527
Maryland.....	237	3,632
Massachusetts.....	1,878	1,192
Michigan.....	794	2,637
Minnesota.....	385	3,381
Mississippi.....	55	23,447
Missouri.....	753	3,558
Montana.....	67	1,972
Nebraska.....	209	5,066
Nevada.....	13	3,520
New Hampshire.....	112	3,361
New Jersey.....	1,001	1,443
New Mexico Territory.....	17	9,034
New York.....	3,781	1,586
North Carolina.....	85	19,034
North Dakota.....	26	7,027
Ohio.....	1,533	2,395
Oklahoma Territory.....	3	20,611
Oregon.....	80	3,922
Pennsylvania.....	2,130	2,468
Rhode Island.....	252	1,371
South Carolina.....	69	16,683
South Dakota.....	64	5,137
Tennessee.....	133	13,289
Texas.....	359	6,227
Utah Territory.....	50	4,158
Vermont.....	76	4,373
Virginia.....	151	10,966
Washington.....	117	2,986
West Virginia.....	84	9,080
Wisconsin.....	507	3,327
Wyoming Territory.....	11	5,518
United States Army.....	10	.....
United States Navy.....	17	.....
Total.....	21,427	.....

*A literal compliance with the provisions of the statute requiring "a detailed statement of all expenditures for contingent and miscellaneous expenses" is not possible, for the reason that the contingent fund for the several bureaus of this Department was consolidated by the act of March 3, 1883, and hence no part of that fund is disbursed by the Patent Office, and I am furnished only with an approximate sum expended on behalf of the Patent Office.

Patents granted to citizens of foreign countries.

Argentine Republic.....	2	Netherlands.....	5
Austria-Hungary.....	66	Newfoundland.....	1
Belgium.....	15	New South Wales.....	16
Brazil.....	3	New Zealand.....	6
British Guiana.....	2	Norway.....	12
Canada.....	296	Peru.....	1
Cape Colony.....	2	Porto Rico.....	1
Colombia.....	1	Portugal.....	2
Costa Rica.....	2	Queensland.....	2
Cuba.....	9	Reunion Island, Indian Ocean.....	1
Denmark.....	5	Roumania.....	2
Egypt.....	1	Russia.....	23
England.....	653	Scotland.....	41
France.....	197	South Australia.....	3
Germany.....	507	Spain.....	5
Guatemala.....	1	Sweden.....	34
Hawaii.....	4	Switzerland.....	42
Honduras.....	1	Venezuela.....	3
India.....	6	Victoria.....	25
Ireland.....	16	West Australia.....	1
Italy.....	12	West Indies.....	1
Japan.....	2		
Luxemburg.....	1	Total.....	2,051
Mexico.....	20		

The following tables present a comparative statement of the business of the Patent Office since the enactment of the statute of 1836 and exhibit in detail the business of the Office during the last calendar year:

Comparative statement of the business of the Office from 1837 to 1892, inclusive.

Year.	Applica- tions.	Claims filed.	Patents and re- issues.	Cash re- ceived.	Cash ex- pended.	Surplus.
1837.....			435	\$29,289 08	\$33,506 98	.....
1838.....			520	42,123 54	37,338 02	\$4,784 62
1839.....			425	38,019 97	34,543 51	3,476 46
1840.....	765	228	473	38,056 51	39,020 67	.....
1841.....	847	312	495	40,413 01	52,666 87	.....
1842.....	761	291	517	36,505 63	31,241 43	5,264 20
1843.....	819	315	519	35,315 81	30,776 96	4,538 85
1844.....	1,045	380	497	42,509 26	36,344 53	6,164 73
1845.....	1,246	452	503	51,076 14	39,395 65	11,680 49
1846.....	1,272	448	638	50,264 16	46,138 71	4,105 45
1847.....	1,531	533	569	63,111 10	41,878 35	21,232 84
1848.....	1,628	607	653	67,576 69	58,905 84	8,670 85
1849.....	1,955	595	1,077	80,752 78	77,716 44	3,036 34
1850.....	2,193	602	993	86,927 05	80,100 95	6,826 10
1851.....	2,258	760	802	95,738 61	86,916 93	8,821 68
1852.....	2,639	996	1,019	112,056 34	95,916 91	16,139 43
1853.....	2,673	901	961	121,527 45	132,869 83	.....
1854.....	3,324	868	1,844	163,789 84	167,146 32	.....
1855.....	4,435	906	2,013	216,459 35	179,540 33	36,919 02
1856.....	4,960	1,024	2,505	192,588 02	199,931 02	.....
1857.....	4,771	1,010	2,496	196,132 01	211,582 09	.....
1858.....	5,364	943	3,710	208,716 16	193,193 74	10,522 42
1859.....	6,225	1,097	4,538	245,942 15	210,278 41	35,663 74
1860.....	7,053	1,084	4,819	256,352 59	252,820 80	3,531 79
1861.....	4,643	700	3,340	137,354 44	221,491 91	.....
1862.....	5,038	824	3,521	215,754 99	182,810 39	32,944 60
1863.....	6,014	787	4,170	195,593 29	189,414 14	6,179 15
1864.....	6,972	1,063	5,020	240,919 98	229,868 00	11,051 98
1865.....	10,664	1,937	6,616	348,791 84	274,199 34	74,592 50
1866.....	15,269	2,723	9,450	495,665 38	361,724 28	133,941 10
1867.....	21,276	3,597	13,015	646,581 92	639,263 82	7,318 60
1868.....	20,445	3,705	13,378	681,565 86	628,679 77	52,886 09
1869.....	19,271	3,624	13,986	693,145 81	486,430 74	206,715 07
1870.....	19,171	3,273	13,321	669,456 76	557,147 19	112,309 57
1871.....	19,472	3,366	13,033	678,716 46	562,091 64	116,624 82
1872.....	18,246	3,090	13,590	699,726 39	665,595 00	34,131 39
1873.....	20,414	3,248	12,864	703,191 77	691,178 98	12,012 79
1874.....	21,602	3,181	13,599	738,278 17	679,288 41	58,989 76
1875.....	21,638	3,094	14,837	743,453 36	721,637 71	21,795 65
1876.....	21,425	2,697	15,595	757,987 65	652,542 60	105,445 05
1877.....	20,308	2,809	14,187	732,342 85	613,132 62	119,190 23
1878.....	20,260	2,755	13,444	725,375 55	593,082 89	132,292 66
1879.....	20,059	2,620	13,213	703,991 47	529,638 97	174,292 50
1880.....	23,012	2,490	13,947	749,685 32	538,865 17	210,820 15
1881.....	26,059	2,406	16,584	853,665 89	605,173 28	248,492 61
1882.....	31,322	2,553	19,267	1,009,219 45	683,867 67	325,351 78
1883.....	34,576	2,741	22,383	1,146,240 00	675,234 86	471,005 14
1884.....	35,600	2,582	20,413	1,075,798 80	970,579 76	105,219 04
1885.....	35,717	2,552	24,233	1,188,089 15	1,024,378 85	163,710 30
1886.....	35,968	2,513	22,508	1,154,551 40	992,503 45	162,047 95
1887.....	35,613	2,622	21,477	1,144,509 60	994,472 22	150,037 38
1888.....	35,797	2,251	20,506	1,118,516 10	973,108 78	145,407 32
1889.....	40,575	2,481	24,158	1,281,728 05	1,052,955 96	228,772 09
1890.....	41,048	2,311	26,292	1,340,372 66	1,099,297 74	241,074 92
1891.....	40,552	2,408	23,244	1,271,285 78	1,139,713 35	131,572 43
1892.....	40,753	2,290	23,559	1,286,331 88	1,110,739 24	175,392 59

Statement showing the number of the first patent, Design patent, and reissued patent, and the number of the first certificate of registration of a Trade-Mark and a Label issued in each calendar year since July 28, 1836, when the present series of numbers of Letters Patent commenced, together with the total number of each issued during the year.

[The number of patents granted prior to the commencement of this series of numbering (July 28, 1836) was 9,957.]

Year.	Number of first patent and certificate issued in each calendar year.					Number of patents and certificates of registration issued during each calendar year.						
	Patents.	Designs.	Reissues.	Trade-Marks.	Labels.	Patents.	Designs.	Reissues.	Total patents.	Trade-Marks.	Labels.	Total certificates.
1836 (July 28)	1					109						
1837	110					436						
1838	546					515			6			
1839	1,061		1			404		13				
1840	1,465		20			458		10				
1841	1,923		30			490		6				
1842	2,413		36			488		13				
1843	2,901	1	49			494	14	11	519			
1844	3,395	15	60			478	12	7	497			
1845	3,873	27	67			475	17	11	503			
1846	4,348	44	78			566	59	13	638			
1847	4,914	103	91			435	60	14	569			
1848	5,409	163	105			584	46	23	653			
1849	5,993	209	128			958	49	30	1,067			
1850	6,981	258	158			884	83	26	993			
1851	7,865	341	184			757	90	25	872			
1852	8,622	431	209			890	109	20	1,019			
1853	9,512	540	229			846	86	29	961			
1854	10,358	626	258			1,759	57	28	1,844			
1855	12,117	683	286			1,892	70	51	2,013			
1856	14,009	753	337			2,315	107	83	2,505			
1857	16,324	860	420			2,686	113	97	2,896			
1858	19,010	973	517			3,467	102	126	3,695			
1859	22,477	1,075	643			4,165	108	231	4,504			
1860	26,642	1,183	874			4,363	183	232	4,778			
1861	31,005	1,366	1,106			3,040	142	147	3,529			
1862	34,045	1,508	1,253			3,221	195	116	3,532			
1863	37,266	1,703	1,369			3,781	176	227	4,184			
1864	41,047	1,879	1,596			4,638	139	248	5,025			
1865	45,685	2,018	1,844			6,099	221	296	6,616			
1866	51,784	2,299	2,140			8,874	294	290	9,458			
1867	60,658	2,533	2,430			12,301	325	400	13,026			
1868	72,959	2,858	2,830			12,544	446	420	13,410			
1869	85,503	3,304	3,200			12,957	506	534	13,997			
1870	98,460	3,810	3,784	1		12,157	737	439	13,333	121		121
1871	110,617	4,547	4,223	122		11,687	905	464	13,056	486		486
1872	122,304	5,452	4,687	608		12,200	854	529	13,613	491		491
1873	134,504	6,336	5,216	1,099		11,616	747	501	12,864	492		492
1874	146,120	7,083	5,717	1,591	1	12,230	856	483	13,599	559	232	791
1875	158,350	7,969	6,200	2,150	233	13,291	915	631	14,837	1,138	232	1,370
1876	171,641	8,884	6,831	3,288	465	14,172	802	621	15,595	959	472	1,431
1877	185,813	9,686	7,452	4,247	937	12,920	699	568	14,187	1,216	392	1,608
1878	198,733	10,385	8,020	5,463	1,329	12,345	590	509	13,444	1,455	492	1,947
1879	211,078	10,975	8,529	6,918	1,821	12,133	592	488	13,213	872	355	1,227
1880	223,211	11,567	9,017	7,790	2,176	12,926	515	506	13,947	349	203	552
1881	236,137	12,082	9,523	8,139	2,379	15,548	565	471	16,584	834	202	1,036
1882	251,685	12,647	9,994	8,973	2,581	18,135	861	271	19,267	947	304	1,251
1883	269,820	13,508	10,265	9,920	2,885	21,196	1,020	167	22,383	902	906	1,808
1884	291,016	14,528	10,432	10,822	3,791	19,147	1,150	116	20,413	1,021	513	1,534
1885	310,163	15,678	10,548	11,843	4,374	23,331	773	129	24,233	1,067	391	1,458
1886	333,494	16,451	10,677	12,910	4,695	21,797	595	116	22,508	1,029	378	1,407
1887	355,291	17,046	10,793	13,939	5,073	20,429	949	99	21,477	1,133	380	1,513
1888	375,720	17,995	10,892	15,072	5,453	19,585	835	86	20,506	1,059	327	1,386
1889	395,505	18,830	10,978	16,131	5,780	23,360	723	75	24,158	1,229	319	1,548
1890	418,665	19,553	11,053	17,360	6,099	25,322	856	84	26,292	1,415	304	1,719
1891	443,987	20,439	11,173	18,775	6,403	22,328	836	80	23,244	1,762	137	1,899
1892	466,815	21,275	11,217	20,537	6,540	22,661	817	81	23,559	1,737	6	1,743
1893	488,976	22,092	11,298	22,274	6,546							

Respectfully submitted,
W. E. SIMONDS,
Commissioner.

ALPHABETICAL LIST

OF

PATENTEES FOR THE YEAR 1892.

[Patentees of Designs, Trade-Marks, and Labels, and parties who have filed Disclaimers follow this in separate indexes, but precede the Alphabetical List of Inventions.]

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Specification.	Drawing.	Volume.	Page.
A. B. Pullman Company. (See Pullman, Albert B., assignor.)						
A. Booth Packing Company of Baltimore City. (See Adams, John, assignor.)						
A. G. Spalding & Brothers <i>et al.</i> (See Perkins, Albert, assignor.)						
A. J. Hartford Steel Railway Tie Manufacturing Company. (See Hartford, Arthur J., assignor.)						
A. M. Collins Manufacturing Company. (See Odgers, John P., assignor.)						
A. N. Kellogg Newspaper Company. (See Partridge, Charles S., assignor.)						
Aaron, William T., Callands, Va. Tobacco cask or tierce	477,484	June 21	2000	497	59	1859
Aaronson, Israel M., New York, N. Y. Trousers-protector	485,807	Nov. 8	985	264	61	791
Abbe, James T., <i>et al.</i> (See Ball, James, assignor.)						
Abbé, Richard W. F., Brooklyn, assignor to J. R. Alsing Company, New York, N. Y.						
Treating oxidized or corroded lead	485,730	Nov. 8	893	239	61	772
Abbett, Leon. (See White, Lewis B., assignor.)						
Abbey, Orra E., Dailey, Mich. Tag-fastener	481,382	Aug. 23	2651	650	60	1128
Abbot, Isaac A., Denver, Colo. Attachment for seeing from submarine boats	467,291	Jan. 19	1614	412	58	323
Abbott, Albert R., Boston, Mass. Machine for perforating dates and amounts upon documents or checks	471,455	Mar. 22	2808	716	58	1670
Abbott, Albert R., Boston, Mass. Cash register and recorder	474,278	May 3	600	149 150	59	754
Abbott, Arthur V., Closter, N. J. Insulating electric conductors	477,732	June 28	2408	-----	59	1958
Abbott, Benjamin J., Chicago, Ill., assignor to Abbott Metal Dressing Company, of Illinois. Cam-clutch for rotating shafts	474,312	May 3	678	176	59	767
Abbott, Cary F., Nashua, N. H. Ash-sifter	487,009	Nov. 29	2961	763	61	1232
Abbott, Charles J., assignor to himself, F. N., C. T., and M. Wright, N. J. Moors, and H. Watson, Greenville, Mich. Reversible plow-point	478,730	July 12	1020	249	60	218
Abbott, Charles W., Albion, Me. Grapple-hook	479,871	Aug. 2	147	36	60	611
Abbott, Chauncey, <i>et al.</i> (See Dickey, Foster, assignor.)						
Abbott, Frank E., Chicago, Ill. Nutmeg-grater	473,051	Apr. 19	1606	409	59	331
Abbott, George F., New Haven, assignor, by mesne assignments, to A. W. Curtis, Meriden, A. M. and F. W. Sigourney, Bristol, Conn., and G. S. Mason, Brooklyn, N. Y.						
Lock	486,420	Nov. 22	1985	527	61	1023
Abbott, James C., Springfield, Ohio. Ribbon-holder	470,775	Mar. 15	1769	455	58	1454
Abbott, John W., Rushville, N. Y. Coffee-pot	478,075	July 5	1	1	60	3
Abbott, Leonard G., Syracuse, N. Y., assignor of two-fifths to W. W. Guilford, West Medford, and Cummer, Jones & Co., Boston, Mass. Garment-supporting loop	474,313	May 3	679	176	59	768
Abbott Machine Company. (See Blodgett, John W., assignor.)						
Abbott Metal Dressing Company. (See Abbott, Benjamin J., assignor.)						
Abbott, Nathan M., Belle Centre, assignor of one-half to R. E. Brooks, Findlay, Ohio. Reflector	470,854	Mar. 15	1896	485	58	1482
Abbott, Samuel E. (See Chisham and Abbott.)						
Abbott, William H., Lennoxville, Canada. Speed-indicator	487,702	Dec. 13	753	193 194	61	1487
Abel, Henry, Carlstadt, N. J. Low-pressure steam-boiler	475,479	May 24	2540	647	59	1171
Abell, Bernard M., and W. Ostrander, New York, N. Y. Means for ornamenting sheet-metal articles	482,837	Sept. 20	1495	372	60	1654
Abell, Francis H., Grand Crossing, Ill. Coffee-pot	470,798	Mar. 15	1806	464	58	1465
Abell, George W., Indianapolis, Ind. Composition of matter for covering walls or other surfaces	469,394	Feb. 23	2319	-----	58	1004
Abell, William P. (See Fletcher and Abell.)						
Abendroth Brothers. (See Fisher, George A., assignor.)						
Abendroth & Root Manufacturing Company. (See Rice, Harvey D., assignor.)						
Aber, Jacob, Gill Hall, Pa. Washing-machine	467,219	Jan. 19	1499	383 384	58	302
Abernathy, Loranzy H., assignor of one-half to S. W. Lewelling, Holland, Ark. Combined cotton chopper and cultivator	479,083	July 19	1563	392	60	333
Abernathy, William M., <i>et al.</i> (See Prescott, George A., assignor.)						
Ablett, Job, <i>et al.</i> (See Phillips, John H., assignor.)						
Abmeyer, Gustav W. E., New York, N. Y. Cash-register	467,905	Feb. 2	1	1	58	527
Abojador, Sebastian, Madrid, Spain. Machine for preparing or reducing and comminuting tobacco for cigarettes	485,483	Nov. 1	510	134	61	676
Aborn, Alonzo R., Norwich, Conn. Rack for holding and draining liquid-measures	483,664	Oct. 4	216	53, 54	61	44
Abraham, John D., Cincinnati, Ohio. Attachment and coupling for water-closets	477,485	June 21	2001	497	59	1859
Abrahams, George E., Birmingham, England, assignor of one-half to J. W. Culmer, New Brighton, Pa. Air and gas meter	470,814	Mar. 15	1838	471 472	58	1471

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Abrahams, John W., assignor of one-half to J. Riddell, Allegheny, and T. G. McClure, Pittsburg, Pa. Pilot for street-cars	469,291	Feb. 23	2169	556	58	974
Abrahamson, Axel F., Madrid, Spain. Reciprocating pump	471,411	Mar. 22	2745	700	58	1659
Abrahamson, Axel F., Madrid, Spain. Pump	472,156	Apr. 5	228	61	59	43
Abram Cox Stove Company. (See Hopkin, George E., assignor.)						
Abram, Julius H., Akron, Ohio. Photograph-display rack	486,748	Nov. 22	2491	651	61	1124
Abrams, George, Philadelphia, Pa. Violin	473,439	Apr. 26	2257	569	59	477
Abrams, George H., Brooklyn, N. Y. Attachment for brooms	486,066	Nov. 8	1403	371	61	875
Abrams, Joseph S., and J. Langsdorf, New York, N. Y. Hat packing-case	477,981	June 28	2798	701	59	2034
Abramson, Joseph, assignor to L. Schulman, New York, N. Y. System of interior art decoration	466,995	Jan. 12	1116	282	58	220
Abresch, Charles, Milwaukee, Wis. Dumping-wagon	478,834	July 12	1189	295	60	251
Abundi, Roland, T. Ellis, Jr., and J. T. Sackett, Kansas City, Mo.; said Abundi assignor to said Sackett. Syringe suppository	467,599	Jan. 26	2118	538	58	426
Accles, James G. (See Grenfell and Accles.)						
Accles, James G., Birmingham, England. Feed mechanism for machine-guns	487,238	Dec. 6	1	1, 2	61	1321
Accumulator Company. (See Griscom, William W., assignor.)						
Accurate Time Stamp Company. (See Martin, William H., assignor.)						
Accurate Time Stamp Company. (See Stahlberg, Charles, assignor.)						
Acers, Nelson F., Kansas City, Mo. Ore crusher and grinder	482,330	Sept. 13	689	165	60	1485
Ach, Fritz, Mannheim, assignor to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Eugenol benzyl-ether and preparing same	487,167	Nov. 29	3205		61	1281
Ach, Fritz, Mannheim, assignor to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Preparing vanillin	487,204	Nov. 29	3261		61	1291
Ach, Fritz, Mannheim, assignor to C. F. Boehringer & Soehne, Waldhof, near Mannheim, Germany. Isoeugenol benzyl-ether and preparing the same	487,205	Nov. 29	3263		61	1291
Acheson, Edward G., Pittsburg, Pa. Telephone-transmitter	472,243	Apr. 5	367	94	59	69
Acheson, William J., Denver, Colo. Shawl-strap	471,988	Mar. 29	3592	917	58	1827
Acheson, William J., Denver, Colo. Package-wrapper	483,198	Sept. 27	2076	521	60	1782
Achor, Servetus T., Brooklyn, N. Y. Soluble chocolate	479,580	July 26	2380		60	504
Achor, Servetus T., Brooklyn, N. Y. Making soluble chocolate	479,581	July 26	2381		60	504
Acker, Frank C., Ionia, Mich. Cracker-cabinet	472,020	Apr. 5	1	1	59	3
Ackerly, Clifford B. (See Brown, Joseph A., assignor.)						
Ackerman, Howard U., North Indianapolis, Ind. Rack	487,594	Dec. 6	576	147	61	1436
Ackerman, Rudolph B., Minneapolis, Minn., assignor to J. C. Lyman, Chicago, Ill. Ring	482,670	Sept. 13	1229	299	60	1588
Acland, Francis E. D. (See Holmström, Carl, assignor.)						
Acland, Francis E. D., and C. Holmström, London, England. Gun	472,244	Apr. 5	369	95 96 97 98	59	69
Acly, Charles H., <i>et al.</i> (See Weller, Chester A., assignor.)						
Acme Adjustable Pole Company. (See Van Valkenburg, Ellis M., assignor.)						
Acme Liquid Fuel Company. (See Rogers and Baker, assignors.)						
Acme Railway Signal and Manufacturing Company. (See Bevington, James H., assignor.)						
Acme Safe and Lock Company. (See Hunter, Joseph H., assignor.)						
Acme Safety Emery Wheel Company. (See Balmes, Michael, assignor.)						
Acme Safety Emery Wheel Company. (See Hodges, Schuyler G., assignor.)						
Acme Storage Battery Company. (See Kennedy and Diss, assignors.)						
Acosta, John L., Vera Cruz, Mexico. Fiber-preparing machine	474,052	May 3	273	66, 67	59	690
Acosta, John L., Vera Cruz, Mexico. Fiber-preparing machine	485,903	Nov. 8	1138	301 302	61	822
Actien-Gesellschaft für Anilin Fabrikation. (See Borgmann, Otto, assignor.)						
Aeuff, John, Kilgore, Tex. Car-coupling	476,768	June 14	815	201	59	1613
Adair, William A., Moline, Kans. Truss	473,807	Apr. 26	2860	718	59	592
Adam, Edwin, Philadelphia, Pa. Beverage of fermented and unfermented wort and making the same	483,337	Sept. 27	2316		60	1825
Adam, Edwin, Philadelphia, Pa. Making malt beverages	483,338	Sept. 27	2316	582	60	1826
Adamant Manufacturing Company. (See Grant, Arthur L., assignor.)						
Adams, Benjamin D., assignor to S. P. Adams, Grinnell, Iowa. Cash-recorder	467,711	Jan. 26	2291	581 582	58	458
Adams, Charles A., Canton, Md. Brick-mold sander	470,963	Mar. 15	2054	525 526	58	1513
Adams, Charles F., <i>et al.</i> (See Gilman, Willard H., assignor.)						
Adams, Charles F., assignor to S. S. Jewett & Co., Buffalo, N. Y. Gas-burning cooking stove or range	472,842	Apr. 12	1264	324	59	252
Adams, Clarence A., and T. J. Thorp, Lincoln, Nebr. Trolley for electric railways	482,031	Sept. 6	178	43	60	1370
Adams, David C., Toronto, Canada. Smoke-consumer	467,745	Jan. 26	2348	595	58	469
Adams, Dewey F., Providence, R. I. Hinge-joint for jewelry	467,391	Jan. 19	1762	449	58	351
Adams, E. G. H., <i>et al.</i> (See Taylor, Barnett, assignor.)						
Adams, Frank D., Northville, Mich. Ironing-machine	482,607	Sept. 13	1141	275 276	60	1572
Adams, Frank H., Rutherford, N. J. Game apparatus	480,056	Aug. 2	480	122	60	674
Adams, Frank P., <i>et al.</i> (See Kates, Wilber H., assignor.)						
Adams, Frederick, assignor to Pittsburgh Brass Company, Allegheny, Pa. Shade-holder	482,887	Sept. 20	1586	398 399	60	1670
Adams, Frederick G., and F. T. Henshaw, London, England. Driving mechanism for velocipedes	477,095	June 14	1338	330 331	59	1722
Adams, George A., South Bend, Ind. Collar-pad	468,609	Feb. 9	1098	260	58	747
Adams, George A., Santa Clara, Cal. Boring and mortising machine	481,383	Aug. 23	2652	650	60	1128
Adams, George E., Providence, R. I. Button	469,902	Mar. 1	377	95	58	1173
Adams, George E., Providence, R. I. Buckle	480,540	Aug. 9	1268	318	60	836
Adams, George E., Providence, R. I. Buckle	484,279	Oct. 11	1154	294	61	248
Adams, George E., Providence, R. I. Clasp	486,242	Nov. 15	1693	448	61	950
Adams, George E., Providence, R. I. Garment-supporter	487,689	Dec. 6	735	188	61	1466
Adams, George E., Providence, R. I. Suspender cast-off	487,690	Dec. 6	736	188	61	1466
Adams, George E., Providence, R. I. Buckle	488,174	Dec. 20	1559	391	61	1667
Adams, George E., Providence, R. I. Buckle	488,175	Dec. 20	1560	391	61	1667
Adams, George F., <i>et al.</i> (See Williamson, Marshall D., assignor.)						
Adams, George W. (See Damon and Adams.)						
Adams, Greenbury E. (See Metcalf, Ralph M., assignor.)						
Adams, Hanson H., Everett, Mass. Carving-machine	488,047	Dec. 13	1343	333	61	1666
Adams, Harvey R., Marseilles, Ill. Cash-register	479,776	Aug. 2	1	1	60	583
Adams, Horace B., Owego, N. Y. Dinner-pail	468,011	Feb. 2	161	39	58	555

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Adams, John, Chicago, Ill. Money-changer.....	483,973	Oct. 4	679	{ 169 170 162 163 }	61	140
Adams, John, assignor to A. Booth Packing Company of Baltimore City, Baltimore, Md. Fruit-coring machine.....	482,327	Sept. 6	682	{ 162 163 }	60	1469
Adams, John P., Fargo, N. D. Flue-thimble.....	476,111	May 31	3554	894	59	1382
Adams, John Q., Jamaica, Vt. Propeller.....	484,511	Oct. 18	1524	387	61	332
Adams, John S., Elgin, Ill. Clutch-shifter.....	474,203	May 3	492	118	59	733
Adams, John S., New Orleans, La. Clutch.....	477,163	June 14	1458	358	59	1742
Adams, Joseph C., New London, assignor of one-third to C. A. Todd, Scytheville, N. H. Ladder-guard.....	480,160	Aug. 2	641	163	60	704
Adams, Peter. (See Shepard and Adams.)						
Adams, Russell B. (See Bennett and Adams.)						
Adams, Sarah P. (See Adams, Benjamin D., assignor.)						
Adams, Stephen J., Pittsburg, Pa. Gate for molds and castings formed thereby.....	477,320	June 21	1741	426	59	1809
Adams Tobacco Press Company. (See Hill, Thomas, assignor.)						
Adams, Thomas E., Cleveland, Ohio, assignor to Brush Electric Company. Electric-arc lamp.....	473,283	Apr. 19	1998	{ 502 503 }	59	405
Adams, Thomas E., Cleveland, Ohio, assignor to Brush Electric Company. Electric loco- motive.....	476,437	June 7	328	75	59	1501
Adams, W. Q. (See Simpson, Charles E., assignor.)						
Adams, Walter S. (See Brill and Adams.)						
Adams, William C., Sturgis, Ky. Grain-binder.....	474,801	May 17	1471	375	59	947
Adams, William G., and J. S. Forbes, Philadelphia, Pa. Valve for steam or high-pressure fluids.....	479,391	July 26	2067	519	60	445
Adams & Westlake Company. (See Giese, James A., assignor.)						
Adams & Westlake Company. (See Ham, William S., assignor.)						
Adams & Westlake Company. (See Mitchell, Charlie I., assignor.)						
Addis, Frederick H., Mhow, Central India. Pulley-block.....	468,499	Feb. 9	930	236	58	714
Adgate, Joseph J., Liberty, N. Y. Jack.....	488,300	Dec. 20	1759	443	61	1705
Adgie, William. (See Yeaton and Adgie.)						
Adkins, Stephen J., Grand View, Tex. Corn or cotton planter attachment.....	487,941	Dec. 13	1157	289	61	1567
Adler, Abraham S., Baltimore, Md. Conformator.....	482,911	Sept. 20	1623	{ 406 407 }	60	1677
Adler, Carl. (See Blinsdorf and Adler.)						
Adler, Elkan, Jersey City, N. J. Veneer-cutting machine.....	484,623	Oct. 18	1691	429	61	366
Adler, Friedrich, Prague, Austria-Hungary. Tramway-brake.....	475,171	May 17	2053	516	59	1060
Adler, Hattie, assignor of one-half to C. C. Mollerup, Denver, Colo. Clothes-drier.....	483,275	Sept. 27	2226	559	60	1809
Adler, Henry, Allegheny, Pa. Burner for burning gaseous fuel.....	485,594	Nov. 1	673	179	61	712
Adler, Leon D. (See Young, Moskowitz, Adler, and Loewenberg.)						
Adler, Leon D., et al. (See Young and Moskowitz, assignors.)						
Adler, Simon. (See Rothschild and Van Cott, assignors.)						
Adriance, Benjamin, assignor to Mersereau Manufacturing Company, Brooklyn, N. Y. Can-heading machine.....	472,284	Apr. 5	432	{ 111 112 }	59	81
Adriance, Benjamin, Brooklyn, and J. H. Volkmann, New York, N. Y., assignors to said Volkmann. Vending apparatus.....	483,199	Sept. 27	2076	{ 524 525 }	60	1782
Adriance, Platt & Company. (See Brown, Thomas S., assignor.)						
Adrianson, John, Chicago, Ill. Stove screen and fender.....	485,363	Nov. 1	334	88	61	641
Aerated Fuel Company. (See Bullard, James H., assignor.) (Reissue.)						
Agee, Arthur L. (See Jones and Agee.)						
Agee, George S., Willow Springs, Mo. Churn.....	481,542	Aug. 30	2915	717	60	1197
Agee, Reuben M., E. Lane, and W. E. Agee, Canton, Mo. Shoe.....	468,319	Feb. 9	647	161	58	659
Agee, William E. (See Agee, Lane, and Agee.)						
Agin, George W., Pekin, Ill. Ice-velocipede.....	475,744	May 31	2959	751	59	1265
Agner, Charles U., Morantown, and W. D. Armstrong, Carlyle, Kans.; said Agner assignor to said Armstrong. Railway-rail joint.....	470,459	Mar. 8	1310	337	58	1357
Agnew, James F. (See Werling and Agnew.)						
Agricola, William H. (See La Burt, John, assignor.)						
Ahearn, Thomas, Ottawa, Canada. Electric water-heater.....	481,291	Aug. 23	2512	618	60	1103
Ahearn, Thomas, Ottawa, Canada. Electric heater.....	483,124	Sept. 27	1953	495	60	1757
Ahner, Hermann A., Meinersdorf, Germany. Machine for keeping gravel paths, &c., in order.....	469,382	Feb. 23	2304	593	58	1001
Ahrens, Charles H., Toronto, and W. O. Gottwals, Ottawa, Canada. Bill or letter file.....	471,087	Mar. 22	2245	577	58	1563
Ahrens, John H., and H. Oostendorp, assignors to C. Schmidt & Co., Cincinnati, Ohio. Switch for overhead tracks.....	477,240	June 21	1613	395	59	1784
Ahrens, John T. (See Foster, Samuel L., assignor.)						
Ahrens, William. (See Sobotka and Ahrens.)						
Aigler, David, St. Louis, Mo. Device for mashing potatoes or other vegetables.....	467,488	Jan. 26	1919	491	58	391
Aiken, Albion P., Port Perry, Pa. Lifting-jack.....	480,685	Aug. 9	1507	375	60	881
Aiken, David, Winnsborough, S. C. Chimney-cleaner.....	478,302	July 5	383	92	60	77
Aiken, Henry. (See Babbitt, Seward S., assignor.)						
Aiken, Henry, Pittsburg, Pa. Crane.....	471,307	Mar. 22	2583	{ 655 656 }	58	1627
Aiken, Henry, Pittsburg, Pa. Apparatus for extracting ingots.....	475,027	May 17	1834	465	59	1017
Aiken, Henry, Pittsburg, Pa. Metal-shears.....	479,392	July 26	2069	519	60	445
Aiken, Henry, Pittsburg, Pa. Metal-shears.....	482,113	Sept. 6	310	73	60	1396
Aiken, Henry, Pittsburg, Pa. Rolling-mill.....	484,767	Oct. 25	1939	495	61	431
Aiken, Henry, Pittsburg, Pa. Guide device for rolling-mills.....	484,768	Oct. 25	1940	{ 495 496 496 497 498 499 }	61	431
Aiken, Henry, Pittsburg, Pa. Cooling-bed for metal beams and rails.....	486,364	Nov. 15	1886		61	989
Aiken, Henry, Pittsburg, Pa., F. W. Wood, Baltimore, Md., and H. H. Campbell, Steel- ton, Pa. Open-hearth furnace.....	481,885	Aug. 30	3476	852	60	1305
Aiken, James A., Jackson, Mich. Device for forming the ends of handles.....	476,220	May 31	3743	{ 945 946 }	59	1419
Aikin, Charles, Evanston, Ill. Fireproof building.....	477,733	June 28	2409	602	59	1959
Aikley, William M., Lenni Mills, Pa. Stop-motion for looms.....	481,292	Aug. 23	2513	618	60	1103
Ains, William D. P., Jr., Philadelphia, Pa. Pipe-coupling.....	470,531	Mar. 8	1407	368	58	1377
Ainslie, Joseph, et al. (See Dixon, Henry J., assignor.)						
Ainsworth, Napoleon B., et al. (See Wiley, Edgar C., assignor.)						
Air Shaft Protector and Manufacturing Company. (See Wieland, Ludwig, assignor.)						
Aird, Joseph, Tipton, England. Joint or coupling for metallic pipes or tubes.....	478,496	July 5	662	162	60	131
Airey, George G., and W. W. Uhl, Mount Savage, Md. Marine vessel.....	475,172	May 17	2055	517	59	1060

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Aishton, George F., Rochester, N. Y. Faucet-filter.....	485,024	Oct. 25	2372	610	61	516
Akin, James H. (See Palm and Akin.)						
Akin, James H., assignor of one-half to J. M. Palm, Arkansas City, Kans. Attachment for vehicles.....	472,843	Apr. 12	1266	324	59	252
Akins, Lest. (See Goodenberger and Akins.)						
Akron Tool Company. (See Morey, Albert E., assignor.)						
Aktiebolaget Separator. (See Bechtolsheim, Clemens von, assignor.)						
Aktiebolaget Separator. (See Folk, Jesse E., assignor.)						
Aktiebolaget Separator. (See Hart, Frederick, assignor.)						
Aktiebolaget Separator. (See Jönsson, Johan L., assignor.)						
Aktiebolaget Separator. (See Laval, Carl G. P. de, assignor.)						
Alapaw, Charles H., assignor of one-half to A. M. Baker, St. Louis, Mo. Pipe-holder.....	479,384	July 19	2051	512	60	427
Albach, Wilhelm, Höchst-on-the-Main, Germany. Apparatus for use in barreling beer or other liquids.....	477,096	June 14	1360	331	59	1722
Albany Horse Nail Company. (See Williams, David F., assignor.)						
Albany Venetian Blind Company. (See Benway, James K., assignor.)						
Albee, George, Susquehanna, Pa. Lamp-hanger.....	487,977	Dec. 13	1205	301	61	1577
Albee, William H. (See Colomy and Albee.)						
Albert, Francis A., Baltimore, Md. Tool-handle.....	471,456	Mar. 22	2311	716	58	1670
Albert, William. (See Price, George W., assignor.)						
Albio, Elmer E., Springfield, Ohio. Hitching device.....	436,842	Nov. 29	2657	695	61	1173
Albin, Elmer E., Springfield, Ohio. Lifting-jack.....	486,922	Nov. 29	2826	731	61	1206
Albin, Herman, Louisville, Ky. Rocking-chair exhibitor.....	485,831	Nov. 8	1021	274	61	798
Albin, Jacob, Seymour, Ind. Carpet-stretcher.....	482,821	Sept. 20	1469	366	60	1649
Albornoz, Isaac C. de, New York, N. Y. Machine for propelling vessels.....	474,939	May 17	1689	431	59	990
Albrecht, Charles R., Tompkinsville, N. Y. Thumb-tack.....	477,587	June 21	2161	536	59	1692
Albrecht, Julius K., and E. Ortmann, New York, N. Y. Photographic shutter.....	475,654	May 24	2809	712	59	1221
Albright, Henry. (See Noble, Charles H., assignor.)						
Albro, Charles E., Philadelphia, Pa. Worm-gear.....	486,318	Nov. 15	1819	480	61	977
Alcock, Alfred U., Melbourne, Victoria. Electrostatic switch and phase-indicator.....	482,032	Sept. 6	180	43	60	1370
Alden, Oliver R., Nicholson, assignor of one-half to H. W. Lord, Lathrop, Pa. Bit-stock.....	478,248	July 5	303	74	60	61
Alden, Seth F., New Bedford, Mass. Electric snap-switch.....	483,316	Sept. 27	2288	575	60	1820
Alden Type Machine Company. (See Johnson, Louis K., assignor.)						
Alderfer, Jeremiah B. (See Price, Edwin H., assignor.)						
Alderman, Olinthus G., Grinnell, assignor of one-half to H. D. Reeve, Des Moines, Iowa. Glove-fastening.....	470,170	Mar. 8	799	199	58	1263
Alderson, Stephen. (See Bennett, Henry, assignor.)						
Alderson, William N. B., and J. W. Allen: said Alderson assignor, and said Allen assignor of one-third, to E. R. Ray, Eureka Springs, Ark. Clamp.....	483,825	Oct. 4	453	114	61	94
Aldrich, Albert T., Worcester, Mass. Combined cape and cap.....	484,945	Oct. 25	2241	577	61	491
Aldrich, Alonzo, Beloit, Wis. Paper-making machine.....	471,631	Mar. 29	3052	777	58	1724
Aldrich, George W., assignor to himself, J. Clayton, and T. Hudson, Brooklyn, N. Y. Collar for pipes, rods, &c.....	474,511	May 10	1006	259	59	842
Aldrich, George W., and J. Hueston, Brooklyn, N. Y. Water-closet cistern.....	475,371	May 24	2368	606	59	1139
Aldrich, Truman H., assignor of one-half to A. G. Rose, Cincinnati, Ohio. Blow-pipe.....	469,670	Mar. 1	1	1	58	1099
Aldrich, Wales, Dayton, Ohio. Cash register and indicator and check-machine.....	481,459	Aug. 23	2775	<div style="display: inline-block; vertical-align: middle;">683 684 685</div>	<div style="display: inline-block; vertical-align: middle;">60</div>	<div style="display: inline-block; vertical-align: middle;">1153</div>
Aldridge, Joseph A., assignor of three-fourths to D. P. Stirk, Indianapolis, Ind. Apparatus for vaporizing oil.....	469,811	Mar. 1	236	59	58	1147
Alexander, Cornelius C. and I. Z.; said I. Z. Alexander assignor to W. J. Alexander, Hartford City, Ind. Swing.....	482,217	Sept. 6	485	116	60	1430
Alexander, Frederick B., Brooklyn, N. Y. Cane-cutter.....	479,611	July 26	2428	605	60	513
Alexander, Isaac Z. (See Alexander, Cornelius C. and I. Z.)						
Alexander, Isaac Z., and A. B. Martindale, Hartford City, Ind. Swing.....	487,141	Nov. 29	3166	811	61	1273
Alexander, James, assignor of one-half to A. F. Koontz, Altoona, Pa. Combined settee and bed.....	473,863	Apr. 26	2951	744	59	610
Alexander, John F., Washington, D. C. Explosive.....	488,534	Dec. 27	2147	61	61	1797
Alexander, Oscar, New York, N. Y. Folding bedstead.....	455,159	Nov. 1	1	1	61	573
Alexander, Phœbus H. (See Dey, Harry E., assignor.)						
Alexander, William J. (See Alexander, Cornelius C. and I. Z., assignors.)						
Alexander, William R. H. (See Wigginton, John R., assignor.)						
Alexy, Hugo, Buda-Pesth, Austria-Hungary. Rail-fastening.....	483,518	Oct. 4	1	1	61	3
Alford, Allen, assignor of one-fourth to N. Smithson, Birmingham, Ala. Car-axle.....	470,651	Mar. 15	1577	411	58	1421
Alford, John M. (See Riter and Alford.)						
Alford, Mitchell C., et al. (See Bierley, Henry A., assignor.)						
Algeo, William G. (See McCool and Algeo.)						
Algonquin Manufacturing Company. (See Chase, Oliver R., assignor.)						
Alinder, John P., Osceola, Nebr. Corn-planter.....	468,231	Feb. 2	484	119	58	619
Alker, John H., assignor to Oliver Iron and Steel Company, Pittsburg, Pa. Manufacture of gate-hooks.....	469,621	Feb. 23	2663	685	58	1071
Allam, Edwin P., Romford, assignor of one-half to E. R. Dolby, London, England. Holder for incandescent lamps.....	483,974	Oct. 4	682	170	61	141
Allan, John W., Minneapolis, Minn. Relief-valve.....	474,711	May 10	1323	337	59	903
Allan, John W., assignor of one-half to A. G. Schlener, Minneapolis, Minn. Auxiliary fire-pot.....	486,067	Nov. 15	1407	373	61	895
Allan, Robert W., Fairfield, assignor of one-half to R. M. Fairfield, Holyoke, Mass. Means for preventing spots in paper.....	480,446	Aug. 9	1123	280	60	806
Allard, Louis A. (See Chabaud, Van Heers, and Allard.)						
Allason, William J., Chicago, Ill. Nut-lock.....	476,769	June 14	817	201	59	1613
Allbright, John G., Boston, Mass., and W. B. Allbright, Chicago, Ill. Sash-holder.....	473,137	Apr. 19	1752	442	59	357
Allbright, William B. (See Allbright, John G. and W. B.)						
Allcroft, Herbert, assignor to H. Rigby, Paterson, N. J. Whirl for filler-frames.....	472,844	Apr. 12	1267	324	59	253
Allen, Aaron, Philadelphia, Pa. Machine for trimming wall-paper, &c.....	473,411	Apr. 19	2220	557	59	448
Allen, Albert W., et al. (See Cooper, Leslie A., assignor.)						
Allen, Alfred J., Essex, Canada, assignor to C. A. Gould, New York, N. Y. Car-coupling.....	472,245	Apr. 5	375	98	59	70
Allen, Alonzo W., Philadelphia, Pa. Shuttle-bobbin winder.....	488,176	Dec. 20	1560	<div style="display: inline-block; vertical-align: middle;">391 392</div>	<div style="display: inline-block; vertical-align: middle;">61</div>	<div style="display: inline-block; vertical-align: middle;">1667</div>
Allen, Augustus L., Poughkeepsie, N. Y. Apparatus for the manufacture of gas.....	484,624	Oct. 18	1692	<div style="display: inline-block; vertical-align: middle;">429 430</div>	<div style="display: inline-block; vertical-align: middle;">61</div>	<div style="display: inline-block; vertical-align: middle;">367</div>
Allen, Bluford F. (See Goodson, William T., assignor.)						
Allen, Chancellor C. (See Crockett and Allen.)						
Allen, Charles A., et al. (See Wallace and Stemm, assignors.)						
Allen, Charles F., North St. Paul, Minn. Horse-collar.....	475,430	May 24	2161	627	59	1155

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Allen, Charles H., Stroudsburg, Pa. Car-brake.....	479,236	July 19	1804	452	60	378
Allen, Charles M., San Francisco, Cal. Range-finder.....	484,726	Oct. 18	1854	471 472	61	399
Allen, Charles M., assignor of one-half to G. Labram, Butte City, Mont. Furnace for roasting ores.....	468,736	Feb. 9	1294	328 329	58	787
Allen, Charles O., Grand Rapids, Mich. Mop-wringer.....	467,351	Jan. 19	1706	436	58	341
Allen, Charles O., Grand Rapids, Mich. Caster.....	470,325	Mar. 8	1086	277	58	1316
Allen, Charles O., Grand Rapids, Mich. Drawer for furniture.....	476,770	June 14	818	201	59	1613
Allen, Charles W., Chadron, Nebr. Stock-car.....	469,829	Mar. 1	265	68, 69	58	1152
Allen, David H. (See Gamble and Allen.)						
Allen, Edward, Baltimore, Md. Mold for casting acid-eggs.....	468,610	Feb. 9	1099	280	58	748
Allen, Edward B., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Buttonhole sewing-machine.....	473,564	Apr. 26	2480	627 624 629	59	530
Allen, Eliza, New York, N. Y. Dress-trimming.....	485,731	Nov. 8	894	240	61	772
Allen, Erasmus W., Seneca, Kans. Dish-washer.....	470,532	Mar. 8	1409	368	58	1377
Allen, Erasmus W., Seneca, Kans. Churn.....	470,533	Mar. 8	1410	368	58	1377
Allen, Ethan. (See Huyek, Leonard W., assignor.)						
Allen, George, Franklin, Pa. Pump for oil-wells.....	480,701	Aug. 16	1537	383	60	901
Allen, George F. (See Taylor, Benjamin, and Allen.)						
Allen, George H., Brockport, N. Y. Thill-coupling.....	469,926	Mar. 1	414	104	58	1180
Allen, George H., Brockport, N. Y. Thill-coupling.....	478,678	July 12	936	232	60	201
Allen, George L., Worcester, Mass. Steam-boiler.....	478,677	July 12	934	232	60	200
Allen, George L., Worcester, Mass. Construction of cast-iron radiators.....	485,757	Nov. 8	924	248	61	779
Allen, George M., Beloit, Wis. Windmill-governor.....	466,482	Jan. 5	275	69, 70	58	53
Allen, Harry D., Waterloo, Iowa. Bank-bill binder.....	467,967	Feb. 2	87	21	58	541
Allen, Henry L. (See Pullman, Herbert S., assignor.)						
Allen, Herbert B., St. Louis, Mo., assignor of one-half to J. E. A. Hussey, Brookline, Mass. Paper-knife.....	483,519	Oct. 4	2	1	61	3
Allen, Herod W., Latta, S. C. Stalk-cutter.....	478,676	July 12	933	232	60	200
Allen, Howard D., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sheet-metal latch-bolt.....	479,582	July 26	2381	594	60	504
Allen, J. M., et al. (See Campbell, Cydnor B., assignor.)						
Allen, James F., Elyria, Ohio. Mail-bag.....	473,603	Apr. 26	2552	641	59	534
Allen, James W. (See Alderson and Allen.)						
Allen, John A., Philadelphia, Pa. Toy.....	432,957	Sept. 20	1694	426	60	1692
Allen, John E., administrator. (See Johnston, James J.)						
Allen, Leicester, New York, N. Y. Gas-pump.....	474,512	May 10	1007	259	59	842
Allen, Lewellyn J. (See Warner and Allen.)						
Allen, Lucius P., Clinton, Iowa, and J. R. Weber, Quincy, Ill. Book-binding.....	471,457	Mar. 22	2811	717	58	1671
Allen, Orron C., et al. (See Cobham, Frederick P., assignor.)						
Allen, Oscar M., Sr. (See Harris, Levi, assignor.)						
Allen, Samuel V., Freeport, Ill. Sign-writing.....	469,033	Feb. 16	1782	454	58	892
Allen, Stephen S. (See Lewis and Allen.)						
Allen, William A., Hartford, Conn. Watch-regulator indicator.....	474,789	May 10	1448	367	59	928
Allen, William H. (See Purcell, John J., assignor.)						
Allen, William H., Detroit, Mich. Ice-cream or water-ice.....	468,631	Feb. 9	1131	-----	58	754
Allen, William H., Detroit, Mich. Fly-paper holder.....	487,505	Dec. 6	448	116	61	1410
Allen, William L. (See Woodhouse, Alfred, assignor.)						
Allendale Company. (See Clark, Jerome B., assignor.)						
Allert, Rudolf, New York, N. Y. Separating yeast-cells.....	479,130	July 19	1641	410	60	347
Allfree, James B., Indianapolis, Ind. Belt-tightener.....	467,712	Jan. 26	2294	582 583	58	459
Allfree, James B., Indianapolis, Ind. Roller grinding-mill.....	467,713	Jan. 26	2296	583	58	459
Allgemeine Elektrizitäts-Gesellschaft. (See Dolivo-Dobrowolsky, Michael von, assignor.)						
Alliger, Andrew. (See Lytle, Alton A., assignor.)						
Allgood, Charles B., Petersburg, Va. Dripper for barrels.....	478,303	July 5	383	92	60	77
Allgood, Charles B., Petersburg, Va. Combined pump and drifter for vessels.....	483,757	Oct. 4	351	88	61	73
Allingham, James, Minneapolis, Minn. Street-car heater.....	472,778	Apr. 12	1178	302	59	235
Allington, William E., East Saginaw, Mich. Electric locomotive.....	486,068	Nov. 15	1408	373 374	61	895
Allis, Elliot W., Adrian, Mich. Fence.....	468,381	Feb. 9	743	184	58	677
Allis, F. H. (See Altman, Emil, assignor.)						
Allis, Thomas V., New York, N. Y. Barbed fencing.....	466,744	Jan. 5	695	179	58	132
Allis, Thomas V., New York, N. Y. Barbed fencing.....	466,745	Jan. 5	696	179	58	132
Allis, Thomas V., New York, N. Y. Barbed fencing.....	466,746	Jan. 5	697	179	58	132
Allis, Thomas V., New York, N. Y. Barbed fencing.....	466,747	Jan. 5	698	179	58	133
Allis, Thomas V., New York, N. Y. Barbed metallic fencing.....	466,748	Jan. 5	699	180	58	133
Allis, Thomas V., New York, N. Y. Die for use in machines for making metallic fencing.....	481,918	Aug. 30	3533	865	60	1316
Allis, Thomas V., New York, N. Y. Metallic fencing.....	486,173	Nov. 15	1503	421	61	930
Allis, Thomas V., New York, N. Y. Method of and apparatus for twisting metallic strips.....	486,174	Nov. 15	1503	422	61	931
Allis, William W. (See Wardhaugh, Richard B., assignor.)						
Allison, Alonzo B., and G. B. Scott, Pittsburgh, Pa. Mast-arm for electric-light poles.....	484,565	Oct. 18	1601	407	61	348
Allison, Charles O., assignor of one-half to R. H. Childs, Missoula, Mont. Car-coupling.....	467,220	Jan. 19	1500	384	58	302
Allison, Emeline, Omro, Wis. Doubling and winding device for domestic use.....	467,906	Feb. 2	1	1	58	527
Allison, Francis A. (See Scott, Nelson S., assignor.)						
Allison, James E., Nashville, Tenn. Portable fare receiver and register.....	487,168	Nov. 29	3206	821 822	61	1281
Allison, Samuel B., New Orleans, La. Moss and fiber brake, backing, and washing machine.....	468,632	Feb. 9	1131	288 289	58	754
Allison, William D. (See Leonard, Roberts, and Allison.)						
Allman, Frank M. (See McEwan, Peter H., assignor.)						
Alfred, Edward, Indianapolis, Ind. Sheet-metal package.....	476,353	June 7	197	47	59	1474
Almeida, Joaquin J. d', and J. Y da Silva, Lisbon, Portugal. Electric fire-alarm.....	484,386	Oct. 18	1319	337	61	293
Almén, Karl, Stockholm, Sweden, assignor to F. M. Weiler's Liberty Machine Works, Berlin, Germany. Printing-press.....	486,365	Nov. 15	1830	499 500	61	990
Almy, Willey H., assignor to Rochester Hosiery Company, Rochester, N. Y. Transfer device for knitting-machines.....	467,907	Feb. 2	2	1	58	527
Alpaugh, William C. (See Butterfield, Abraham, assignor.)						
Alpert, Wilhelm, Brandenburg-on-the-Havel, Germany. Thrashing-machine.....	480,484	Aug. 9	1187	293	60	819
Alpress, George T., Bristol, Conn. Trace-lock.....	487,463	Dec. 6	385	100	61	1397
Alsip, Frank, Chicago, Ill. Setting brick in kilns.....	484,170	Oct. 11	974	249	61	213
Altman, Charles, and D. C. C. Macdonald, assignors of one-third to J. Grant, London, Canada. Sash-fastener.....	472,325	Apr. 5	497	129	59	93
Altenecker, Ferdinand A., Philadelphia, Pa. Drawing-pen.....	480,541	Aug. 9	1269	318	60	836

Alphabetical list of patentees—Continued.

Name, residence, and invention	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Alter, Fred P. (See Hill and Alter.)						
Altham, George J., Swansea, Mass. Steam-turbine	475,957	May 31	3313	836	59	1334
Altham, George J., Swansea, Mass. Motor	475,958	May 31	3315	837	59	1334
Althouse, George W. (See Best, Clearmont V., assignor.)						
Althouse, Harry W., Ashland, Pa. Boiler-tube	469,731	Mar. 1	99	27	58	1118
Althouse, Milo J., et al. (See Bunker, Harman, assignor.)						
Althouse, Milo J., Waupun, Wis. Adjustable brace for windmill-towers, &c.	483,520	Oct. 4	2	1	61	3
Altman, Emil, New Haven, assignor of one-half to F. H. Allis, New Britain, Conn. Display-rack	476,029	May 31	3416	863	59	1355
Altman, Isadore, Philadelphia, Pa. Garter	470,031	Mar. 1	579	144	58	1211
Altmann, Julius, assignor of two-thirds to W. B. and G. A. Neeves, Milwaukee, Wis. Nut shearing and punching machine	467,908	Feb. 2	3	1, 2	58	527
Altmeyer, Matthew, Oakland, Cal., assignor of three-fifths to J. F. Heil, O. T. Schreiber, F. Freismuth, G. Heir, K. J. Hoge, W. J. W. Cowden, W. F. Stifel, A. Reymann, P. Cassell, N. B. Scott, Wheeling, W. Va., and H. Semple, Steubenville, Ohio. Feed mechanism for nail-machines	470,149	Mar. 1	749	187	58	1245
Altmeyer, Matthew, Oakland, Cal., assignor of three-fifths to J. F. Heil, O. T. Schreiber, F. Freismuth, G. Heir, K. J. Hoge, W. J. W. Cowden, W. F. Stifel, A. Reymann, P. Cassell, N. B. Scott, Wheeling, W. Va., and H. Semple, Steubenville, Ohio. Nail-rolling machinery	470,150	Mar. 1	752	187	58	1245
Altoft, George F., Carlton, Mich. Shoe for expanding horses' hoofs	488,535	Dec. 27	2148	531	61	1797
Altorfer, Gustav G., et al. (See Payne, William H., assignor.)						
Alves, John, Melbourne, Victoria. Concentrating-table	471,412	Mar. 22	2746	700	58	1659
Alvord, Irwin T., North Ogden, Utah Ter. Commercial coin	478,304	July 5	384	93	60	77
Alzugaray, José B., Porto, Portugal. Metallurgical process	472,422	Apr. 5	644		59	121
Amador, Martin, Las Cruces, N. Mex. Cultivating-machine	467,221	Jan. 19	1502	384	58	303
Amblor, William S., et al. (See Weaver and Manypenny, assignors.)						
Ambrose, Joseph D., Dallas, Tex. Gas-compressor	467,909	Feb. 2	5	2, 3	58	528
Ambruster, William, St. Louis, Mo. Pocket cash-register	480,057	Aug. 2	481	122	60	674
Amend, Edward B. (See Heimann, Salomon, assignor.)						
Amend, Otto P., New York, and J. H. Macy, Harrison, N. Y. Desulphurizing oils	480,311	Aug. 9	912	230	60	768
Amend, Otto P., New York, and J. H. Macy, Harrison, N. Y. Desulphurizing oils	480,312	Aug. 9	914	231	60	768
American Art Stove and Mantel Company. (See Ruehle and Schmidt, assignors.)						
American Atomizing Aerator Company. (See Fisher, Charles H., assignor.)						
American Automatic Lighting Company. (See Cody and Lawton, assignors.)						
American Automatic Spray Perfume Company. (See Mayrhofer, Joseph C., assignor.)						
American Balance-Slide-Valve Company. (See Thomas, William J., assignor.)						
American Bell Telephone Company. (See Dyer, Richard N., assignor.)						
American Bell Telephone Company. (See Hayes, Hammond V., assignor.)						
American Bell Telephone Company. (See Hayes and Richards, assignors.)						
American Bell Telephone Company. (See Hayes and Stone, assignors.)						
American Bell Telephone Company. (See Jacques, William W., assignor.)						
American Bell Telephone Company. (See Stone, John S., assignor.)						
American Bell Telephone Company. (See White, Anthony C., assignor.)						
American Bell Telephone Company. (See Wilson, Charles H., assignor.)						
American Biscuit and Manufacturing Company. (See Langlés, Justin J., assignor.)						
American Carrier Rocket Company. (See Cunningham, Patrick, assignor.)						
American Cotton Oil Company. (See Diffey, Alexander A., assignor.)						
American Electric Heating Company. (See Mitchell, Willis, assignor.)						
American Electrical Works. (See Sawyer, William H., assignor.)						
American Fiber Association. (See Brown, John H., assignor.)						
American Fire Engine Company. (See Nieman, Hiram H., assignor.)						
American Forcite Powder Manufacturing Company. (See Brown, Lewis, assignor.)						
American Harrow Company. (See Fraser, John, assignor.)						
American Indicator Company. (See Turner, William A., assignor.)						
American Injector Company. (See Trix, John, assignor.)						
American Lead Pencil Company. (See Weissenborn, Albert G., assignor.)						
American Leather and Membranoid Company. (See Deckert, James W., assignor.)						
American Light and Fuel Company. (See Langberg, Oscar, assignor.)						
American Loop Fabric Company. (See Urbahn, Alwill, assignor.)						
American Oil Projectile Company. (See Moore, Everett D., assignor.)						
American Optical Company. (See Currin, John, assignor.)						
American Patents Company. (See Malings, Charles, assignor.)						
American Postal Machines Company. (See Ethridge, Martin V. B., assignor.)						
American Press Association. (See Cummings, John R., assignor.)						
American Projectile Company. (See Wood, William M., assignor.)						
American Rapid Motor Company. (See Sheffield, George V., assignor.)						
American Ring Traveler Company. (See Bentley, Albert F., assignor.)						
American Roll Paper Company. (See Pickles, Charles K., assignor.)						
American Saw Company. (See Bamford, Richard J., assignor.)						
American Saw Company. (See Brooke, William E., assignor.)						
American Scale Manufacturing Company. (See Judd, Edward C., assignor.)						
American Screw Company. (See Rogers, Charles D., assignor.)						
American Shoe Tip Company. (See Merrill, Hollis W., assignor.)						
American Soda Fountain Company. (See Johnston and Barton, assignors.)						
American Soda Fountain Company. (See Johnston and Hallett, assignors.)						
American Soda Fountain Company. (See Maguire, Patrick J., assignor.)						
American Soda Fountain Company. (See Ormerod, John, assignor.)						
American Spring Company. (See Purdy, Fred, assignor.)						
American Steam Gauge Company. (See Kinney, Amos P., assignor.)						
American Steel Wheel Company. (See Cushing, George W., assignor.)						
American Steel Wheel Company. (See Cushing and Rampe, assignors.)						
American Sugar Refining Company. (See Niese, Henry E., assignor.)						
American Sugar Refining Company. (See Steinberg, Lothar, assignor.)						
American Sulphite Pulp Company. (See Russell, George F., assignor.) (Reissue.)						
American Telephone and Telegraph Company. (See Dunbar, Francis W., assignor.)						
American Telephone and Telegraph Company. (See Hibbard, Angus S., assignor.)						
American Telephone and Telegraph Company. (See Pickernell, Frank A., assignor.)						
American Type Telegraph. (See Wright, John E., assignor.)						
American Water Transportation Company. (See Briggs, Frank H., assignor.)						
American Writing Machine Company. (See Clemens, Henry D., assignor.)						
American Writing Machine Company. (See Fairfield, John M., assignor.)						
American Zinc Lead Company. (See Bartlett, Frank L., assignor.)						
Ames, Azel, Jr., Chelsea, assignor to S. K. Hamilton, Wakefield, Mass. Box	478,947	July 12	1344	333	60	281
Ames, Clarence F., Akron, Ohio. Recording-balance	481,543	Aug. 30	2916	717	60	1197

Alphabetical list of patentees—Continued.

Name residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Ames, Franklin, Chicago, Ill. Suspending-clamp for use with carpet-sewing machines	472,779	Apr. 12	1180	302	59	236
Ames, Frederick A., Owensborough, Ky. Whip-socket	487,814	Dec. 13	951	240	61	1527
Ames, George, Green Ridge, Mo. Check-row planter	487,506	Dec. 6	449	116	61	1410
Ames, Jesse E., Boston, Mass. Account-book	477,631	June 28	2257	535	59	1927
Ames, John G., and R. Herrmann, Chicago, Ill. Wheel	471,711	Mar. 29	3180	{ 811 812 }	{ 58 }	1747
Ames, Knowlton L. (See Clafin and Ames.)						
Amet, Edward H., assignor to himself and H. A. Streeter, Chicago, Ill. Fire-alarm and telephone apparatus	470,231	Mar. 8	901	223	58	1283
Amies, Joseph H., Scranton, assignor to C. W. Kennedy, Philadelphia, Pa. Making plastic compositions	469,111	Feb. 16	1882	—	58	912
Amies, William T., assignor to Seth Thomas Clock Company, New York, N. Y. Clock-case.	478,546	July 12	755	185	60	165
Amilly, Maurice d', and J. Caillet, Paris, France, assignors to W. G. Tiffany, Baltimore, Md. Horseshoe	468,130	Feb. 2	339	84	58	590
Amos, Alexander M., Buffalo, N. Y. Potato-masher	488,668	Dec. 27	2359	584	61	1839
Amos, George W., Chicago, Ill. Mechanical movement	476,112	May 31	3555	894	59	1383
Amos, William, Providence, R. I. Insect-trap	485,077	Oct. 25	2447	630	61	532
Amraytoon Paper Tube Company. (See Coram and Huntton, assignors.)						
Amrock, Edward S., Waltham, Mass. Brake for electric cars	469,383	Feb. 23	2305	593	58	1002
Ams, Max, New York, N. Y. Wall-facing	476,354	June 7	198	47	59	1474
Ams, Max, New York, N. Y. Cap for mustard-bottles	476,771	June 14	819	202	59	1613
Amsler, Carl. (See McClure, George W., assignor.)						
Amsler, Carl. (See McClure and Amsler.)						
Amspcher, Wesley B. (See Sterner and Amspcher.)						
Amundson, Hans. (See Kurz and Amundson.)						
Anchor Pearl Company. (See Taft, Walter E., assignor.)						
Anchor Pearl Company of Portland, Me. (See Taft, Walter E., assignor.)						
Andersen, Albert. (See Andersen, Johan M., assignor.)						
Andersen, Albert, assignor of one-half to J. M. Andersen, Boston, Mass. Insulating-coupling	474,569	May 10	1106	282	59	861
Andersen, Hans J., St. Cloud, Minn. Combined band and circular saw mill	470,964	Mar. 15	2055	526	58	1514
Andersen, Johan M. (See Andersen, Albert, assignor.)						
Andersen, Johan M., assignor of one-half to A. Andersen, Boston, Mass. Trolley-wire-circuit breaker	474,037	May 3	242	58	59	684
Andersen, Johan M., assignor of one-half to A. Andersen, Boston, Mass. Engine	477,921	June 28	2715	680	59	2016
Andersen, Peter, assignor to H. G. Olds, Fort Wayne, Ind. Fifth-wheel	480,901	Aug. 16	1837	457	60	963
Andersen, Richard C., Pawnee City, Nebr. Device for watering stock	474,621	May 10	1187	301	59	876
Andersen, Richard C., Pawnee City, Nebr. Cooking-vessel	474,622	May 10	1188	302	59	876
Andersen, Richard C., Pawnee City, assignor of one-half to J. L. Marshall, Lincoln, Nebr. Cooking utensil	474,619	May 10	1184	301	59	875
Andersen, Richard C., Pawnee City, assignor of one-half to J. L. Marshall, Lincoln, Nebr. Apparatus for cooking by steam	474,620	May 10	1185	301	59	875
Anderson, Albert. (See Andersen, Johan M., assignor.)						
Anderson, Albert, Boston, Mass. Trolley-wire insulator	484,280	Oct. 11	1155	294	61	248
Anderson, Alfred H. (See Todd and Anderson.)						
Anderson, Andreas P., Oriental, Nev. Quartz-crusher	480,647	Aug. 9	1443	359	60	870
Anderson, Anders, Blossburg, Mont. Elevated railway	470,534	Mar. 8	1411	368	58	1377
Anderson, Anders G., Chicago, Ill. Drawbridge-gate	486,843	Nov. 29	2658	{ 695 696 }	{ 61 }	1173
Anderson, Annie L., et al., administrators. (See Anderson, Frank.)						
Anderson, Anton G., assignor to Illinois Malleable Iron Company, Chicago, Ill. Floor-thimble	469,005	Feb. 16	1745	444	58	884
Anderson, Benjamin B. (See Lomax and Anderson.)						
Anderson, Benjamin C., Brooklyn, N. Y. Plumber's trap	473,993	May 3	169	40	59	671
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Gang-plow	468,021	Feb. 2	174	42, 43	58	555
Anderson, Charles, assignor to South Bend Iron Works, South Bend, Ind. Sulky-plow	476,355	June 7	199	48	59	1474
Anderson, Charles A., Rockford, Ill. Cultivator-shovel	472,970	Apr. 19	1463	375	59	305
Anderson, Charles A., Rockford, Ill. Car-coupling	477,399	June 21	1865	459	59	1833
Anderson, Charles A., A. W. and F. D. England, Pembroke, Ky. Harrow	483,317	Sept. 27	2289	{ 575 576 }	{ 60 }	1820
Anderson, Charles G., Columbus, Ohio. Window	471,729	Mar. 29	3216	819	58	1754
Anderson, Charles J. (See Hallsten and Anderson.)						
Anderson, Charles L. (See Mosher and Anderson.)						
Anderson, Christopher, Leeds, England. Smoke-exhausting apparatus for locomotives	470,965	Mar. 15	2058	527	58	1514
Anderson, Christopher, Leeds, England. Smoke-exhausting apparatus for locomotives	471,458	Mar. 22	2813	717	58	1671
Anderson, Clarence L., and G. H. Fairchild, San Francisco, Cal. Adjusting device for cable-grips	468,555	Feb. 9	1026	261	58	733
Anderson, David, and J. Naylor, Stowell, Victoria. Spark-extinguisher and smoke-consumer	472,568	Apr. 12	871	224	59	180
Anderson, Edward C., Boston, Mass., assignor to Invisible Eyelet Company, Portland, Me. Shoe	475,073	May 17	1903	483	59	1030
Anderson, Frank, deceased, Peekskill, N. Y.; A. L., G. H., and H. Anderson, administrators. Automatic telegraph	472,326	Apr. 5	498	130	59	93
Anderson, Frank S. (See Sigsbee, Hayward, and Anderson.)						
Anderson, Furr L., Audubon, Iowa. Draft-equalizer	473,895	May 3	1	1	59	637
Anderson, George, Madras, India. Tip-wagon	483,200	Sept. 27	2079	{ 525 526 527 528 }	{ 60 }	1782
Anderson, George A., Greenwood, Mass. Double door	475,531	May 24	2626	668	59	1187
Anderson, George E., and M. J., Grantsburg, Wis. Potato-digger	475,373	May 24	2370	{ 606 607 }	{ 59 }	1140
Anderson, George W. (See Best and Anderson.)						
Anderson, George W., and G. M. Huntington, Ladoga, Ind. Expanding device for use in making wash-bollers	485,078	Oct. 25	2447	630	61	532
Anderson, Gilbert, Chicago, Ill. Valve	477,398	June 21	1863	{ 458 459 }	{ 59 }	1832
Anderson, Gilbert H., et al., administrators. (See Anderson, Frank.)						
Anderson, Gustav, Wells, Minn. Grain measurer and bagger	468,091	Feb. 2	271	66	58	577
Anderson, Hans J., Lake Mills, Wis. Butter-worker	483,201	Sept. 27	2085	528	60	1783
Anderson, Harriett E. (See Anderson, William, assignor.)						
Anderson, Henry B. (See Williamson, David, assignor.)						
Anderson, Henry C., assignor of three-fourths to J. W. Weaver and R. N. Fox, Whitesborough, Tex. Churn	469,511	Feb. 23	2507	643	58	1039

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & C.	Vol.	Page.
Anderson, Homer, <i>et al.</i> , administrators. (See Anderson, Frank.)						
Anderson, James, Harrodsburg, Ky. Scaffolding	470,032	Mar. 1	580	145	58	1211
Anderson, James C., Highland Park, Ill. Hollow brick wall	467,489	Jan. 26	1920	491	58	391
Anderson, James C., Highland Park, Ill. Hollow brick wall	467,490	Jan. 26	1921	491	58	391
Anderson, James C., Highland Park, Ill. Hollow brick wall	467,491	Jan. 26	1923	491	58	391
Anderson, James C., Highland Park, Ill. Brick-machine	468,059	Feb. 2	228	56	58	568
Anderson, James C., Highland Park, Ill. Manufacture of vitreous bricks	468,320	Feb. 9	648		58	659
Anderson, James C., Highland Park, Ill. Coloring brick	468,321	Feb. 9	648	161	58	659
Anderson, James C., Highland Park, Ill. Manufacturing or burning coke	485,904	Nov. 8	1139	302	61	822
Anderson, James J., Chicago, Ill. Metal-rolling machine	488,048	Dec. 13	1347	334	61	1606
Anderson, John, Hickson, N. D. Window frame and sash	481,001	Aug. 16	2149	533	60	1022
Anderson, John, assignor to Pierce Steam Heating Company, Buffalo, N. Y. Flask-weight for molds	488,513	Dec. 20	2105	522	61	1775
Anderson, John A., assignor of one-half to D. Mackenzie, Wakefield, Mass. Plate-securing device	475,745	May 31	2960	751	59	1265
Anderson, John A. E., assignor of one-half to E. Schopbach, Lebanon, Ind. Pistol-pocket	468,556	Feb. 9	1027	262	58	734
Anderson, John B., Montpelier, Vt. Fluid-regulator	468,737	Feb. 9	1296	329	58	788
Anderson, John B., assignor to Lane Manufacturing Company, Montpelier, Vt. Derrick-crane	479,730	July 26	2635	653	60	551
Anderson, John N., Chicago, Ill. Stretcher for the paper or canvas of pictures	472,021	Apr. 5	2	1	59	3
Anderson, John S., Corsicana, Tex. Feed-trough	472,971	Apr. 19	1463	375	59	305
Anderson, Lars O., Kansas City, Kans. Folding bed	467,603	Jan. 26	2122	539	58	427
Anderson, Lee, Paris, Tex. Stirrup	475,374	May 24	2372	607	59	1140
Anderson, Martin, Henderson Station, Ill. Swinging gate	482,218	Sept. 6	487	116	60	1430
Anderson, Martin J. (See Anderson, George E. and M. J.)						
Anderson, Niels, Sioux City, Iowa. Harrow	485,677	Nov. 8	804	{ 214 215 }	61	754
Anderson, Oliver, assignor of one-half to H. F. Herrick, Racine, Wis. Thrashing-machine	482,494	Sept. 13	968	{ 234 235 }	60	1538
Anderson, Olof W., Moorhead, Minn. Copying appliance	483,679	Oct. 4	236	59	61	49
Anderson, Peter, Fort Wayne, Ind. House-door letter-box	473,138	Apr. 19	1753	442	59	357
Anderson, Peter, New York, N. Y. Piano	488,915	Dec. 27	2744	677	61	1918
Anderson, Peter W., Roanoke, Va. Puzzle	483,276	Sept. 27	2228	560	60	1809
Anderson Preserving Company (See Cox, John T., assignor.)						
Anderson, Robert M., <i>et al.</i> (See Hudgins, George E., assignor.)						
Anderson, Thaddens N. L., and W. Boatner, Centerville, Miss. Fertilizer-distributor	467,074	Jan. 12	1250	316	58	246
Anderson, Thomas C., Moscow, N. Y. Railway-tie	470,094	Mar. 1	675	166	58	1230
Anderson, Valerius D., Cleveland, Ohio. Press	474,802	May 17	1473	375	59	947
Anderson, William. (See Symington and Anderson.)						
Anderson, William, assignor to H. E. Anderson, Boston, Mass. Sofa-bed	477,881	June 28	2657	664	59	2004
Anderson, William A., assignor of one-third to R. Burns, Chicago, Ill. Sectional canteen or coffee-flask	475,231	May 17	2145	543	59	1079
Anderson, William F. (See Gustafson, Axel R., assignor.)						
Anderson, William J. (See Arbutin and Anderson.)						
Anderson, William N., San Rafael, Cal. Elevator	480,542	Aug. 9	1270	{ 318 319 }	60	836
Anderson, William R. (See Clouse and Anderson.)						
Anderson, William S., <i>et al.</i> (See Hudgins, George E., assignor.)						
Anderson, William W., New York, N. Y. Cuff-holder	474,803	May 17	1474	375	59	947
Anderssen, Johannes, Christiania, Norway. Mud-guard for carriages	480,425	Aug. 9	1188	298	60	819
Anderson, Gustaf M., Newark, N. J., assignor to United States Butter Extractor Company, New York, N. Y. Centrifugal butter-extractor	487,316	Dec. 6	129	39	61	1346
Andre, Elias C., Bay City, Mich. Extension step-ladder	486,069	Nov. 15	1412	374	61	896
Andre, Emil. (See Rempen and Andre.)						
André, Friedrich, Hildesheim, Germany. Disinfecting apparatus	470,966	Mar. 15	2058	527	58	1515
André, Thomas J., Wauson, Ohio. Fence-tightener	471,207	Mar. 22	2435	620	58	1599
André, Ulysse, and O. Durand, Barcelona, Spain. Cock or tap	476,113	May 31	3557	895	59	1383
Andresen, Momme, Berlin, Germany. Developing photographic pictures	475,372	May 24	2369		59	1139
Andresen, Momme, Berlin, Germany. Photographic developer	477,486	June 21	2003		59	1660
Andress, Thomas, Pittsville, Wis. Whiffletree-hook	472,491	Apr. 5	754	192	59	1431
Andrews, Albert A., Whitinsville, Mass. Top roll	474,204	May 3	493	118	59	733
Andrews, Brannard A., <i>et al.</i> (See Parks, Dana, assignor.)						
Andrews, Charles S., Wilmington, N. C. Former for berry-crates	467,026	Jan. 12	1165	295	58	230
Andrews, Daniel L., Denison, Tex. Wick-trimmer	476,114	May 31	3557	895	59	1383
Andrews, David H. (See Worcester, Joseph R., assignor.)						
Andrews, Elbert J., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Type setting and distributing machine	467,631	Jan. 26	2156	548	58	433
Andrews, George M., Boston, Mass. Calculating-instrument	476,070	Nov. 15	1413	374	61	896
Andrews, Horace S., West Orange, N. J. Coal-scuttle screen	482,431	Sept. 13	860	206	60	1517
Andrews, James M., Syracuse, N. Y. Journal-bearing	497,815	Dec. 13	952	{ 240 241 }	61	1528
Andrews, James M. and M. A., Syracuse, N. Y. Journal-bearing	478,533	July 5	733	{ 178 179 }	60	145
Andrews, Joseph D. F., London, England, assignor, by mesne assignments, to Curtis Electric Manufacturing Company, of West Virginia. Dynamo-electric machine or motor	474,624	May 10	1191	302	59	876
Andrews, Marion A. (See Andrews, James M. and M. A.)						
Andrews, Permelia A. (See Andrews, William, assignor.)						
Andrews, Robert W., Staffordville, Conn. Picker-check for looms	469,671	Mar. 1	2	1	58	1099
Andrews, Sidney F. (See Brown, Frederick H., assignor.)						
Andrews, Tyler, Boston, and J. H. Fitzpatrick, Medford, Mass. Device for preventing burglaries	468,557	Feb. 9	1029	262	58	734
Andrews, W. S. (See Carpenter, Charles E., assignor.)						
Andrews, Walter E., New York, N. Y. Dental reflector and tongue-guard	477,791	June 28	2502	627	59	1975
Andrews, Willard J., assignor to J. G. Reardin, Kansas City, Mo. House letter-box	467,586	Jan. 26	2096	531	58	422
Andrews, William, Aston, near Birmingham, England. Velocipede	475,959	May 31	3318	837	59	1334
Andrews, William, assignor to P. A. Andrews, Decatur, Ill. Farm-gate	467,113	Jan. 12	1330	336	58	262
Andrews, William S., assignor to Edison General Electric Company, New York, N. Y. Insulator	466,391	Jan. 5	126	35	58	26
Andrews, William S., assignor to Edison General Electric Company, New York, N. Y. Circuit-controller for electric motors	474,623	May 10	1190	302	59	876
Andrews, William S., New York, and H. P. Ball, Brooklyn, assignors to Edison General Electric Company, New York, N. Y. Insulator for trolley-wires	470,417	Mar. 8	1234	{ 315 316 }	58	1343
Andrews, William S., New York, N. Y., and T. Spencer, Philadelphia, Pa., assignors to H. C. Wirt, Boston, Mass. Dynamo-electric machine. (Reissue)	11,266	Aug. 30	3552	860	60	1319

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Andross, Edward B., Brockport, N. Y. Automatic twine-holder	475,173	May 17	2057	517	59	1061
Andrus, Duane P., St. Louis, Mo. Electric belt	479,147	July 19	1667	417	60	352
Andrus, Grosvenor S., Walla Walla, Wash. Weed-cutter	479,612	July 26	2429	605	60	513
Angell, Edwin E. (See Burton and Angell.)						
Angell, Edwin E., Somerville, Mass., assignor to Electrical Forging Company, of Maine. Journal-box	486,175	Nov. 15	1595	422	61	931
Anger, John E., Green Island, N. Y. Car-truck	479,237	July 19	1805	452	60	378
Anger, John E., Green Island, N. Y. Car-brake	481,693	Oct. 18	1809	460	61	390
Angerer, Victor. (See Samuel, Angerer, and Psilander.)						
Angerer, Victor, assignor to William Wharton, Jr., and Company, Philadelphia, Pa. Combined foot and brace for railway-rails	483,889	Oct. 4	544	137	61	113
Angerer, Victor, and C. A. Psilander, assignors to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Track structure	488,377	Dec. 20	1894	474	61	1731
Angier, O. M. (See Wilder, Frank E., assignor.)						
Angle, Harrison M., and W. D. Hess, Evanston, Ill. Lubricator for elevator-guides	466,971	Jan. 12	1075	273	58	213
Angois, Paul. (See Woodhead and Angois.)						
Annable, George G., assignor of one-half to H. Lacy, Syracuse, N. Y. Governor	476,356	June 7	201	48, 49	59	1475
Annibale, Allevi, Chicago, Ill. Lever-power engine	483,776	Oct. 4	385	95, 96	61	80
Annis, Albert S. (See Broca, Franklin D., assignor.)						
Ansley, Frank and G. W., Medical Lake, Wash. Combined milk pail and strainer	475,375	May 24	2373	607	59	1140
Ansley, George W. (See Ansley, Frank and G. W.)						
Ansonia Brass and Copper Company. (See Cowles and Gilpin, assignors.)						
Ansonia Brass and Copper Company. (See Hull, Wolcott A., assignor.)						
Ansonia Clock Company. (See Davies, Walter D., assignor.)						
Ansted, Edward W., Connorsville, Ind. Machine for bending and forming springs	483,094	Sept. 20	1907	482	60	1736
Antislisle, William J., London, Canada. Coffin-shell mold	480,986	Aug. 16	1974	493	60	989
Anthony, Frederick A., Hackensack, N. J., and W. H. Lewis, Huntington, assignors to E. & H. T. Anthony & Company, New York, N. Y. Photographic shutter	471,088	Mar. 22	2246	577	58	1563
Anthony, Jacob L., Celina, Ohio. Fastening or locking device for stovepipes	473,052	Apr. 19	1606	409	59	331
Anthony, Mark. (See Secor, Jerome B., assignor.)						
Anthony, Mark, Berkeley, assignor to Golden Gate Safety Faucet Company, San Francisco, Cal. Means for protecting the bungways of barrels	476,180	May 31	3609	927	59	1405
Anthony, Mark, Berkeley, assignor to Golden Gate Safety Faucet Company, San Francisco, Cal. Faucet and bushing	487,206	Nov. 29	3264	834	61	1292
Anthony, Mark, Berkeley, assignor to Golden Gate Safety Faucet Company, San Francisco, Cal. Faucet and bushing	487,307	Nov. 29	3265	834	61	1292
Anthony, Mark, Berkeley, and W. C. Savage, Oakland, Cal. Thimble and bushing for barrels	468,144	Feb. 2	359	88	58	594
Anthony, Mark, Berkeley, and W. C. Savage, Oakland, Cal. Bung	483,035	Sept. 20	1820	462	60	1719
Anthony, William H. (See Goode and Anthony.)						
Anton, John C., assignor of one-half to P. G. Anton, St. Louis, Mo. Repetition piano-action	476,115	May 31	3558	895	59	1383
Anton, Philip G. (See Anton, John C., assignor.)						
Antonini, Frank E. (See Watson and Antonini.)						
Apfel, Jacob. (See Page and Apfel.)						
Apfelbaum, Morris, New York, N. Y. Button	472,845	Apr. 12	1268	325	59	253
Appell, John F., St. Louis, Mo. Window-screen	468,906	Feb. 16	1555	395	58	847
Appenzeller, Eugene. (See Dolson and Appenzeller.)						
Appert, Léon, Paris, France. Apparatus for molding curved hollow glass articles	476,772	June 14	819	202	59	1614
Apple, Charles S., Bellaire, Ohio. Potato-masher	472,515	Apr. 12	799	205	59	165
Appleby, John F., assignor to William Deering & Company, Chicago, Ill. Winch	475,376	May 24	2374	607	59	1140
Appleby, John F., assignor to William Deering & Company, Chicago, Ill. Harvester-reel support	481,218	Aug. 23	2371	583	60	1079
Appleby, John F., Santa Cruz, Cal., and J. F. Steward, assignors to William Deering & Company, Chicago, Ill. Mechanical movement	472,972	Apr. 19	1464	375	59	305
Appleby, Reuben L., assignor of one-half to J. N. Wheeler, Wilmington, Del. Indicator	467,910	Feb. 2	8	3	58	528
Applegate Electric Light and Power Company. (See Applegate, Eugene W., assignor.)						
Applegate, Eugene W., Omaha, Nebr., assignor to Applegate Electric Light and Power Company, Chicago, Ill. Incandescent electric lamp	487,360	Dec. 6	202	55	61	1360
Applegate, Eugene W., Omaha, Nebr., assignor to Applegate Electric Light and Power Company, Chicago, Ill. Incandescent lamp	488,139	Dec. 13	1488	375	61	1636
Applegath, William, Hamilton, Canada. Hat-supporter	481,156	Aug. 23	2275	561	60	1039
Appleman, Mathias M., Rohrsburg, Pa. Sawmill-dog	485,251	Nov. 1	148	43	61	603
Appleton, Charles J., New York, N. Y., assignor of two-thirds to H. S. Mack and E. A. Whittelsey. Knitting-machine	482,608	Sept. 13	1143	276 277 278	60	1572
Appleton Machine Company et al. (See Goodrick, Edward W., assignor.)						
Appleton Manufacturing Company. (See Search, Casper F., assignor.)						
Appley, Harrison V., Grand Rapids, Mich. Thill-bolt	471,502	Mar. 22	2874	731	58	1683
Appley, Harrison V., Grand Rapids, Mich. Anti-rattler for thill-couplings	471,503	Mar. 22	2875	732	58	1684
Appleyard, Arthur E., Boston, Mass. Electrical heater	483,758	Oct. 4	352	88	61	74
Appleyard, Arthur E., Boston, Mass. Electrical heater	483,759	Oct. 4	353	89	61	74
Appleyard, Arthur E., Boston, assignor to H. L. Millis, trustee, Millis, Mass. Electrical heating apparatus	467,075	Jan. 12	1252	317	58	246
Arave, Daniel W., assignor of one-half to E. A. Barnes, Ogden, Utah Ter. Combined step-ladder and ironing-board	473,896	May 3	2	1	59	637
Arbegust, Thomas O. (See Mesker and Arbegust.)						
Arborn, Russell, Los Angeles, Cal. Cow, calf, and colt weaner	467,144	Jan. 19	1387	355	58	281
Arbitt, John, and W. J. Anderson, Des Moines, Iowa. Vehicle-wheel	471,933	Mar. 29	2520	899	58	1213
Arbuckle Brothers. (See Smyser, Henry E., assignor.)						
Arbuckle, Frank P., et al. (See Stokesbury, John H., assignor.)						
Archbold, Israel N., Ridge Farm, Ill. Machine-gun	476,590	June 7	546	130	59	1545
Archbold, Israel N., Ridge Farm, Ill. Revolving firearm	476,591	June 7	550	131	59	1545
Archer, Francis M., Fountaintown, Ind. Press for honey-sections	476,116	May 31	3561	895	59	1384
Archer, George W., assignor to Archer Manufacturing Company, Rochester, N. Y. Elevator-door-operating device	476,773	June 14	821	202	59	1614
Archer, George W., assignor to Archer Manufacturing Company, Rochester, N. Y. Barber's chair	476,774	June 14	822	203	59	1614
Archer Manufacturing Company. (See Archer, George W., assignor.)						
Archer & Panceast Manufacturing Company. (See Dears, Charles, assignor.)						
Archibald, William W., Newport News, Va. Clamp for molders' flasks	474,352	May 10	763	199	59	795
Arday, Robert, assignor to D. Wistar, Philadelphia, Pa. Umbrella-runner	475,074	May 17	1904	483	59	1030
Arens, August, assignor to P. & F. Corbin, New Britain, Conn. Lock	471,594	Mar. 29	3003	764	58	1715
Arens, August, assignor to P. & F. Corbin, New Britain, Conn. Lock	471,595	Mar. 29	3004	764	58	1715

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Arens, August, assignor to P. & F. Corbin, New Britain, Conn. Lock.....	475,914	May 31	3246	819	59	1320
Arey, Clarence O., Cleveland, Ohio. Furnace or setting for steam-generators.....	473,053	Apr. 19	1607	409	59	331
Arey, Clarence O., Cleveland, Ohio. Boiler and furnace setting.....	482,147	Sept. 6	368	87	60	1408
Ariza, Victor M., Maracaibo, Venezuela. Ruler.....	471,459	Mar. 22	2815	718	58	1671
Arland, Henry. (See Linkert, John, assignor.)						
Arlington Manufacturing Company. (See Colburn, Frederick C., assignor.)						
Armas, Fabricio L., Pescadero, Cal. Crupper-strap fastener.....	475,655	May 24	2813	713	59	1225
Armbruster, Hermann, New Haven, Conn. Tug-loop.....	480,003	Aug. 2	376	93	60	652
Arment, Samuel B., Bloomsburg, Pa. Lawn-mower grass-receptacle.....	474,804	May 17	1476	376	59	948
Armenta, Victor M., Santa Marta, Colombia. Distance measuring and registering instrument.....	467,847	Jan. 26	2505	634	58	499
Armitage, Edwin, Toronto, assignor of three-fourths to A. G. Cole, Ottawa, and T. Dill, Toronto, Canada. Painting-machine.....	468,145	Feb. 2	360	89	58	594
Armstrong & Co., R. G. (See Armstrong, Robert G., assignor.)						
Armstrong & Co., William H. (See Willbrandt, Emil, assignor.)						
Armstrong, David H., Long Island City, N. Y. Electric switch.....	483,704	Oct. 4	274	68	61	57
Armstrong, Edwin E., Detroit, Mich. Horse-collar fastener.....	474,712	May 10	1324	338	59	904
Armstrong, Frank, Bridgeport, Conn. Adjustable die.....	469,622	Feb. 23	2664	685	58	1072
Armstrong, Harry, Fidelity, Ill. Toe-weight for horses.....	481,611	Aug. 30	3025	739	60	1217
Armstrong, James P., assignor to I. P. Primrose, J. M. Hyde, and W. G. Crook, Nelsonville, Ohio. Registering pendulum-scale.....	478,534	July 5	735	179	60	146
Armstrong, John B., Guelph, Canada. Sulky.....	482,114	Sept. 6	312	74	60	1396
Armstrong, John B., Guelph, Canada. Apparatus for shaping, hardening, and tempering steel plates, &c.....	488,301	Dec. 20	1760	444	61	1705
Armstrong, John E., Santa Cruz, Cal. Latch and lock combined.....	423,318	Sept. 27	2290	576	60	1920
Armstrong, Lewis D., deceased, Lock Haven, Pa.; M. M. Armstrong, administrator and assignor to New York and Pennsylvania Company, of Pennsylvania. Apparatus for reclaiming soda-ash.....	480,702	Aug. 16	1538	383	60	901
Armstrong, Meylert M., administrator. (See Armstrong, Lewis D.)						
Armstrong, Miller F., et al. (See Davis, William H., assignor.)						
Armstrong, Mitchell & Co., W. G. (See Dyer, Henry C. S., assignor.)						
Armstrong, Preston W., Columbus, Ohio. Water-spout cut-off.....	469,989	Mar. 1	523	130	58	1200
Armstrong, Robert G., assignor to R. G. Armstrong & Co., Wichita, Kans. Hanger for swinging harness.....	481,627	Aug. 30	3048	744	60	1222
Armstrong, Robert G., assignor to R. G. Armstrong & Co., Wichita, Kans. Hame-fastener.....	481,725	Aug. 30	3210	784	60	1253
Armstrong, Samuel H. (See Wages and Armstrong.)						
Armstrong, William D. (See Agner and Armstrong.)						
Armstrong, William L., Bellport, N. Y. Sieve.....	478,976	July 19	1399	347	60	303
Armstrong, William T., et al. (See Davis, William H., assignor.)						
Arnaud, Samuel, Maidenhead, England. Meat-crusher, &c.....	472,973	Apr. 19	1466	{ 375 376 }	59	305
Arne, George H. (See Kint, Daniel, assignor.)						
Arnett, William D., Caldwell, Idaho. Grading-machine.....	472,569	Apr. 12	872	224	59	180
Arnett, William J. (See Simpsou, Peter P., assignor.)						
Arno, Oliver H., Boston, Mass. Magazine spring-gun.....	473,808	Apr. 26	2-61	718	59	593
Arnold, Alexius H., Chicago, Ill. Adjustable angular and circular composing-bar.....	474,649	May 10	1227	314	59	884
Arnold, Alonzo B., Marshalltown, Iowa. Harness-saddle.....	478,535	July 5	738	180	60	146
Arnold, Benjamin, East Greenwich, R. I. Endless-chain elevator.....	473,203	Apr. 19	1569	471	59	378
Arnold, Benjamin, East Greenwich, R. I. Endless-chain elevator.....	476,507	June 7	428	100	59	1521
Arnold, Charles N. (See Hemmer, Frederick L., assignor.)						
Arnold, Clarence R., assignor to H. M. Arnold, Wellsville, Ohio. Tricycle.....	474,279	May 3	606	150	59	755
Arnold, Craig R., Sharon Hill, Pa. Incandescent-electric-lamp socket.....	473,373	Apr. 19	2156	542	59	436
Arnold, Craig R., Sharon Hill, Pa. Junction-box.....	476,970	June 14	1157	279	59	1680
Arnold, Daniel J. C., New London, Ohio. Band-tightener.....	485,484	Nov. 1	512	135	61	676
Arnold, Eliphalet L., Georgetown, Tex. Elevated railway.....	476,720	June 7	734	{ 181 182 }	59	1583
Arnold, Everett D., assignor to Troy Steel and Iron Company, Troy, N. Y. Harrow-disk.....	488,514	Dec. 20	2106	523	61	1775
Arnold, Helen M. (See Arnold, Clarence R., assignor.)						
Arnold, Henry H., Rockland, Mass. Channeling-machine.....	484,130	Oct. 11	896	229	61	198
Arnold, John D., assignor of one-half to H. O. Jones, Holley, N. Y. Barrel-truck.....	466,951	Jan. 12	1049	266	58	208
Arnold, John T. (See Roney and Arnold.)						
Arnold, Lyndon, St. Johnsbury, Vt. Railway-car gate.....	481,540	Aug. 23	2910	714	60	1180
Arnold, Matthew, San Francisco, Cal. Riveting-machine.....	469,891	Mar. 1	360	91	58	1170
Arnold, Oscar M., assignor of one-third to A. T. Sherrod, Searcy, Ark. Meat-tenderer.....	478,547	July 12	756	185	60	165
Arnold, Phineas, Canal Dover, Ohio. Preparing clay.....	475,915	May 31	3247	820	59	1321
Arnold, Rawdon, Sacramento, Cal. Ice-pitcher.....	481,544	Aug. 30	2918	718	60	1197
Arnold, Samuel S., Toronto, Canada. Axle-bearing.....	481,545	Aug. 30	2919	718	60	1198
Arnold, Vindex, and F. E. Wetmore, assignors of one-third to H. Ryder, Marshall, Mich. Wire fence.....	484,387	Oct. 18	1321	337	61	293
Arnold, Walter, St. Cloud, Minn. Rock-drill machine.....	471,331	Mar. 22	2614	663	58	1634
Arnold, Wellington A., and E. M. Babcock, Moravia, N. Y. Carpet-stretcher.....	472,204	Apr. 5	312	80	59	59
Arnold, Willis E., Danville, Ill. Wire-staple making and driving machine.....	472,516	Apr. 12	799	{ 205 206 }	59	165
Aron, Lessar M. (See May and Aren.)						
Arrick, Everton J., MacConnellsville, Ohio. Watch-case pendant.....	479,930	Aug. 2	241	59	60	628
Arthur, Charles, East Orange, assignor to Newark Watch Case Material Company, Newark, N. J. Watchcase-pendant.....	482,971	Sept. 20	1716	433	60	1697
Arthur, John E., Clinton, Ill. Nut and bolt lock.....	479,131	July 19	1642	411	60	347
Arthur, Joseph, New York, N. Y. Theatrical illusion apparatus.....	471,371	Mar. 22	2678	681	58	1646
Arthur, Richard E., et al. (See Arthur, William, assignor.)						
Arthur, William, assignor of one-half to R. E. Arthur and W. G. Jones, Delphos, Ohio. Fence.....	487,208	Nov. 29	3266	834	61	1292
Arundale, John, et al. (See Terrell, Nathaniel A., assignor.)						
Arvidson, Pier N., Kalamazoo, Mich. Tailor's measuring square.....	483,521	Oct. 4	4	1	61	4
Arvine, Freeling W., Port Richmond, N. Y. Crystallizing and setting box.....	486,015	Nov. 8	1326	352	61	861
Asbell, Joseph W. (See Horne and Asbell.)						
Aschendorf, Friedrich W., Wiesbaden, Germany. Ear-trumpet.....	466,531	Jan. 5	355	89	58	68
Ascough, Jesse, Handsworth, England. Making borax.....	476,592	June 7	554	.....	59	1546
Ash, Joseph H., Brooklyn, N. Y. Plumber's clamp.....	474,713	May 10	1325	338	59	904
Ash, Walter V., Newark, N. J. Treadle-crank for bicycles.....	485,678	Nov. 8	805	215	61	754
Ashbaugh, Charles C., assignor to W. Buhl & Co., Detroit, Mich. Muff.....	482,432	Sept. 13	861	207	60	1517
Ashberry, Philip, and W. Barnes, Sheffield, England. Animal-shears.....	479,109	July 19	1611	403	60	342
Ashberry, Philip, and W. Barnes, Sheffield, England. Animal-shears.....	479,110	July 19	1613	403	60	342

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Ashby, Charles M., and H. M. Seybold; said Ashby assignor to H. Schaper, Sioux Falls, S. D. Chocolate-cutter.	488,493	Dec. 20	2074	515	61	1769
Ashby, George J. M., Coney Island, N. Y., assignor to A. Brock, London, England. Pyrotechnic device.	487,898	Dec. 13	1087	272	61	1554
Ashby, George J. M., Coney Island, N. Y., assignor to A. Brock, London, England. Pyrotechnic device.	487,899	Dec. 13	1089	272	61	1554
Ashby, Jay T. (See Kent and Ashby.)						
Ashe Manufacturing Company. (See Ashe, Robert, assignor.)						
Ashe, Robert, Somerville, Mass., assignor to Ashe Manufacturing Company, of Maine. Nail-driving machine.	470,137	Mar. 1	735	183	58	1242
Ashenden, Henry H. (See Atwood and Ashenden.)						
Ashford, Henry, Philadelphia, Pa. Boat-detaching apparatus.	469,034	Feb. 16	1783	454	58	892
Ashley, Edward L., and W. H. Camp, Waterbury, Conn. Push-button and thermostat.	488,645	Dec. 27	2320	574	61	1832
Ashley, Frank M., Hawthorne, assignor of one-half to W. Wood, Paterson, and W. A. Rosenbaum, Jersey City, N. J. Projectile.	486,657	Nov. 22	2349	614	61	1094
Ashley, Frederick, Brooklyn, N. Y. Bicycle-wheel.	481,460	Aug. 23	2787	685	60	1155
Ashley, Henry P. (See Jones and Ashley.)						
Ashley, William A. G., assignor of two-thirds to J. M. Lawton, Jr., and A. T. Howland, New Bedford, Mass. Knob attachment.	481,519	Aug. 23	2866	705	60	1171
Ashley, William A. G., assignor of two-thirds to J. M. Lawton, Jr., and A. T. Howland, New Bedford, Mass. Knob attachment.	485,145	Oct. 25	2543	653	61	552
Ashlin, Henry C., London, England. Steam-boiler furnace.	480,864	Aug. 16	1778	445	60	951
Ashness, William, Andover, Mass. Friction-regulator for reversing motion of spinning-mules.	469,414	Feb. 23	2356	604	58	1011
Ashton, Walter S., St. Louis Mo. Sight-feed lubricator.	471,934	Mar. 29	3521	599	58	1813
Ashurst, John L., Havana, assignor to L. B. Ashurst, Kilbourn, Ill. Grain-drill.	475,532	May 24	2627	668	59	1187
Ashurst, Louis B. (See Ashurst, John L., assignor.)						
Ashurst, Robert P., Blackburn, Mo. Cultivator.	475,843	May 31	3132	794	59	1298
Ashworth, Daniel, Wappinger's Falls, N. Y. Valve-gear for steam-engines.	470,343	Mar. 8	1115	285	58	1321
Ashworth, Elijah, Manchester, England. Stopping mechanism for carding-engines.	480,957	Aug. 16	1974	494	60	989
Ashworth, Granville H., assignor of two-thirds to H. B. Wieman and J. J. Shrike, Sedalia, Mo. Bee-escape for hives.	473,284	Apr. 19	2002	503	59	406
Ashworth, James W., Camden, N. J. Stretcher for necktie-bows.	473,687	Apr. 26	2680	675	59	558
Ashworth, Robert. (See Smith, George B., assignor.)						
Ashworth, Robert, St. Cloud, Minn. Hawser-clamp.	479,777	Aug. 2	6	2	60	583
Askam, William F., Shelton, Conn. Letter-box.	476,971	June 14	1159	280	59	1681
Askins, Joseph, Lima, Ohio. Apparatus for the manufacture of water-gas.	478,305	July 5	385	93	60	77
Askins, Joseph, Lima, Ohio. Apparatus for the manufacture of gas.	480,161	Aug. 2	642	163	60	704
Askren, Isaac M., Des Moines, Iowa. Curtain-mover.	469,803	Mar. 1	224	57	58	1145
Aspinwall, Lewis A., Three Rivers, assignor to Aspinwall Manufacturing Company, Jackson, Mich. Potato-cutter.	485,160	Nov. 1	2	1	61	573
Aspinwall Manufacturing Company. (See Aspinwall, Lewis A., assignor.)						
Assmy, Ernst, Milwaukee, Wis. Transfer-copying compound.	466,483	Jan. 5	276		58	53
Assorati, Antenor, assignor of one-half to A. Cuyas, New York, N. Y. Clasp.	468,633	Feb. 9	1133	289	58	754
Assorati, Antenor, New York, assignor to himself, and E. L. Desvernine, Bensonhurst, N. Y. Bolt.	475,746	May 31	2960	751	59	1265
Assorati, Antenor, and A. Cuyas, assignors to Columbus Egg Company, New York, N. Y. Puzzle.	478,497	July 5	664	162	60	132
Asten, Josephine, Washington, D. C. Skirt-elevator.	478,076	July 5	1	1	60	3
Astrup, William J. O., Cleveland, Ohio. Grass-catching attachment for lawn-mowers.	485,599	Nov. 8	685	181	61	729
Atchinson, Mattie, administratrix. (See Watson, Charles W.)						
Ateliers de Constructions Mecaniques. (See Sprenger, Jean, assignor.)						
Atberton, Garrick M., Longton, Kans., assignor of one-half to F. A. Du Bois. Speed-controller.	472,598	Apr. 12	909	233	59	187
Atherton, James. (See Bartholomew, Cassius M., assignor.)						
Atherton, Robert, Paterson, N. J. Spindle-support for silk-spinning machines.	468,634	Feb. 9	1134	289	58	754
Atherton, Stillman M., assignor to Baldwin Refrigerator Company, Burlington, Vt. Lever-latch for refrigerators.	472,938	Apr. 12	1407	360	59	281
Atkins, George J., London, England. Amalgamating apparatus for separating gold and other metals from their ores.	473,104	Apr. 19	1681	427	59	314
Atkins, George J., London, England. Electrolytic apparatus for separating gold and other metals from their ores.	473,105	Apr. 19	1684	428	59	315
Atkins, George J., London, England. Separating gold and other metals from their ores.	484,869	Oct. 25	2109	543	61	465
Atkins, John, Cincinnati, Ohio. Vehicle-shaft.	475,916	May 31	3248	820	59	1321
Atkinson, Charles, Chicago, Ill. Plow.	466,591	Jan. 5	448	115	58	86
Atkinson, Claude W. (See Atkinson, Llewelyn B. and C. W.)						
Atkinson, Claude W. (See Atkinson and Goolden.)						
Atkinson, Claude W. and L. B., London, England. Dynamo-electric generator or motor.	471,691	Mar. 29	3146	801	58	1742
Atkinson, Claude W. and L. B., London, England. Machinery for cutting coal or other minerals.	476,594	June 7	556	132	59	1546
Atkinson, Claude W. and L. B., London, England. Cutter or drill for coal.	482,033	Sept. 6	181	43	60	1371
Atkinson, Francis F., New York, N. Y. Adjustable feed-bag.	475,600	Nov. 8	686	181	61	729
Atkinson, Francis F., assignor of one-third to H. Ogden, New York, N. Y. Metallic edge-protector.	480,241	Aug. 9	787	201	60	743
Atkinson, Frederick A., Worcester, England. Interlocking railway point and signal apparatus.	484,840	Oct. 25	2071	532	61	457
Atkinson, Henry C., assignor of one-half to J. A. Norris, Franklin, Ky. Combined oil-can and lamp-filler.	469,112	Feb. 16	1883	481	58	912
Atkinson, James W., Milpitas, Cal. Incubator.	467,285	Jan. 19	1606	410	58	322
Atkinson, James W., Milpitas, Cal. Spring-gun.	477,982	June 28	2799	701	59	2034
Atkinson, John, assignor of one-third to C. J. Mortimer, New York, N. Y. Safety-bridle and releveable bit.	468,299	Feb. 2	609	152	58	641
Atkinson, Llewelyn B. (See Atkinson, Claude W. and L. B.)						
Atkinson, Llewelyn B. (See Goolden and Atkinson.)						
Atkinson, Llewelyn B. (See Renold, Goolden, Atkinson, and Gold.)						
Atkinson, Llewelyn B., London, England. Safety device for electric circuits.	482,433	Sept. 13	862	207	60	1517
Atkinson, Llewelyn B. and C. W., London, England. Electrically-driven machinery for cutting coal.	481,775	Aug. 30	3299	804	60	1271
Atkinson, Llewelyn B. and C. W., and W. T. Goolden, London, England. Machinery for cutting coal and other minerals.	476,593	June 7	555	131	59	1546
Atkiuson, Llewelyn B., H. W. Ravenshaw, London, and F. Mori, Leeds, England. Apparatus for cutting minerals.	481,921	Sept. 6	1	1	60	1335

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Atkinson, W. H., <i>et al.</i> (See Somers, Daniel M., assignor.)						
Atkinson, William, assignor of one-half to C. It. Tower, Granby, Canada. Vehicle-spring	483,505	Sept. 27	2546	639	60	1871
Atkinson, William H. (See Somers and Atkinson.)						
Atkinson, William H., Brooklyn, N. Y. Can.....	471,528	Mar. 29	2909	741	58	1699
Atkinson, William H., and D. M. Somers, Brooklyn, N. Y. Apparatus for pickling metal plates	473,106	Apr. 19	1688	428 429 430	59	345
Atlantic Dynamite Company. (See Penniman, Russell S., assignor.)						
Atlas Tack Corporation. (See Fraser, Peter, assignor.)						
Atmospheric Paint Compound Company. (See Frederick, William B., assignor.)						
Atterbury, Thomas B., Pittsburg, Pa. Device for manufacturing hollow glassware.....	484,131	Oct. 11	897	229 230	61	198
Atwater, Henry W., East Orange, N. J. Ice-cream freezer.....	479,931	Aug. 2	242	60	60	628
Atwater, Randolph K. (See Langdon, George W., assignor.)						
Atwater, Richard M., Pittsburg, Pa. Glass-funace.....	485,340	Nov. 1	288	78	61	631
Atwood Electric Company. (See Atwood, La Motte C., assignor.)						
Atwood, George F., assignor to G. M. French, Malden, Mass. Bottle-stopper.....	479,045	July 19	1508	376	60	323
Atwood, Henry O., Philadelphia, Pa. Convertible furniture.....	486,749	Nov. 22	2492	651	61	1124
Atwood, La Motte C., assignor to Atwood Electric Company, St. Louis, Mo. Motor.....	470,095	Mar. 1	676	166	58	1230
Atwood, Leonard. (See Harrington, Walter E., assignor.)						
Atwood, Lewis J., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Argand lamp.....	466,551	Jan. 5	384	98	58	74
Atwood, Walter S., and H. H. Ashenden, assignors to Plume & Atwood Manufacturing Company, Waterbury, Conn. Lamp and shade holder.....	471,286	Mar. 22	2550	648	58	1621
Atwood, William G., Harlem, Ill. Corn-harvester.....	471,632	Mar. 29	3053	777	58	1724
Atwood, William W., and W. C. Orcutt, San Francisco, Cal. Sole-inking tool.....	475,377	May 24	2375	608	59	1140
Auchman, Ferdinand, assignor to A. Moschek and A. Brunner, Graz, Austria-Hungary. Blasting-powder.....	493,125	Sept. 27	1954	495	60	1757
Audette, Henry E. (See Petterson, Charles E., assignor.)						
Auer, John F., Nyack, N. Y. Submarine boat.....	470,535	Mar. 8	1412	369	58	1372
Auer, Louis, Albany, N. Y. Shirt.....	487,000	Nov. 29	2946	759	61	1229
Anfuldish, John B., Dayton, Ohio. Attachment for brooms.....	467,127	Jan. 12	1353	345	58	266
Anger, Charles L., Paterson, N. J. Dye-tub.....	472,327	Apr. 5	502	130	59	95
Augir, Viola J., Springfield, Mo. Photograph-holder.....	476,357	June 7	203	49	59	1475
Augustin, Francis E. and W. F., Chicago, Ill. Pool-table.....	472,423	Apr. 5	645	164 165	59	121
Augustin, William F. (See Augustin, Francis E. and W. F.)						
Auld, Benjamin F., deceased, Phoenixville, Pa.; E. M. Auld, administratrix. Umbrella...	475,028	May 17	1835	465	59	1017
Auld, Emily M., administratrix. (See Auld, Benjamin F.)						
Ault, Edwin. (See Shone and Ault.)						
Aultman, Riley J., Shanesville, Ohio. Corn-harvester.....	476,595	June 7	558	133	59	1546
Aultman & Taylor Machinery Company. (See Galland, Joseph, assignor.)						
Aulst, Daniel E., Milton, Pa. Pump.....	486,016	Nov. 8	1327	352	61	861
Auspangh, William, Cairo, Mo. Sliding gate.....	488,105	Dec. 13	1436	360	61	1625
Austin, Anna B. (See Chapman and Hunt, assignors.)						
Austin, Emmet R., Norwalk, Conn. Tea or coffee filter.....	476,548	July 12	757	165	60	165
Austin, Eugene A., Boulder, Colo. Screen for clay, ores, &c.....	476,438	June 7	333	75, 76	59	1502
Austin, Frank F., assignor of one-fourth to H. B. Lyford, Chicago, Ill. Order-holder.....	484,625	Oct. 18	1695	430	61	367
Austin, Frederick C. (See Bunnell, Morton G., assignor.)						
Austin, Frederick C. (See Chapman, Thomas G., assignor.)						
Austin, Frederick C. (See Gardner, John, assignor.)						
Austin, Frederick C. (See Hinman and Bunnell, assignors.)						
Austin, Fredrick W. (See York and Austin.)						
Austin, Henry J., and R. T. Lewis, Jr., Waterbury, Conn. Machine for making sheet-metal chains.....	481,776	Aug. 30	3301	805 806	60	1271
Austin, John, Burlington, Iowa. Corner for boxes.....	486,844	Nov. 29	2063	696	61	1173
Austin, John T., assignor to D. L. Bartlett, T. J. Hayward, and B. L. Bartlett, Baltimore, Md. Magazine-stove.....	474,769	May 10	1412	359	59	921
Austin, Mellen A. (See Ingalls, Sumner L., assignor.)						
Austin, Nelson E., Danbury, Conn. Trolley for overhead railways.....	469,460	Feb. 23	2425	621	58	1024
Austin, William J., Fond du Lac, Wis. Feed-water heater.....	487,549	Dec. 6	516	134	61	1423
Auto Machinery Company. (See Hillman, William, assignor.)						
Automatic Call Manufacturing Company. (See Harto, William F., assignor.)						
Automatic Interchangeable Car Coupling Company. (See Wells, Frederick L., assignor.)						
Automatic Manufacturing Company. (See Pope, William R., assignor.)						
Automatic Time, Stamp and Register Company. (See Martin, Morris, assignor.)						
Automatic Turning Company. (See Tingley, Horace W., assignor.)						
Auzat, Joseph E., Clermont-Ferrand, France. Chopper.....	482,838	Sept. 20	1498	372	60	1654
Aveling, Thomas L., Rochester, England. Wheel-scraper.....	484,841	Oct. 25	2072	533	61	457
Averell, Oscar J., New York, N. Y. Fire-extinguisher.....	483,522	Oct. 4	5	2	61	4
Averill, John C., Tracer, Iowa. Halter.....	483,594	Oct. 4	117	29	61	25
Avery, Amos L., Bradford, Pa. Gas and air mixer.....	477,288	June 21	1690	414	59	1799
Avery, Amos L., Bradford, Pa. Injector-burner.....	488,646	Dec. 27	2321	574	61	1832
Avery, Andrew J., Lynn, Mass. Blind-binge.....	484,351	Oct. 11	1263	322	61	270
Avery, Chaney, Pleasant Lake, Ind. Shingling-gage.....	472,446	Apr. 12	1268	325	59	253
Avery, Edward N., and C. A. Slayton, Tecumseh, Mich. Convertible hay and stock rack.....	483,705	Oct. 4	275	68	61	58
Avery, George H., Easthampton, assignor to Standard Whip Company, Westfield, Mass. Belt-fastener.....	487,691	Dec. 6	737	188	61	1466
Avery, John G. (See Park, Gilbert, assignor.)						
Avery, John T., assignor to Avery Lasting Machine Company, St. Louis, Mo. Lasting-machine.....	472,599	Apr. 12	910	234 235 236	59	187
Avery Lasting Machine Company. (See Avery, John T., assignor.)						
Avery, Philander, Industry, Ill. Stanchion.....	470,388	Mar. 8	1192	304 305	58	1335
Avery, Russell F., assignor to J. Goetz, trustee, Spokane Falls, Wash. Coin-chute.....	480,360	Aug. 9	981	247 248	60	780
Avery, Russell F., assignor to J. Goetz, trustee, Spokane Falls, Wash. Coin-operated automatic hydraulic air-compressor.....	482,775	Sept. 20	1414	350	60	1636
Avery, Russell F., assignor to J. Goetz, trustee, Spokane Falls, Wash. Air pump or compressor.....	482,776	Sept. 20	1416	350	60	1637
Avery, Russell F., assignor to J. Goetz, trustee, Spokane Falls, Wash. Device for operating pumps by means of treadles.....	482,777	Sept. 20	1417	350	60	1637
Avery, Thomas E., Danbury, Conn. Machine for curling hat-brims.....	472,974	Apr. 19	1467	376 377	59	305

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Ct.	Vol.	Page.
Avery, Thomas E., Danbury, Conn. Drainage-trap.....	474,205	May 3	493	119	59	733
Avery, Thomas E., assignor of one-half to F. W. Randall, Danbury, Conn. Adjustable handles for taps, reamers, &c.....	469,035	Feb. 16	1784	455	58	893
Avery Stamping Company. (See Judd, Fred W., assignor.).....						
Avery, William G., Chicago, Ill. Bevel.....	487,010	Nov. 29	2962	763	61	1232
Avery, William G., Cleveland, Ohio. Tote-box.....	488,259	Dec. 20	1694	423	61	1693
Avignone, Giambattista. (See Prunetti and Avignone.).....						
Avis, Walter H. (See Hunter and Avis.).....						
Avis, Walter H. (See Munro and Avis.).....						
Axell, Charles, Chicago, Ill. Coping.....	488,933	Dec. 27	2767	683	61	1923
Axtell, Samuel, Elkhart, Ind. Blotter.....	487,239	Dec. 6	5	2	61	1321
Ayer, George A., New Bedford, Mass. Carding-engine.....	488,177	Dec. 20	1564	392	61	1668
Ayer, Harry L. (See Shattuck, Charles A., assignor.).....						
Ayer, John C., Leicester, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.....	488,916	Dec. 27	2745	677	61	1918
Ayer, John C., Leicester, assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple.....	488,917	Dec. 27	2748	677	61	1918
Ayer, Melville C., Biddeford, assignor of one-half to W. H. Stevens, Portland, Me. Cutter-bar for mowers.....	486,816	Nov. 22	2609	679	61	1147
Ayers, George M., Pittsfield, Pa. Whiffletree.....	476,117	May 31	3563	896	59	1384
Ayers, James R., Petersburg, Va. Check-row corn-planter.....	472,246	Apr. 5	376	99	59	70
Ayers, James R., Petersburg, Va. Combined hoe and planter.....	488,596	Dec. 27	2245	556	61	1818
Aylsworth, Jonas W., Orange, and A. C. Payne, Elizabeth, N. J. Method of and apparatus for extracting gold and silver from their ores.....	481,683	Aug. 30	3133	764 765	60	1238
Ayres, Aaron L. (See Ayres, Ruben B., assignor.).....						
Ayres, Andrus D., Kalamazoo, Mich. Electro-magnet.....	469,672	Mar. 1	3	1, 2	58	1099
Ayres, Andrus D., Kalamazoo, Mich. Electro-magnet.....	476,226	June 7	1	1	59	1439
Ayres, Edward F., and T. H. Foster, Danbury, Conn. Heel-plate.....	481,324	Aug. 23	2561	629	60	1112
Ayres, Ruben B., New York, N. Y. Station-indicator.....	467,678	Jan. 26	2929	567 568	58	446
Ayres, Ruben B., New York, N. Y. Station-indicator.....	475,378	May 24	2376	608 609	59	1141
Ayres, Ruben B., New York, N. Y. Underground electric trolley system.....	485,252	Nov. 1	149	44	61	604
Ayres, Ruben B., New York, N. Y. Means for operating station-indicators.....	488,415	Dec. 20	1956	489	61	1743
Ayres, Ruben B., assignor to A. L. Ayres, New York, N. Y. Station-indicator.....	467,884	Jan. 26	2566	650	58	510
Ayton, Charles W., New York, N. Y. Dumb-bell.....	484,352	Oct. 11	1265	323	61	270
Ayton, Charles W., New York, N. Y. Electric meter.....	487,703	Dec. 13	755	194	61	1487
Azceno y Meana, Sebastian, Havana, Cuba. Cigar and marking the same.....	466,449	Jan. 5	535	139	58	104
Aze, Emile, Chicago, Ill., assignor of one-half to J. S. Mackaye, New York, N. Y. Sash-fastener.....	474,570	May 10	1107	283	59	861
B. F. Avery & Sons. (See Flatau, Louis S., assignor.).....						
B. F. Avery & Sons. (See Holsclaw, Wilford H., assignor.).....						
B. F. Cummins Company. (See Cummins, Benjamin F., assignor.).....						
B. F. Cummins Company. (See Cummins and Stenwall, assignors.).....						
B. F. Cummins Company. (See Stenwall, John, assignor.).....						
B. F. Goodrich Company. (See Holt, Albert T., assignor.).....						
B. F. Sturtevant Company. (See Snow, Walter B., assignor.).....						
Baackes, John M. E., and C. Richards, Cleveland, Ohio. Nail-machine.....	468,399	Feb. 9	775	192 193	58	684
Baackes, John M. E., and C. Richards, Cleveland, Ohio. Nail-machine.....	481,997	Sept. 6	114	28, 29	60	1357
Baader, Stephan, assignor of one-fifth to M. Schuster, Philadelphia, Pa. Steam-engine.....	487,025	Nov. 29	2984	768	61	1236
Babbitt, Seward S., assignor of one-half to H. Aiken, Pittsburg, Pa. Crane.....	484,870	Oct. 25	2112	514	61	466
Babcock, Charles A. (See Gilbert, Truman H., assignor.).....						
Babcock, Darius, Meriden, Conn. Chain-guiding mechanism for tentering-machines.....	469,221	Feb. 23	2057	529	58	953
Babcock, Darius, Meriden, Conn. Spreading-brush for sizing-machines.....	469,292	Feb. 23	2170	557	58	974
Babcock, Darius, Meriden, Conn. Sprocket-wheel for tentering-machines.....	471,529	Mar. 29	2910	741	58	1699
Babcock, E. H. (See Babcock, Samuel W., assignor.).....						
Babcock, Edwin H. (See Arnold and Babcock.).....						
Babcock, Francis G. (See Ingraham, Thomas J., assignor.).....						
Babcock, George H., Plainfield, N. J. Brick-press.....	488,049	Dec. 13	1349	334 335	61	1607
Babcock, George W., Ithaca, N. Y. Spoon-holder.....	484,081	Oct. 11	836	212	61	136
Babcock, Henry D. (See Durr and Babcock.).....						
Babcock, Henry D., Leonardsville, N. Y. Grate-support for furnaces.....	472,780	Apr. 12	1182	302	59	236
Babcock, Henry D., Leonardsville, N. Y. Hot-air furnace.....	476,775	June 14	825	203	59	1615
Babcock, Henry D., Leonardsville, assignor of one-half to C. H. Childs & Co., Utica, N. Y. Cultivator.....	473,491	Apr. 26	2355	597	59	496
Babcock, Henry D., Leonardsville, assignor of one-half to C. H. Childs & Co., Utica, N. Y. Straw-cutter.....	473,492	Apr. 26	2355	597	59	496
Babcock, Milton S. (See Kindleberger, Jefferson, assignor.).....						
Babcock, Samuel W., assignor of one-half to E. H. Babcock, Avon, N. Y. Compensator for signal-wires.....	481,922	Sept. 6	3	1	60	1335
Babcock, Stephen E., Little Falls, N. Y. Sewerage system.....	473,489	Apr. 26	2352	596 597	59	495
Babcock, Stephen E., Little Falls, N. Y. Sewerage system and hollow tile for use in same.....	473,490	Apr. 26	2353	597	59	495
Babcock, Sylvester P., Adrian, Mich. Fence-post for wire fencing.....	466,315	Jan. 5	1	1	58	3
Babcock, Sylvester P., Adrian, Mich. Brick-machine.....	488,106	Dec. 13	1437	361 362 363 364 365 366 367 368 369 370 371 372 373	61	1626
Babcock, William W., Galesburg, Ill. Machine for loading cartridge-shells.....	473,440	Apr. 26	2258	571 572 573	59	477
Babis, John, Philadelphia, Pa. Bottle-washing brush.....	474,625	May 10	1192	303	59	877
Baca, Roman L. (See Leavitt, John L., assignor.).....						
Bacallado y Sanchez, Luis, Matanzas, Cuba. Fiber-machine.....	474,714	May 10	1326	338 339	59	904
Bach, Christoph, Jr. (See Quirk and Bach.).....						
Bach, Matthew W., Ottawa, Ill. Fly-net.....	486,421	Nov. 22	1986	527	61	1023
Bache, William H., assignor of one-half to W. W. Smalley, Bound Brook, N. J. Fifth-wheel.....	486,060	Nov. 8	1395	369	61	874
Bache, William H., assignor of one-half to W. W. Smalley, Bound Brook, N. J. Bearing.....	486,061	Nov. 8	1396	370	61	874
Bache, William H., and W. W. Smalley, Bound Brook, N. J. Journal-lubricator.....	484,512	Oct. 18	1525	347	61	332
Bachelor, Edward J., Boston, Mass. Hydrant.....	480,313	Aug. 9	916	231	60	768

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bachelder, Elmer N., and F. E. Lovejoy, Portland, Me. Weighing oil-tank. (Reissue) ..	11,274	Oct. 4	697	174	61	144
Bachem, Carl, Pforzheim, Germany. Bracelet	460,883	Jan. 12	944	241	58	189
Bachert, Edward C., Canton, Ohio. Combined match-box and holder	472,092	Apr. 5	3	1	59	3
Bachmann, Ulrich, Mission San José, Cal. Impregnating liquids with gases	481,538	Aug. 30	3402	835	60	1290
Back, Carl, Vienna, Austria-Hungary. Spool	487,704	Dec. 13	759	195	61	1488
Backhaus, Anton, Altenburg, Saxe-Altenburg, Germany. Alarm for hot axles	472,688	Apr. 12	1041	269	59	209
Backof, William C., St. Louis, Mo. Quilting-frame	487,240	Dec. 6	6	2	61	1322
Backus, Frederick E., Philadelphia, Pa. Gas-log fireplace	485,079	Oct. 25	2448	630	61	532
Backus Water Motor Company. (See Shepperd, Sylvanus D., assignor.)						
Bacon, Alfred T., Stevens' Point, Wis. Mail-catcher	486,658	Nov. 23	2350	614	61	1094
Bacon, Benjamin J., Sydney, New South Wales. Tapping cock and valve	471,413	Mar. 23	2746	701	58	1659
Bacon, Daniel H., and C. C. Hill, Chicago, Ill.; said Hill assignor to said Bacon. Coin-actuated device for vending or other purposes	471,712	Mar. 29	3182	812	58	1748
Bacon, George M., Scranton, Pa. Lightning-arrester	470,736	Mar. 15	1706	440	58	1446
Bacon, Gilbert, Antigo, Wis. Ironing-table	469,431	Feb. 23	2378	610	58	1016
Bacon, Henry S., Worcester, Mass., assignor to Bacon-Tylee Company, Berwick, Me. Index	483,595	Oct. 4	118	29	61	95
Bacon, Hiram A., Pontiac, Mich. Bean-picker	483,986	Oct. 11	703	177	61	159
Bacon, John W., Enderley, Canada. Shingle-gage	478,306	July 5	387	93	60	78
Bacon-Tylee Company. (See Bacon, Henry S., assignor.)						
Bacorn, Frederick W., Marysville, Mont. Electric signal for mine-shafts	467,985	Feb. 2	119	29	58	547
Bacorn, Frederick W., Marysville, Mont. Electric signal for mine-shafts	479,046	July 19	1509	376	60	323
Badger, Argulas A., assignor of one-half to S. J. Cotton, Windsor, Mo. Fire-escape	481,923	Sept. 6	4	2	60	1335
Badger, George L., West Quincy, Mass. Device for polishing granite, &c	481,341	Aug. 23	2588	636	60	1117
Badgley, Edwin L., assignor of one-half to J. V. De Less, Clayton, Ill. Sash-fastener	469,769	Mar. 1	159	42	58	1131
Badgley, Eugene F. (See Bedbury and Badgley.)						
Badia, José G., New York, N. Y. Fiber-cleaning machine	469,222	Feb. 23	2058	529	58	953
Badische Anilin and Soda Fabrik. (See Bohn, René, assignor.)						
Badlam, Edgar B., San Francisco, Cal. Carburetor	475,972	May 31	3337	842	59	1338
Badlam, Edgar B., San Francisco, Cal. Air-snppliyng device for gas-machines	479,238	July 19	1807	452	60	379
Badoni, Massimiliano, assignor to A. R. de Mnralt, Geneva, Switzerland. Permutation-lock	486,391	Nov. 15	1931	511	61	999
Badt, Francis B., Chicago, Ill. Automatic safety device for dynamo-electric machines	487,816	Dec. 13	953	241	61	1328
Badt, Francis B., assignor of two-fifths to L. S. Hills and A. M. Searles, Chicago, Ill. Electric railway	480,543	Aug. 9	1272	319	60	837
Badt, Francis B., assignor of two-thirds to L. S. Hills and A. M. Searles, Chicago, Ill. Tell-tale for electrolytic refineries	482,148	Sept. 6	370	88	60	1408
Bachr, George, Brooklyn, N. Y. Dynamo-electric machine	486,524	Nov. 22	2132	563	61	1052
Baer, Hermine, San Francisco, Cal. Dress-form	480,703	Aug. 16	1540	383	60	902
Baenmie, John, assignor of one-fourth to M. Poetzel, Milwaukee, Wis. Bung	482,713	Sept. 20	1311	321	60	1617
Baenmie, John, assignor of one-fourth to M. Poetzel, Milwaukee, Wis. Bung	482,714	Sept. 20	1313	321	60	1617
Bagby, Walter D. (See Martin, Betsey J., assignor.)						
Bagdasarian, Ignatius D., Cambridge, Mass. Dulcimer	479,323	July 19	1928	482	60	403
Bagdaley, Henry, Stoke-on-Trent, England. Manufacture of tiles	471,740	Mar. 29	3233	833	58	1757
Baggesen, Frederick F., Brooklyn, N. Y. Bedbug-trap	481,270	Aug. 23	2466	608	60	1096
Baggett, Charles L., Blue Branch, Tex. Plow	485,732	Nov. 8	895	240	61	773
Bagley, Martin J., assignor of one-half to J. S. Crane, Lake Village, N. H. Last	476,858	June 14	971	236	59	1644
Baglin, John O. (See Neckerman, Irvan, assignor.)						
Baglin, William A. (See Yule and Baglin.)						
Bagnasco, Frank A., Long Island City, N. Y. Pneumatic tool	474,154	May 3	413	100	59	718
Bagwell, Charles A. (See Scribner, George W., assignor.)						
Baier, Frederick A., assignor to Brownell Car Company, St. Louis, Mo. Car-truck	476,596	June 7	560	133	59	1547
Baier, Frederick A., assignor to Brownell Car Company, St. Louis, Mo. Car-brake	478,902	July 12	1276	316	60	267
Bail, Philip V. (See Beall and Bail.)						
Bailey, Alfred J. (See Bailey, William H. and A. J.)						
Bailey, Archibald, Philipsburg, assignor of seventeen twenty-fourths to Bigler, Reed & Co., G. A. Read, Clearfield, and C. E. Glenn, Butler, Pa. Coal-mining machine	473,604	Apr. 26	2553	644	59	534
Bailey & Brown. (See Bailey, Edward L., assignor.)						
Bailey, Charles J., Newton, Mass. Sock-sole for boots or shoes	466,592	Jan. 5	449	115	58	87
Bailey, D. H. (See Taber, William M., assignor.)						
Bailey, Edward L., assignor to Bailey & Brown, Philadelphia, Pa. Trimming for buckets, pails, &c	483,641	Oct. 4	183	46	61	38
Bailey, Ella E., Baltimore, Md. Cake-box	482,434	Sept. 13	863	207	60	1517
Bailey, Ellene A., New York, N. Y. Powder-puff	471,680	Mar. 29	3131	798	58	1738
Bailey, Elmer E., Sinnamahoning, Pa. Repeating air-gun	487,169	Nov. 29	3210	822	61	1282
Bailey Farrel Manufacturing Company. (See Bailey and Grace, assignors.)						
Bailey, Frank H., Wilkes-Barré, Pa. Steam-boiler	486,017	Nov. 8	1328	352	61	861
Bailey, Frank H., Wilkes-Barré, Pa. Fire-box	486,018	Nov. 8	1329	353	61	862
Bailey, Frank M., assignor of one-half to J. A. McKenzie and J. T. Gordon, Lima, N. Y. Rotary engine	484,769	Oct. 25	1943	496	61	431
Bailey, Fortune L., Freeport, Ind. Metal wheel	476,118	May 31	3564	866	59	1384
Bailey, George H., and T. Grace, assignors to Bailey Farrel Manufacturing Company, Pittsburg, Pa. Waste and stop cock	479,544	July 26	2330	582	60	495
Bailey, George W., Brooklyn, N. Y. Puzzle	487,063	Nov. 29	3038	780	61	1247
Bailey, Gilbert L., and V. W. Cole, Portland, Me. Curtain stick and guide	468,861	Feb. 16	1491	380	58	835
Bailey, Inkerman, and L. Feger, Madisonville, Ky. Safety-keeper for mining-cars	470,536	Mar. 8	1415	369	58	1379
Bailey, James B., assignor of one-half to J. G. Redmond, West Liberty, Ohio. Elevator	468,756	Feb. 9	1323	335	58	793
Bailey, John C., Ford City, Pa. Thill-coupling	480,643	Aug. 9	1444	360	60	870
Bailey, John G., Rogers, Ark. Stirrup-strap connection	474,715	May 10	1333	339	59	905
Bailey, John M., Bristol, Va. Fuel-gas apparatus	478,549	July 12	758	185	60	165
Bailey, John W. (See Morris and Bailey.)						
Bailey, Joseph R., and L. C. Lincoln, assignors to Woonsocket Edge Tool Company, Woonsocket, R. I. Arm-rest for telephones	481,293	Aug. 23	2515	618	60	1103
Bailey, Leonard, Hartford, Conn. Ribbon for type-writing machines	472,847	Apr. 12	1270	325	59	254
Bailey, Mahlon G., and H. T. Welch, San José, assignors to J. G. Spaulding, San Francisco, Cal. Book-indicator	480,649	Aug. 9	1446	360	60	870
Bailey, Oscar J., Kane, Pa. Ironing-table	488,347	Dec. 20	1844	461	61	1731
Bailey, Samuel R., Amesbury, Mass. Carriage end-gate	474,353	May 10	763	199	59	795
Bailey, Thomas. (See Highfill, William F., assignor.)						
Bailey, Wilber N., and C. F. Tilton, assignors to Eureka Tape and Belt Fastening Company, Bay City, Mich. Belt-fastener	473,864	Apr. 26	2953	745	59	610

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bailey, William H. and A. J., Salford, England. Oil-cup	478,977	July 19	1400	347	60	303
Bailey, William W. (See Boice, Joseph C. W., assignor.)						
Baillard, George C., New York, N. Y. Incandescent electric lamp	472,800	Apr. 12	1207	310	59	241
Baillard, George C., New York, N. Y. Incandescent electric lamp	472,801	Apr. 12	1209	310	59	241
Baillie, William E. (See Godfrey, Jonathan, assignor.)						
Bailly, Paul, Paris, France. Clasp and hook for suspenders, gaiters, &c	471,332	Mar. 22	2615	663	58	1634
Baily, George D., Spiceland, Ind. Body-warmer	485,080	Oct. 25	2450	430	61	533
Baily, John B., Lake Geneva, Wis. Automatic cork-puller	466,451	Jan. 5	228	58	58	43
Bainter, Elgar R., and E. Shepley, Good Hope, Ohio; said Shepley assignor to said Bainter. Dumping-wagon	466,931	Jan. 12	1017	259	58	202
Bair, Alexander M. (See Boggs, Robert R., assignor.)						
Baird, Addison W., et al., executors. (See Baird, John.)						
Baird, Andrew. (See Buckland, Harry W., assignor.)						
Baird, Archibald, et al. (See Rose, George, assignor.)						
Baird, Ariette, Riverhead, N. Y. Combined baby tender and crib	485,081	Oct. 25	2451	631	61	533
Baird, Burr, and T. O. Johnson, Newark, Ohio. Slide for extension-tables	485,521	Nov. 1	558	149	61	686
Baird, George W., U. S. Navy. Steam generator or evaporator	484,946	Oct. 25	2242	578	61	491
Baird, Jane, North Topeka, Kans. Strainer	467,604	Jan. 26	2124	539	58	427
Baird, John, deceased, New York, N. Y.; J. S. and A. W. Baird and J. E. Parsons, executors. Steam-boiler	476,181	May 31	3670	928	59	1405
Baird, John S., et al., executors. (See Baird, John.)						
Baird, Matthew B., et al. (See Rose, George, assignor.)						
Baird, Thomas F., Gasburg, Va. Combined stirrup-lantern and foot-warmer	482,219	Sept. 6	488	117	60	1430
Baird, William A., West Louisville, Ky. Wagon-lock	468,992	Feb. 16	1716	437	58	879
Baird, William C., Brooklyn, N. Y., assignor to Wilson Manufacturing Company, of Minnesota. Elevator	471,497	Mar. 22	2867	730	58	1682
Baker, Albert, Fort Wayne, Ind., assignor of one-half to F. D. Bittinger, Dayton, Ohio. Package	483,523	Oct. 4	6	2	61	4
Baker, Albert M. (See Case, Elon E., assignor.)						
Baker, Albert R. (See Brown, John F., assignor.)						
Baker, Albert R., Indianapolis, Ind. Temporary binder	483,706	Oct. 4	276	68	61	58
Baker, Alfred M. (See Alapaw, Charles H., assignor.)						
Baker, Ambrose S., assignor of one-half to G. J. Woodard, Sandy Creek, N. Y. Composition of matter for bricks	477,632	June 28	2258		59	1927
Baker, Andrew H. (See Morton, Ephraim S., assignor.)						
Baker, Ansel G. (See Gifford, Fred S., assignor.)						
Baker, Arthur D., Brooklyn, N. Y. Open-toed horseshoe	479,111	July 19	1615	404	60	342
Baker, Barney R. (See Gelin, Peter, assignor.)						
Baker, Benjamin F., Ballston, N. Y. Harness	487,900	Dec. 13	1090	{ 272 273 }	61	1554
Baker, Charles F. (See Thompson, James F., assignor.)						
Baker, Charles H., Lake Geneva, Wis. Electric railway	474,355	May 10	766	199	59	705
Baker, Charles H., Lake Geneva, Wis. Electric railway	480,004	Aug. 2	377	94	60	652
Baker, Charles H., Bay City, Mich. Lawn-sprinkler	477,164	June 14	1460	358	59	1742
Baker, Charles H., Portland, Me. Fire-escape	480,759	Aug. 16	1615	406	60	919
Baker, Charles R., Malden, Mass. Device for use in the manufacture of leather-bound brushes	488,685	Dec. 27	2388	591	61	1844
Baker, Clark, Greenville, Ohio. Saw-set	479,239	July 19	1809	453	60	379
Baker, Conrad and L. Santa Ana, Cal. Truck-elevator	473,441	Apr. 26	2269	573	59	479
Baker, David, Sparrow's Point, Md. Drill	488,050	Dec. 13	1352	335	61	1607
Baker, David B., and M. Lafaw, Tacoma, Wash. Steam-transmitter	486,019	Nov. 8	1330	353	61	862
Baker, David H., Melrose, Mass. Fog-horn	467,885	Jan. 26	2569	650	58	511
Baker, Eri G., assignor to Baker Telephone Index and Tablet Company, Lowell, Mass. Tablet-displaying device	476,182	May 31	3672	928	59	1405
Baker, Frank L., assignor, by mesne assignments, to Diamond Paper Bag Company, Wilmington, Del. Paper-bag machine	484,281	Oct. 11	1156	294	61	248
Baker, George A., South Bend, Ind. Letter-file	474,280	May 3	608	151	59	755
Baker Gun and Forging Company. (See Hollenbeck, Frank A., assignor.)						
Baker Heater Company. (See Baker, William C., assignor.)						
Baker, Henry B., Dighton, Mass. Lacing-stud	483,680	Oct. 4	237	59	61	49
Baker, Henry H., Jr., assignor to H. D. Blakeslee, Buffalo, N. Y. Harness-loop	468,932	Feb. 16	1602	406	52	857
Baker, Henry H., Jr., assignor of one-half to H. D. Blakeslee, Buffalo, N. Y. Book-holder	472,247	Apr. 5	377	99	59	70
Baker, Henry W., and W. J. Stump, Keyser, W. Va. Hinge	473,688	Apr. 26	2680	675	59	558
Baker, Homer M., Hopkins, assignor of one-half to G. M. Eaton, St. Louis, Mo. Cash-recording attachment for money-drawers	467,777	Jan. 26	2392	608	58	478
Baker, Horace M., Carthage, Mo. Fan attachment for rocking-chairs	483,413	Sept. 27	2425	610	60	1847
Baker, Isaiah. (See Baker, Conrad and L.)						
Baker, Jacob S., New York, N. Y. Recessed paddle-wheel	480,225	Aug. 2	751	190	60	725
Baker, Jacob S., New York, N. Y. Paddle-wheel boat	482,115	Sept. 6	313	74	60	1396
Baker, Jacob W., Dover, N. J., assignor to National Hollow Brake Beam Company, Chicago, Ill. Brake-beam. (Reissue)	11,292	Dec. 6	749	191	61	1469
Baker, James E., Brooklyn, N. Y. Paper box	476,237	June 7	2	1	59	1439
Baker, James H. (See Rogers and Baker.)						
Baker, James H., Allegheny, Pa. Wagon running-gear	480,379	Aug. 9	1016	{ 255 256 }	60	7-7
Baker, James H., Allegheny, Pa. Wagon running-gear	480,380	Aug. 9	1019	256	60	787
Baker, John. (See Earle, Henry E., assignor.)						
Baker, John L., Baird, Tex. Bell-ringer	470,096	Mar. 1	678	167	58	1231
Baker, John T., Chicago, Ill. Awning-worker	476,119	May 31	3565	896	59	1385
Baker, John W., et al. (See Hall, George F., assignor.)						
Baker, Jonathan C., Butte City, Mont. Fly-scare	470,537	Mar. 8	1417	369	58	1379
Baker, Joseph M., Louisville, Ky. Box	476,121	May 31	3567	897	59	1385
Baker, Julius, Pittsburg, Pa. Fence	476,120	May 31	3567	896	59	1385
Baker, Miffin J. (See Clark, John W., assignor.)						
Baker, Moses N., administrator. (See Stevens, Asher B.)						
Baker, Oscar, Weatherford, Tex. Boot-upper	478,550	July 12	759	186	60	166
Baker, Seth H., and J. H. Verity, Rapidan, Minn. Middlings-purifier	474,354	May 10	764	199	59	795
Baker Telephone Index and Tablet Company. (See Baker, Eri G., assignor.)						
Baker, Thomas J. (See Parry and Baker.)						
Baker, Thomas J., Findlay, Ohio. Boiler-scraper	473,809	Apr. 26	2863	719	59	593
Baker, Volney C., Mount Morris, N. Y. Tea-kettle	482,972	Sept. 20	1718	433	60	1697
Baker, William C., New York, N. Y. Heating and steam-generating apparatus	466,552	Jan. 5	386	98	58	74
Baker, William C., New York, N. Y. Car-heating apparatus	472,689	Apr. 12	1042	269	59	209
Baker, William C., New York, N. Y. Heating apparatus for cars or buildings	476,972	June 14	1160	280	59	1681

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Baker, William C., New York, N. Y. Car-heater	476,973	June 14	1161	{ 280 281 }	59	1681
Baker, William C., Eureka Springs, Ark. Wire clothes-line and clothes-holder	469,113	Feb. 16	1884	482	58	912
Baker, William C., Baltimore, Md. Steam-trap	481,098	Aug. 16	2158	535	60	1024
Baker, William C., assignor to Baker Heater Company, New York, N. Y. Railway-car heater	473,721	Apr. 26	2732	687	59	567
Baker, William C., assignor to Baker Heater Company, New York, N. Y. Safety-vent for steam apparatus	473,722	Apr. 26	2733	688	59	568
Baker, William E., Newport News, Va. Vehicle-wheel	480,162	Aug. 2	645	163	60	705
Baker, William H., assignor to Pioneer Manufacturing Company, Des Moines, Iowa. Mechanical movement	475,379	May 24	2383	609	59	1142
Baker, William H., and B. A. Oborn, Ettna, Pa. Harrow or cultivator	478,072	June 28	2950	737	59	2061
Baker, William R., assignor to McCormick Harvesting Machine Company, Chicago, Ill. Mower	481,219	Aug. 23	2373	{ 584 585 }	60	1079
Baland, August. (See Peterson and Baland.)						
Balbian, Frederick, assignor of one-half to H. Balbian, Louisville, Ky. Steam-coupling and automatic parting and cut-off device	483,987	Oct. 11	704	177	61	159
Balbian, Henry. (See Balbian, Frederick, assignor.)						
Balch, Edward P., et al. (See Fargo, William H., assignor.)						
Balch, Gilbert B., et al. (See Fargo, William H., assignor.)						
Balch, Samuel W. (See Bracher and Balch.)						
Bald, Peter H., Louisville, Ky. Training-sulky	487,343	Dec. 6	169	47	61	1354
Baldensperger, Philippe, St. Pié, (Vosges,) France. Manual motor	486,020	Nov. 8	1332	354	61	863
Baldner, Jacob, Xenia, Ohio. Spindle and flier	480,163	Aug. 2	646	164	60	705
Baldridge, Herman, Highlands, Cal. Transplanter	485,832	Nov. 8	1022	274	61	798
Baldwin, A. Van Nest. (See Higgins and Lea, assignors.)						
Baldwin, Charles E., Newark, N. J. Package-carrier	473,897	May 3	3	1	59	637
Baldwin, Charles H., Glens Falls, N. Y. Horse-shield	484,282	Oct. 11	1158	295	61	249
Baldwin, Cyrus W., Yonkers, N. Y., assignor to National Company, Chicago, Ill. Elevator	478,040	June 28	2900	{ 724 725 }	59	2052
Baldwin, E. J., et al. (See Christy, James A., assignor.)						
Baldwin, Eli. (See Crook, Charles, assignor.)						
Baldwin, Elias J. (See Christy and Baldwin.)						
Baldwin, Frank, New York, N. Y. Steam-mangle	482,609	Sept. 13	1151	278	60	1573
Baldwin, Frank R., Jersey City, N. J. Cartridge-loader	479,613	July 26	2430	606	60	514
Baldwin, Frank S., Newark, N. J., assignor of one-half to J. W. Tilley, Castleton, N. Y. Roundabout	476,597	June 7	562	134	59	1547
Baldwin, Franklin T., Baldwinsville, assignor of one-half to R. Thompson, New York, and J. S. Bushnell, Brooklyn, N. Y. Hose-band	470,344	Mar. 8	1118	286	58	1322
Baldwin, Frederic E., New York, N. Y. Means for regulating the flow of liquids from vessels	487,817	Dec. 13	954	241	61	1528
Baldwin, George W., assignor to Edward Miller & Company, Meriden, Conn. Lamp-suspending device	472,468	Apr. 5	719	183	59	136
Baldwin, George W., assignor to Edward Miller & Company, Meriden, Conn. Suspension device	481,157	Aug. 23	2275	561	60	1059
Baldwin, John P., New Orleans, La. Automatic weighing apparatus for liquids	479,694	July 26	2559	{ 646 647 }	60	538
Baldwin, John T., Petaluma, Cal. Propeller	473,374	Apr. 19	2158	637	59	436
Baldwin, Judson A., Benton Harbor, Mich. Smoke consuming or preventing furnace	470,171	Mar. 8	800	{ 199 200 }	58	1263
Baldwin, Judson A., Burlington, Vt. Sash-holder	473,898	May 3	3	1	59	637
Baldwin, Le Roy W. (See Spiegel, William G., assignor.)						
Baldwin, Le Roy W., New York, N. Y. Time-lock for toy banks	477,321	June 21	1743	427	59	1809
Baldwin, Orrin R., Detroit, Mich. Wheel harrow and cultivator	488,597	Dec. 27	2246	557	61	1818
Baldwin, Ozro J., Youngsville, Pa. Rope-clamp	488,348	Dec. 20	1845	461	61	1721
Baldwin, Ozro J., Youngsville, assignor of one-half to W. A. and G. W. Louden, Allegheny, Pa. Device for holding and operating the jaws or ends of the rehus of a temper-screw	476,721	June 7	737	182	59	1584
Baldwin Refrigerator Company. (See Atherton, Stillman M., assignor.)						
Baldwin, William A., New York, N. Y. Furnace for alloying metals	477,792	June 28	2502	627	59	1975
Baldwin, William A., assignor of one-half to R. D. Sawyer, New York, N. Y. Propeller	470,097	Mar. 1	620	167	58	1231
Baldwin, William A., assignor of one-half to R. D. Sawyer, New York, N. Y. Converter	484,770	Oct. 25	1944	496	61	433
Bales, William, Clinton, Ind. Stovepipe-thinable	484,694	Oct. 18	1811	460	61	391
Ball and Socket Fastener Company. (See Rabitto, John M., assignor.)						
Ball, Albert, assignor to Sullivan Machine Company, Claremont, N. H. Tripod for rock-drills	471,300	Mar. 22	2573	653	58	1626
Ball, Albert, assignor, by mesne assignments, to Sullivan Machinery Company, Claremont, N. H. Prospecting-drill	478,077	July 5	3	1, 2	60	3
Ball, Alice M., et al. (See Stone, James, assignor.)						
Ball, Arthur W., et al. (See Wallace and Stemm, assignors.)						
Ball, Charles, assignor to Ball & Jewell, Brooklyn, N. Y. Cotton-picker	483,707	Oct. 4	276	69	61	58
Ball, Charles A. (See Perkins, Richard B., assignor.)						
Ball, Charles F., Memphis, Tenn. Hoisting-platform	478,078	July 5	5	2	60	3
Ball, Clinton M., Troy, N. Y., and S. Norton, Hokendauqua, Pa. Magnetic separator	478,551	July 12	759	186	60	166
Ball, Cortland, Indianapolis, Ind. Fuel-oil burner	483,730	Oct. 4	308	77	61	64
Ball, Daniel C. (See Owens and Ball.)						
Ball, Frank H., assignor to Ball & Wood Company, Elizabeth, N. J. Pulley-fastening	486,154	Nov. 15	1569	416	61	926
Ball, George H., Watervliet, N. Y. Copying written or printed documents executed in carbonaceous inks	468,777	Feb. 16	1365	.....	58	811
Ball, George H., Menands, N. Y. Means for and method of designating document-files	485,025	Oct. 25	2373	610	61	516
Ball, George L., Allegheny, Pa. Composition for removing paint or varnish from wood	488,416	Dec. 20	1959	.....	61	1744
Ball, Henry P. (See Andrews and Ball.)						
Ball, Henry P., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Adapter for incandescent-lamp sockets	480,988	Aug. 16	1976	494	60	989
Ball, Hosea, deceased, (C. A. Chase, administratrix, assignor of three-eighths to S. O. Rockwell and J. Balmore, New York, N. Y. Heater	470,345	Mar. 8	1120	286	58	1322
Ball, James, assignor to Holyoke Envelope Company, Holyoke, Mass. Envelope-gumming mechanism	468,925	Feb. 16	1589	{ 402 403 }	58	854
Ball, James, assignor of two-thirds to J. T. Abbe and G. N. Tyner, Holyoke, Mass. Incandescent lamp	476,183	May 31	3674	928	59	1406
Ball & Jewell. (See Ball, Charles, assignor.)						
Ball, John E., Cartwright, Canada. Thrashing-machine	469,461	Feb. 23	2426	{ 621 622 }	58	1024
Ball, John W., Rusk, Tex. Safety-valve	477,487	June 21	2004	497	59	1860
Ball, Judson O., Monnt Pleasant, Iowa. Time-meter for electric-lighting systems	488,107	Dec. 13	1442	362	61	1626

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Ball, Lorenzo D. (See Pfouts and Ball.)						
Ball, Robert R., New York, N. Y., assignor to Sphere Manufacturing Company, of New Jersey. Lock	434,392	Oct. 18	1332	339	61	295
Ball, Royal E., New York, N. Y. Electric-arc lamp	472,747	Apr. 12	1136	291	59	227
Ball, Samuel E., Winters, Cal. Fruit-gatherer	478,903	July 12	1277	317	60	268
Ball, Thomas. (See Worrall, Arthur J., assignor.)						
Ball, William P., Fresno, assignor to T. Hooker & Co., San Francisco, Cal. Dirt-scraper.	474,896	May 17	1626	415	59	977
Ball & Wood Company. (See Ball, Frank H., assignor.)						
Ballantine, Alexander T., assignor to Domestifroid Company, Cleveland, Ohio. Portable or domestic refrigerator	476,358	June 7	205	49 50 51	59	1476
Ballantine, Alexander T., assignor to Domestifroid Company, Cleveland, Ohio. Reciprocating hydraulic motor	476,359	June 7	209	51, 52	59	1476
Ballantyne, James L., assignor to Nonantum Worsted Company, Newton, Mass. Dabbing apparatus for wool-combing machines	479,695	July 26	2562	637 638	60	538
Ballantyne, Peter, Cincinnati, Ohio. Harness-saddle	424,771	Oct. 25	1946	496	61	432
Ballard, Harlan H., Pittsfield, Mass. Binding-clip	467,244	Jan. 19	1544	394	58	310
Ballard, James, Peoria, Ill. Finishing of house interiors	466,897	Jan. 12	965	246	58	193
Ballard, John. (See Fellows, Frank, assignor.)						
Ballard, John F., Hamilton, assignor to D. Bell, Rockton, Canada. Buckle	470,652	Mar. 15	1578	411	58	1421
Ballard, Loring C. (See Shepherd and Ballard.)						
Ballentine, Laura C., Port Huron, Mich. Means for securing glass plates in windows of stoves and furnaces	478,904	July 12	1279	317	60	268
Balliet, John W. (See Seemel, Howard S., assignor.)						
Balliett, Byron J., Mansfield, Ohio. Suspender-buckle	480,650	Aug. 9	1447	360	60	871
Ballman, John H., St. Louis, Mo. Photographic-plate holder	474,571	May 10	1110	223	59	862
Ballow, John C., Evansville, Ind. Machine for removing knots from poles	476,859	June 14	972	236	59	1644
Balloe, James F., et al. (See Randall, Robert F., assignor.)						
Baloun, Russell A., assignor to Chemical Hand Fire Extinguisher Company, Boston, Mass. Chemical fire-extinguisher	475,050	May 17	1869	474	59	1024
Ballou, Waldo R., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	474,221	May 3	609	151	59	756
Balnes, Michael, assignor to Acme Safety Emery Wheel Company, Detroit, Mich. Machine for grinding mowing-machine knives	481,886	Aug. 30	3477	852	60	1305
Balmore, John, et al. (See Ball, Hosea, assignor.)						
Balmore, John, and E. E. Geld, New York, N. Y.; said Balmore assignor to said Geld. Hose-coupling	475,738	May 24	2942	746	59	1247
Balshaw, David, Nacogdoches, Tex. Cotton-chopper	472,975	Apr. 19	1478	377 378	59	308
Balsley, David, Philadelphia, Pa. Oil-stove	480,544	Aug. 9	1275	320	60	837
Bamberger, Willard I. (See Banta and Bamberger.)						
Bamford, Richard J., assignor to American Saw Company, Trenton, N. J. Saw-tooth	470,967	Mar. 15	2059	528	58	1515
Bammann, Johannes. (See Ulrich and Bammann.)						
Bancroft, Ashley, Portland, Oreg. Traveling-bag	476,598	June 7	563	134	59	1548
Bancroft, Gideon K., Philadelphia, Pa. Device for operating awnings	476,439	June 7	333	76	59	1502
Bancroft, Joseph B., and A. E. Rhoades, assignors to Hopedale Machine Company, Hopedale, Mass. Beam-truck	478,731	July 12	1020	250	60	218
Band, Henry F. (See Rosback, Fredrick P., assignor.)						
Band, Otto W., Brooklyn, N. Y. Automatic soap-press	487,818	Dec. 13	955	241	61	1528
Bang, Ivor A. F., and M. C. A. Ruffin, Paris, France. Separating tin from other metals	483,245	Sept. 27	2148	544	60	1795
Bangert, John D., Baltimore, Md. Apparatus for mixing flour or other materials	487,507	Dec. 6	450	116 117	61	1410
Banghart, Andrew B. (See Treat and Banghart.)						
Bangs, Edwin D., Milwaukee, Wis. Railway-switch signal	469,927	Mar. 1	415	104	58	1189
Bangs, Edwin D., Milwaukee, Wis. Bell-ringer for locomotives	485,445	Nov. 1	456	122	61	665
Bangs, Edwin D., Milwaukee, Wis. Propeller-wheel	486,062	Nov. 8	1398	370	61	874
Bangs, Edwin D., assignor of three-fifths to M. H. Case, Milwaukee, Wis., and J. H. Curtis, Chicago, Ill. Lubricator	463,229	Feb. 2	567	146	58	637
Bangs, Edwin D., Milwaukee, and A. L. Waite, deceased, (A. L. Waite, administratrix.) Baraboo, assignor of one-fifth to M. H. Case, Milwaukee, Wis. Brake and heating system for railway-cars	472,424	Apr. 5	649	165 166	59	121
Banker, Edwin C., Buck Creek, Wis. Harvester	467,222	Jan. 19	1504	325	58	303
Banker, George W., Brooklyn, N. Y. Paint-oil	474,434	May 10	888		59	820
Banker, George W., Brooklyn, N. Y. Packing-case	482,715	Sept. 20	1315	321	60	1617
Banks, Charles F., Chicago, Ill. Automatic hatchway-door-releasing device	466,819	Jan. 12	824	212	58	167
Banks, Charles M., Boardman, Fla. Curtain-fixture	481,684	Aug. 30	3135	765	60	1238
Banks, Jennie H. (See Unger, Charles W., assignor.)						
Banks, John and J. H., and W. B. Peet, New York, N. Y. Oarsman's recorder	478,270	July 5	334	80, 81	60	67
Banks, Joseph H. (See Banks and Peet.)						
Banks, John W., New York, N. Y. Fastening device	480,242	Aug. 9	797	201	60	743
Banta, Harry S., and W. I. Bamberger, Kansas City, Mo., said Banta assignor to said Bamberger. Fountain tympan-oiler	470,460	Mar. 8	1311	338	58	1357
Banta, Harry S., and W. I. Bamberger, Kansas City, Mo., said Banta assignor to said Bamberger. Fountain benzine-brush	470,461	Mar. 8	1312	338	58	1358
Banta, William E., Springfield, Ohio. Wire coupling	484,812	Oct. 25	2073	533	61	458
Baeyerlin, Emile K., and F. E. Heinig, Louisville, Ky.; said Baeyerlin assignor to said Heinig. Binder for artificial fuel	480,243	Aug. 9	788		60	743
Barbee, Napoleon B., Crockett, Tex. Hand fertilizer distributor	466,996	Jan. 12	1119	284	58	221
Barber, Arthur J., assignor of one-half to H. A. and W. Tripp, Sedus, N. Y. Fruit-slicing machine	483,731	Oct. 4	309	77, 78	61	65
Barber Asphalt Paving Company. (See Greene, Francis V., assignor.)						
Barber Asphalt Paving Company. (See Ruthren, Robert C., assignor.)						
Barber, Earl E. (See Eaton and Barber.)						
Barber, Edwin J., assignor of two thirds to W. F. Kyle, Gove City, and H. Ripley, Page City, Kans. Windmill	485,082	Oct. 25	2452	631	61	533
Barber, Edwin L., Chicago, Ill. Soldering-tool	485,161	Nov. 1	4	2	61	573
Barber, Hiram, Chicago, Ill. Spring-draft attachment for vehicles	478,777	July 12	1090	270	60	232
Barber, Hiram, Chicago, Ill. Spring draft attachment	481,384	Aug. 23	2653	650 651	60	1129
Barber, Hiram, Chicago, Ill. Draft attachment for vehicles	482,973	Sept. 20	1718	434	60	1697
Barber, John F., and J. Stevens, Hazelton, Pa. Catch for bake pans	466,915	Jan. 12	993	254	58	198
Barber, Luther A. (See Twiss and Barber.)						
Barber, Ohio C., Chicago, Ill. Automatic fire-extinguisher	473,442	Apr. 26	2271	573	59	480

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Barber, Ohio C., Chicago, Ill. Water-tube boiler.....	473,443	Apr. 26	2272	573	59	480
Barber, Philip Y., Sharp's Wharf, Va. Pitman.....	480,545	Aug. 9	1276	320	60	837
Barber, Wanton C., Villisca, Iowa. Drill.....	467,459	Jan. 19	1864	475	58	371
Barbier, Eugène J., Paris, France. Treating bisulphate of soda.....	484,546	Oct. 18	1577	400	61	313
Barbour, Fred E., Washington, D. C. Luggage-carrier for bicycles.....	475,174	May 17	2058	517	59	1061
Barbour, Stockwell & Co. (See Luther, Henry R., assignor.).....						
Barbourn, Wallace W., Alamo, Mich. Grain-butter for harvesters.....	471,165	Mar. 22	2369	605	58	1586
Barckdall, Daniel, assignor of one-half to W. J. Woodward, Indianapolis, Ind. Refrigerator.....	467,886	Jan. 26	2570	651	58	511
Barclay, Elmer E., Lawrence, Mich. See-it-drill.....	466,762	Jan. 12	729	189	58	149
Barclay, Francis R. (See Edwards and Barclay.).....						
Barclay, Frank, Beatrice, Nebr. Furnace for steam-boilers.....	486,923	Nov. 29	2827	732	61	1206
Barclay, Frank, Beatrice, Nebr. Locomotive or marine boiler furnace.....	486,924	Nov. 29	2829	732	61	1207
Barclay, James, Sioux City, Iowa. Wrist-plate.....	473,810	Apr. 26	2464	719	59	594
Barcroft, Henry, Newry, Ireland. Apparatus for propelling vessels.....	476,122	May 31	3569	897	59	1385
Bardill, John, Grant Fork, Ill. Corn-harvester.....	485,522	Nov. 1	559	{ 149 } 150	61	687
Bardon, Prosper, Waco, Tex. Bale-tie.....	488,302	Dec. 20	1763	444	61	1706
Bardons, George C., Cleveland, Ohio. Machine for turning irregular shapes.....	475,917	May 31	3249	820	59	1321
Bardsley, Henry, Philadelphia, Pa. Tension device for loom-shuttles.....	479,084	July 19	1565	392	60	333
Bardsley, Henry, and W. Parkinson, Philadelphia, assignors of one-third to J. Bardsley, } Lyndell, Pa. Fruit-cleaner.....	482,937	Sept. 20	1654	{ 416 } 417	60	1685
Bardsley, James. (See Bardsley and Parkinson, assignors.).....						
Bardsley, William, Kearney, N. J. Cloak-hanger.....	469,223	Feb. 23	2060	530	58	953
Bardsley, William, Kearney, N. J., and W. K. Crofford, New York, N. Y. Hatchway-door mechanism.....	469,224	Feb. 23	2061	530	58	954
Bareis, Albert, <i>et al.</i> (See Johnson, John, assignor.).....						
Bareis, Albert, assignor of five-sixths to J. Johnson, A. and A. Martini, St. Louis, Mo. Pipe-wrench.....	478,948	July 12	1344	333	60	281
Bareis, Karl G., Madison, Wis. Check-hook.....	473,107	Apr. 19	1693	430	59	346
Barger, Robert N., Hopedale, Ill. Combined folding bed, billiard-table, &c.....	481,385	Aug. 23	2655	651	60	1129
Baril, Thomas, Arthabaskaville, Canada. Draw-bar for cars.....	471,530	Mar. 29	2911	741	58	1699
Barisch, Robert. (See Bean, Joseph A., assignor.).....						
Barker, Albert A. (See Houghton and Barker.).....						
Barker, Ashbury, Peekskill, N. Y. Camera-shutter.....	477,588	June 21	2161	536	59	1892
Barker, Douglas, Riverside, Cal. Tree-prop.....	473,412	Apr. 19	2321	558	59	448
Barker, Henry W., and E. L. Wirt, Elbow Lake, Minn. Engraving-block.....	467,911	Feb. 2	9	3	58	528
Barker, Hiram, St. Joseph, Mo. Gate.....	471,935	Mar. 29	3521	899	58	1814
Barker, Irving, Springfield, Ill. Automatic latch for dump-cars.....	485,403	Nov. 1	396	106	61	653
Barker, James. (See Beimling, Henry F., assignor.).....						
Barker, Joel T., <i>et al.</i> (See Cox, Jacob R., assignor.).....						
Barker, John A., Pasadena, Cal. Head-rest.....	477,197	June 21	1525	373	59	1769
Barker, John F., Springfield, Mass. Wantage-rod.....	480,058	Aug. 2	483	123	60	674
Barker, Joseph H., New York, N. Y. Mailing or salesman's box.....	475,918	May 31	3251	821	59	1321
Barker, Peleg. (See Miller and Barker.).....						
Barker, William R., Edwardsville, Ala. Fish net or trap.....	470,314	Mar. 8	1061	269	58	1312
Barkhausen, Karl G., Hanover, Germany. Gas-holder.....	482,891	Sept. 20	1590	399	60	1671
Barkley, Richard W., Brooklyn, N. Y. Electric railway.....	476,776	June 14	826	{ 203 } 204 205	59	1615
Barklow, Benjamin R., New York, N. Y. Metallic bedstead.....	468,862	Feb. 16	1492	380	58	835
Barkman, Albert B., Brooklyn, N. Y. Luggage-carrier for bicycles.....	468,757	Feb. 9	1324	335	58	793
Barler, Augustus C., Fremont, Nebr., assignor to Huette-Barler Manufacturing Company, Chicago, Ill. Stove or heater.....	475,029	May 17	1837	466	59	1017
Barley, James H. (See Logan, Maurice S., assignor.).....						
Barley, V. R. (See Craig, James H., assignor.).....						
Barlow, John H., New Haven, Conn. Decapping and recapping tool.....	486,659	Nov. 22	2351	614	61	1094
Barlow, John W., Quincy, Ill. Check-row mechanism for planters.....	472,976	Apr. 19	1479	378	59	308
Barlow, William H., Charlottesville, Va. Four-wheeled dog-cart.....	487,942	Dec. 13	1158	{ 289 } 290 291	61	1567
Barnaby, Charles W., St. Louis, Mo. Shaft-coupling.....	481,092	Aug. 16	2150	534	60	1022
Barnaby, Sydney W., assignor to J. I. Thornycroft, London, England. Propeller.....	486,366	Nov. 15	1894	{ 500 } 501 502	61	991
Barnard, George L., Milwaukee, Wis. Electric signaling device for firemen.....	482,778	Sept. 20	1418	351	60	1638
Barnard, Harry M., <i>et al.</i> (See Cook, Thomas R., assignor.).....						
Barnard, Heman A., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Grain-scourer.....	485,525	Nov. 1	563	151	61	688
Barnard, Heman A., assignor to Barnard & Leas Manufacturing Company, Moline, Ill. Air-belt purifier.....	485,571	Nov. 1	643	171	61	705
Barnard & Leas Manufacturing Company. (See Barnard, Heman A., assignor.).....						
Barnard, William, <i>et al.</i> (See Wood, Joseph M., assignor.).....						
Barn-dollar, Winfield J., Pueblo, Colo. Bridle-bit.....	488,051	Dec. 13	1354	336	61	1608
Barnes, Benjamin F., assignor to W. F. & John Barnes Company, Rockford, Ill. Cutter-head.....	470,462	Mar. 8	1313	338	58	1358
Barnes, Burr F., Circleville, Ohio. Air-ship.....	478,905	July 12	1280	318	60	268
Barnes, Carroll D., <i>et al.</i> (See Shipley, Henry T., assignor.).....						
Barnes, Charles A., <i>et al.</i> (See Phillips, Adelbert M., assignor.).....						
Barnes, Charles O. and L. Sr., Syracuse, N. Y. Bicycle-wheel.....	474,897	May 17	1627	415	59	977
Barnes, Cyrenius S., Elba, Nebr. School-desk.....	482,465	Sept. 13	910	222	60	1525
Barnes, Dana A., Dunkirk, N. Y. Steam-engine governor.....	471,048	Mar. 15	2180	561	58	1538
Barnes, Dana A., Syracuse, N. Y. Pipe-coupling.....	481,250	Aug. 23	2438	601	60	1091
Barnes, Dana A., assignor to Westinghouse Company, Schenectady, N. Y. Chuck.....	485,364	Nov. 1	335	89	61	641
Barnes, David L., Chicago, Ill. Frame for car-trucks.....	468,491	Feb. 9	921	234	58	712
Barnes, David L., Chicago, assignor to Fox Solid Pressed Steel Company, Joliet, Ill. Truck for vehicles.....	468,146	Feb. 2	363	89, 90	58	595
Barnes, David L., Chicago, assignor to Fox Solid Pressed Steel Company, Joliet, Ill. Cen- ter-bearing plate for vehicles.....	468,471	Feb. 9	876	223	58	704
Barnes, David L., Chicago, Ill., assignor to E. C. Clark, Saratoga Springs, N. Y. Car-coup- ling.....	477,489	June 21	2006	498	59	1600
Barnes, David L., assignor to Northwestern Equipment Company, Chicago, Ill. Car-brake.....	477,922	June 28	2720	680	59	2017
Barnes, David L., assignor to Congdon Brake Shoe Company, Chicago, Ill. Car-coupling.....	478,835	July 12	1191	296	60	251
Barnes, E. Henry, <i>et al.</i> (See Lyon, Marcus E., assignor.).....						
Barnes, Edward A. (See Arave, Daniel W., assignor.).....						
Barnes, G. H., <i>et al.</i> (See Hoff, Peter, assignor.).....						
Barnes, George A., New Haven, Conn. Machine for making box-covers.....	473,184	Apr. 19	1841	{ 463 } 464	59	373

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Barnes, George Z., Pekin, Ill. Mouth-speculum for horses.....	472,939	Apr. 12	1409	360	59	282
Barnes, Harry C. (See Slater and Barnes.)						
Barnes, John. (See Fenton and Barnes.)						
Barnes, John L., Kendallville, Ind. Feed mechanism for sawmills.....	474,435	May 10	888	231	59	820
Barnes, John M., North Adams, Mass. Cork-extractor.....	481,093	Aug. 16	2152	534	60	1022
Barnes, Joseph W., Van Buren, Ark. Car-brake.....	483,414	Sept. 27	2427	610	60	1447
Barnes, Joshua, Green Lawn, N. Y. Pocket-case for bottles.....	474,940	May 17	1691	431	59	991
Barnes, Lewis, Philadelphia, assignor to W. A. Nichols, Wayne, Pa. Bridge.....	487,819	Dec. 13	957	242	61	1529
Barnes, Lorenzo L., Worcester, Mass. Grass-shears.....	488,647	Dec. 27	2322	574	61	1832
Barnes, Lucien, Sr. (See Barnes, Charles O. and L., Sr.)						
Barnes, Lucien, Syracuse, N. Y. Car-coupling.....	474,466	May 10	910	242	59	820
Barnes, Noble T., Buffalo, N. Y. Brick-machine.....	466,763	Jan. 12	730	189 190	58	149
Barnes, Noble T., Buffalo, N. Y. Material for the manufacture of paving-blocks.....	467,492	Jan. 26	1924		58	391
Barnes, Norman A., et al. (See Pearce, William, assignor.)						
Barnes, Patrick, Pownal, Vt. Tire shrinker or upsetter.....	466,392	Jan. 5	127	36	58	27
Barnes, Walter. (See Ashberry and Barnes.)						
Barnes, William F., assignor to W. F. & John Barnes Company, Rockford, Ill. Drilling-machine.....	466,916	Jan. 12	993	254	58	198
Barnett, David, and D. Black, Bradford, England. Machine for combing fiber.....	474,513	May 10	1012	260	59	843
Barnett, David H. (See Vanderpool, Albion A., assignor.)						
Barnett, Edward C., New Bloomfield, Pa. Train-order cateber.....	482,220	Sept. 6	489	117	60	1431
Barnett, George, et al. (See Gosling, Henry J., assignor.)						
Barnett, Harry T. (See Pyke and Barnett.)						
Barnett, Henry, et al. (See Gosling, Henry J., assignor.)						
Barnett, Lycurgus S., Birchtree, Mo. Railway-gate.....	478,978	July 19	1400	347	60	303
Barnett, Otto R., trustee. (See Marsh, James P., assignor.)						
Barnett, Thomas, San Francisco, Cal. Broiler and toaster.....	476,508	June 7	429	100	59	1521
Barnett, William E., and B. R. Chalk, Mount Washington, Md. Handle-holder for brushes, &c.....	482,221	Sept. 6	491	117	60	1431
Barney, Earl, Schenectady, N. Y. Poultry-brooder.....	471,460	Mar. 22	2815	718	58	1672
Barney, Earl, Schenectady, N. Y. Chicken-brooder.....	488,417	Dec. 20	1959	489	61	1744
Barney, Finis M., Kearney, Nebr. Hydraulic clutching mechanism.....	473,444	Apr. 26	2273	574	59	450
Barney, George L., Seward, Nebr. Combination-lock.....	471,262	Mar. 22	2518	639	58	1614
Barney, George L., Indianapolis, Ind. Combination-lock.....	482,222	Sept. 6	492	118	60	1431
Barney & Smith Car Company. (See Haeseler, Emil C., assignor.)						
Barnhart, Harvey P., assignor to Thatcher Manufacturing Company, Potsdam, N. Y. Milk-jar and closing device therefor.....	474,436	May 10	890	232	59	821
Barnhart, James H. (See Kidd, Gideon P., assignor.)						
Barnhart, John M., Marshall, Pa. Fruit can or jar.....	483,415	Sept. 27	2428	610	60	1847
Barns, George R. (See Thurston and Stenerson, assignors.)						
Barnum, Thomas C., Indianapolis, Ind. Tag.....	478,185	July 5	180	47	60	38
Barnum, William H., assignor to C. H. Merritt, Danbury, Conn. Machine for stiffening hats.....	476,860	June 14	973	236	59	1644
Barnum, William H., assignor to C. H. Merritt, Danbury, Conn. Machine for stiffening hats.....	485,601	Nov. 8	687	181	61	729
Baron, Alfred L., and B. F. Cockayne, Tiffin, Ohio. Lantern.....	482,671	Sept. 13	1231	360	60	1588
Baron, Charles, New York, N. Y. Sanitary pail.....	483,036	Sept. 20	1821	463	60	1719
Baron, Peter, assignor to H. H. Grenfell, London, England. Machine for making screws.....	467,787	Jan. 26	2403	610 611 612 613	58	480
Barr, James M., Dent's Run, Pa. Tongue-support.....	469,531	Feb. 23	2538	653	58	1046
Barr, Samuel W., Mansfield, Ohio. Cash and package carrier apparatus.....	482,822	Sept. 20	1470	366	60	1649
Barr, Simon L. (See Stout, John W., assignor.)						
Barr, William, Detroit, Mich. Dust-guard for car-axle boxes.....	483,524	Oct. 4	11	3	61	5
Barr, William C., assignor to Cockburn Barrow and Machine Company, Jersey City, N. J. Concrete-mixing machine.....	468,290	Feb. 2	589	146 147	58	638
Barraclough, Thomas C., London, England. Machinery for shaping, finishing, and flanging metal barrels, &c.....	470,737	Mar. 15	1707	440	58	1447
Barraclough, Thomas C., London, England. Machinery for rolling and expanding metal tubes.....	473,651	Apr. 26	2627	662	59	548
Barrett Brothers. (See Barrett, Thomas, assignor.)						
Barrett Brothers. (See Woodward, Erastus, assignor.)						
Barrett, Charles E. (See Horne and Barrett.)						
Barrett, Cornelius T., Brooklyn, N. Y., assignor of one-third to H. W. Douty, Jersey City, N. J. Electric telemeter.....	477,853	June 28	2609	654	59	1995
Barrett, Frederick W., Springfield, Ohio. Guard-rail.....	486,541	Nov. 22	2153	569	61	1056
Barrett, Frederick W., Springfield, Ohio. Election-booth.....	488,747	Dec. 27	2476	615	61	1862
Barrett, Frederick W., Springfield, Ohio. Ballot-box.....	488,748	Dec. 27	2478	616	61	1863
Barrett, Frederick W., assignor to Barrett Publishing Company, Springfield, Ohio. Tally-sheet.....	466,593	Jan. 5	450	116	58	87
Barrett, George L., Springfield, Ohio, assignor to J. W. Duncan and T. B. Quinby, Onancock, Va. Smoke-escape.....	485,523	Nov. 1	561	150	61	687
Barrett, J. L. (See Crane, James B., assignor.)						
Barrett, James H., assignor of one-half to C. H. Leonard, Grand Rapids, Mich. Refrigerator.....	467,904	Jan. 26	2601	658	58	517
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electrical circuit and cable.....	482,149	Sept. 6	371	88	60	1408
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electric conductor.....	482,150	Sept. 6	373	88	60	1409
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electric conductor.....	482,151	Sept. 6	375	88	60	1409
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electric circuit and cable.....	482,152	Sept. 6	380	89	60	1409
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Machine for folding tape.....	482,153	Sept. 6	381	89	60	1410
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Electric cable.....	482,328	Sept. 6	683	163	60	1469
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Wire-covering machine.....	486,270	Nov. 15	1746	460	61	962
Barrett, John A., Brooklyn, N. Y., assignor to Standard Underground Cable Company, Pittsburg, Pa. Machine for covering wires.....	486,845	Nov. 29	2664	696 697	61	1173
Barrett, John E., Chicago, Ill., assignor, by mesne assignments, to Rodwell Manufacturing Company, of New York. Sign-letter.....	468,720	Feb. 9	1269	323	58	782

Alphabetical list of patentees—Continued.

Name, residence and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Barrett Publishing Company. (See Barrett, Frederick W., assignor.)						
Barrett, Sam S., Salem, Mo. Fence	469,532	Feb. 23	2541	653	58	1046
Barrett, Sam S., Salem, Mo. Box-fastener	470,968	Mar. 15	2060	528	58	1515
Barrett, Sam S., Salem, Mo. Educational appliance	480,164	Aug. 2	648	164	60	705
Barrett, Sam S., Salem, Mo. Box-fastener	485,524	Nov. 1	563	150	61	687
Barrett, Samuel, Keighley, England. Washing-machine	468,477	Feb. 9	890	226	58	706
Barrett, Samuel, Keighley, England. Belt-shifting apparatus	468,478	Feb. 9	891	226	58	707
Barrett, Thomas, assignor to Barrett Brothers, Boston, Mass. Wire-pegging machine	478,732	July 12	1021	250 251	60	218
Barrett, William N., Meadville, Pa., assignor to Universal Fuel Company. Steam-generator	471,333	Mar. 22	2616	664	58	1634
Barrickman, William J. (See Snow, James C., assignor.)						
Barril, Robert de, New York, N. Y. Photographic camera	475,919	May 31	3252	821	59	1322
Barringer, Daniel M., Philadelphia, Pa. Apparatus for illustrating geological formations	477,633	June 28	2259	565	59	1927
Barron, Martha E. (See Jones, William, assignor.)						
Barron, Patrick, Pittsburg, Pa. Guard for railway-cars	483,202	Sept. 27	2087	529	60	1783
Barron, Walter J., Brooklyn, N. Y. Type-writing machine	470,172	Mar. 8	805	200	58	1264
Barron, Walter J., Brooklyn, N. Y. Type-writing machine	470,969	Mar. 15	2061	528 529	58	1515
Barron, Walter J., Brooklyn, N. Y. Type-writing machine	472,023	Apr. 5	4	2	59	3
Barron, Walter J., F. X. Wagner, and A. Densmore, New York, N. Y.; said Barron and Wagner assignors to said Densmore. Type-writing machine	484,132	Oct. 11	900	230 231	61	199
Barrow, Jacob, Windfall, Ind. Gas-burner	468,635	Feb. 9	1135	289	58	755
Barrow, Jacob, Windfall, Ind. Oil-burner	474,282	May 3	612	151	59	756
Barrow, Jacob, Windfall, assignor to J. S. Moore, Muncie, Ind. Oil-burner	488,108	Dec. 13	1445	362 363	61	1627
Barrow, Thomas, Chester, Pa., assignor, by mesne assignments, of one-half to R. L. Cour- sen, New York, N. Y. Punching-machine	483,095	Sept. 20	1908	4-2	60	1736
Barrow, Thomas E., Mansfield, Ohio. Store-service apparatus	484,547	Oct. 18	1578	400 401	61	343
Barrow, Thomas E., Mansfield, Ohio. Store-service apparatus	484,548	Oct. 18	1580	401	61	344
Barrow, Timothy J., Chicago, Ill. Two-way sanitary trap	455,833	Nov. 8	1023	274	61	798
Barrows, John F. (See Lockwood, George F., assignor.)						
Barry, Henry H., and W. James, Philadelphia, Pa., assignors to Barry & James Manufac- turing Company, of New Jersey. Divided household utensil	471,517	Mar. 22	2290	735	58	1686
Barry & James Manufacturing Company. (See Barry and James, assignors.)						
Barry, John F., et al. (See Slaymaker, Samuel R., assignor.)						
Barry, Joseph E., New York, N. Y. Hydraulic elevator	473,811	Apr. 26	2866	719	59	594
Barry, Joseph E., New York, N. Y. Hydraulic elevator	470,486	Aug. 9	1188	299	60	819
Barry, Patrick H., New York, N. Y. Staircase	486,319	Nov. 15	1820	480	61	977
Barry, Richard C., Montreal, Canada. Saddle-tree	483,037	Sept. 20	1823	463	60	1719
Bartelmes, Benjamin, Brooklyn, N. Y. Switch-operating device	485,446	Nov. 1	458	122	61	666
Bartels, John L., Jr., Milwaukee, Wis. Vent-closure	482,223	Sept. 6	494	118	60	1431
Barth, John H., Batesville, Ind. Head-rest	471,049	Mar. 15	2182	561	58	1538
Barthel, Gustav, Dresden, Germany. Lamp for burning hydrocarbons	478,733	July 12	1026	252	60	219
Barthelemy, Edward C., New Orleans, La. Manufacturing sugar	487,439	Dec. 6	351	61	1391	
Barthelues, Alexander A., Toronto, Canada. Frasing-machine	485,162	Nov. 1	5	2	61	574
Bartholme, Anton, Baltimore, Md. Album	487,170	Nov. 29	3212	823	61	1282
Bartholomew, Albert W., assignor of one-half to T. B. Kennedy, Boston, Mass. Puzzle	474,941	May 17	1692	432	59	991
Bartholomew, Cassius M., assignor to himself and J. Atherton, Newark, Ohio. Elevator	483,277	Sept. 27	2228	500	60	1809
Bartholomew, Ellis, assignor of four-fifths to O. W. Bell, Lima, O. and D. W. Jay, St. Mary's, Ohio. Valved pipe-coupling	481,130	Aug. 16	2208	546	60	1033
Bartholomew, Ellis, assignor of four-fifths to O. W. Bell, Lima, O. and D. W. Jay, St. Mary's, Ohio. Steam-actuated valve	481,520	Aug. 23	2867	705	60	1172
Bartholomew, Frank G. (See Blackburn and Bartholomew.)						
Bartholomew, George E., assignor to E. Wenning, Cincinnati, Ohio. Vehicle running- gear	470,232	Mar. 8	902	223	58	1223
Bartholomew, George W., Wichita, Kans. Displacement-pump	487,595	Dec. 6	576	148	61	1436
Bartholomew, Gilbert A., Maumee, Ohio. Railway-signal	486,271	Nov. 15	1749	460 461	61	962
Bartholomew, Isaac H., Northford, Conn. Brush-holder for commutators for dynamo-elec- tric machines	466,972	Jan. 12	1077	273	58	213
Bartholomew, Nancy C. (See Burns and Bartholomew.)						
Bartholomew, Sidney W., Castalia, N. C. Fire-tongs	486,963	Nov. 29	2889	746	61	1218
Bartholomew, Thomas W., Danville, Pa. Burner attachment	486,525	Nov. 22	2133	503	61	1052
Bartlett, Frank. (See Goold and Bartlett.)						
Bartlett, Alvin F., et al. (See Bennett, William H., assignor.)						
Bartlett, Charles F. (See McIlvain, John H., assignor.)						
Bartlett, David L., et al. (See Austin, John T., assignor.)						
Bartlett, Edward L., et al. (See Austin, John T., assignor.)						
Bartlett, Eugene E., Springfield, Mass. Cash register and indicator	470,463	Mar. 8	1314	338 339	58	1358
Bartlett, Frank L., Portland, Me. Bag-room for the collection of fume	470,970	Mar. 15	2069	530	58	1517
Bartlett, Frank L., assignor to American Zinc Lead Company, Portland, Me. Paint-pig- ment	477,488	June 21	2005	59	1860	
Bartlett, Frank L., assignor to American Zinc Lead Company, Portland, Me. Refining fume	480,686	Aug. 9	1509	375	60	882
Bartlett, George F., and A. J. O'Neill, Butte City, Mont. Ore-roasting furnace	472,848	Apr. 12	1271	325 326	59	254
Bartlett, George T. (See Terrell and Bartlett.)						
Bartlett, George W., Joliet, Ill. Advertising device	466,926	Jan. 12	1010	258	58	201
Bartlett, Henry F., Springfield, Mo. Can-screw and faucet	472,157	Apr. 5	929	61	59	43
Bartlett, Henry F., assignor of one-third to S. A. and S. C. Hazletine and J. F. Carson, Springfield, Mo. Oven for oil, gas, or gasoline stoves	478,211	July 5	219	55	60	45
Bartlett, James, Toledo, Ohio. Air-heating apparatus	467,145	Jan. 19	1388	355	58	281
Bartlett, James F., Chicago, Ill., assignor to Chicago Cash Carrier Company, of Illinois. Cash-carrier	483,681	Oct. 4	237	59	61	50
Bartlett, Samuel E., Camden, N. C. Roller-bearing	485,083	Oct. 25	2453	631	61	533
Bartlett, William E., Edinburgh, Scotland. Wheel-tire	466,532	Jan. 5	356	90	58	69
Bartliff, Charles A., Memphis, Tenn. Nut-lock	479,162	July 19	1688	422	60	357
Barton, Charles N., Cynthia, assignor of two-thirds to L. M. Wade and C. F. Tente, Mount Vernon, Ind. Weighted horseshoe	470,815	Mar. 15	1839	472	58	1471
Barton, D. E. (See McFeely, Frederick P., assignor.)						
Barton, Delbert E., San Francisco, Cal. Wheel-cultivator	484,513	Oct. 18	1526	387	61	332

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Barton, Edwin, Paterson, N. J. Swivel-loom	467,272	Jan. 19	1585	404	58	318
Barton, George E. (See Johnston and Barton.)						
Barton, John W., and W. J. McNabb, Blue Rapids, Kans. Tag-holder	467,848	Jan. 26	2507	635	58	499
Barton, Josiah C., Brooklyn, N. Y. Apparatus for making rubber stamps	480,420	Aug. 9	1084	271 272	60	798
Barton, Lyman D., Kilbourn City, Wis. Paper-hanging machine	481,251	Aug. 23	2440	601	60	1091
Barton, Robert R., Catlettsburg, Ky. Account-book	466,316	Jan. 5	2	1, 2	58	3
Bartsch, Edwin, <i>et al.</i> (See Kirkwood, John D., assignor.)						
Bartusch, Oswald, Brooklyn, N. Y., assignor to J. Wetter, Memphis, Tenn. Numbering hand-stamp	473,605	Apr. 26	2557	645	59	535
Basanta, Henry, Ponce, Porto Rico. Feed-pipe for vacuum-pans	478,906	July 12	1282	319	60	269
Base, Frank C. (See Sanderson and Base.)						
Basel, John C., and E. Fruehauf, Galveston, Tex. Hot-box alarm	483,682	Oct. 4	239	60	61	50
Bash, Ambrose. (See Buence and Bash.)						
Bash, Leopold, <i>et al.</i> (See Rosenthal, Adolph, assignor.)						
Basket, James M., Leota Landing, assignor of two-thirds to J. K. Nutt and T. Worthington, Washington county, Miss. Saw-set	471,461	Mar. 22	2817	718	58	1672
Bass, James, assignor to Merrill Brothers, Brooklyn, N. Y. Die for making turn-buckles	468,778	Feb. 16	1366	345	58	811
Bass, Robert T., <i>et al.</i> (See Snyder, Charles A., assignor.)						
Bassett, Charles W., Newton, assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Electric conductor	475,920	May 31	3254	821	59	1322
Bassett, Edward E., Seymour, Conn. Folding table	485,855	Nov. 8	1058	282	61	805
Bassett, Edward W., Stockwell, Ind. Check-punch	483,733	Nov. 8	897	240	61	773
Bassett, Fred H., Saranac Lake, N. Y. Curtain-fixture	482,716	Sept. 20	1316	321	60	1618
Bassett, George R., New York, N. Y. Bicycle-tire	487,596	Dec. 6	579	148	61	1436
Bassett, Horace P., Warren, Ohio. Car-brake	473,606	Apr. 26	2559	645	59	535
Bassett, Ira, Chicago, Ill. Organ-tremolo	478,552	July 12	762	186	60	166
Bassett, Judson L., assignor of one-half to A. A. Dorrance, Coldwater, Mich. Mail-bag	470,169	Mar. 1	788	195	58	1252
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Axle-box for street-cars	471,089	Mar. 22	2248	578	58	1563
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Controlling device for elevators	482,495	Sept. 13	971	235	60	1538
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Gearing for elevators	483,203	Sept. 27	2087	529	60	1784
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric locomotive	483,204	Sept. 27	2088	529 530	60	1784
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Armature for motors and generators	483,708	Oct. 4	277	69	61	58
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Commutator for electric machines	483,732	Oct. 4	311	78	61	65
Bassett, Norman C., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Gearing for elevators	485,163	Nov. 1	8	2, 3	61	574
Bassett, Norman C., Chicago, Ill., assignor to Otis Brothers & Company, New York, N. Y. Operating mechanism for hydraulic-elevator valves	476,861	June 14	975	236 237	59	1644
Bassford, Isaac F., assignor of one-half to A. Docter, Milwaukee, Wis. Mowing-machine cutter	476,030	May 31	3418	863	59	1356
Bassford, Thomas S., receiver. (See Goodson, George A., assignor.)						
Bassford, Thomas S., receiver. (See Goodson and Capehart, assignors.)						
Bast, Johann G., Brooklyn, N. Y. Ash-sifter	477,529	June 21	2165	537	59	1892
Bastable, Frederick. (See Ellis, Richard E., assignor.)						
Bastian, Charles L., assignor to L. M. Eunis, Chicago, Ill. Valve	477,192	June 14	1507	369	59	1753
Batcheller, Birney C., assignor of seventeen-twentieths to S. D. Schuyler, New York, N. Y., and W. M. Cramp, Philadelphia, Pa. Drier	486,806	Nov. 22	2584	674	61	1142
Batchelor, Telford C. (See Butterfield and Batchelor.)						
Bate, James R., Detroit, Mich. Device for cutting excelsior	467,531	Jan. 26	2000	506 507	58	405
Bateman, Edward S., <i>et al.</i> (See Bateman, Frank, assignor.)						
Bateman, Frank, assignor to himself, E. S. Bateman, Grenloch, and E. C. Wilson, Blackwood, N. J. Wheel-cultivator	472,781	Apr. 12	1183	303	59	236
Bates, Albert J., Joliet, Ill. Steam dash-pot	473,994	May 3	170	40	59	671
Bates & Blake Electric Railway Conduit Company. (See Bates, Joseph W., assignor.)						
Bates, Charles G., <i>et al.</i> (See Hoffman, Austin D., assignor.)						
Bates, Clarence H., Minneapolis, Minn. Conduit for electric or cable roads	468,314	Feb. 2	634	158	58	647
Bates, Edward P. (See Duffy, John J., assignor.)						
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Consecutive-numbering machine	484,389	Oct. 18	1322	338	61	294
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Machine for consecutively numbering checks, bonds, &c., in sheets	484,390	Oct. 18	1326	338	61	294
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Consecutive-numbering machine	484,391	Oct. 18	1329	339	61	295
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Machine for printing stencil characters consecutively	486,964	Nov. 29	2890	747	61	1219
Bates, Edwin G., New York, N. Y., assignor to Bates Manufacturing Company, of New York. Check-punch	488,052	Dec. 13	1354	336	61	1608
Bates, Hervey, Jr., Indianapolis, Ind. Process of and apparatus for the manufacture of alimentary products from corn	476,599	June 7	565	134	59	1548
Bates, James H., New York, N. Y. Torpedo	483,126	Sept. 27	1955	495	60	1757
Bates, James H., Hoboken, N. J. Electric annunciator	488,536	Dec. 27	2149	531	61	1797
Bates, James P., assignor of one-half to A. Doneghy, Springfield, Mo. Manhole and sewer connection	476,440	June 7	334	76	59	1502
Bates, John H., Santa Barbara, Cal. Washing-machine	484,871	Oct. 25	2115	544	61	466
Bates, John L., Brooklyn, N. Y., assignor of one-half to H. Brooke, Jersey City, N. J. Collapsing satchel	476,862	June 14	977	237	59	1645
Bates, Joseph W., Minneapolis, Minn. Wall-covering	476,360	June 7	213	52	59	1477
Bates, Joseph W., assignor to Bates & Blake Electric Railway Conduit Company, Minneapolis, Minn. Electric railway	477,734	June 28	2409	602	59	1959
Bates, Leprelet M. (See Williams, Bates, and James.)						
Bates, Louis, Jersey City, N. J. Electric door-opener	480,546	Aug. 9	1277	320	60	838
Bates Manufacturing Company. (See Bates, Edwin G., assignor.)						
Bates, Milford L. (See Johnson, Hiram S., assignor.)						
Bates, Richard W., Chicago, Ill. Folding chair	479,393	July 26	2070	520	60	445
Bates, Sterling V. B., Charleston, Tenn. Surgical instrument	480,165	Aug. 2	649	164	60	706
Bates, Theron M., Bloomington, Ill. Railway-signal	469,623	Feb. 23	2665	686	58	1072
Bates, William F., Davenport, Nebr. Fodder-cutter	471,250	Mar. 22	2499	633	58	1611

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bath, John, London, England. Cash-receipt-checking apparatus.....	467,767	Jan. 26	2376	604	58	475
Bathen, L. O., <i>et al.</i> (See Jacoby, William, assignor.)						
Batt, Charles F., Brooklyn, N. Y. Combined stand and step-ladder.....	486,320	Nov. 15	1820	480	61	977
Batt, John B., Martinsville, N. Y. Merry-go-round.....	488,686	Dec. 27	2389	591	61	1845
Batte, Rinaldo A., assignor of one-half to G. L. Iles, Norfolk, Nchr. Broom-support and bridle.....	466,764	Jan. 12	733	190	58	150
Battelle, Joseph W., Worcester, Mass. Combined pencil sharpener and holder.....	480,547	Aug. 9	1278	321	60	838
Batters, Edward, Toronto, Canada. Milk-receiver.....	477,289	June 21	1691	415	59	1799
Battersby, Arthur J., Nottingham, England. Bicycle.....	480,166	Aug. 2	650	165	60	706
Battersby, Benjamin F. (See Browning and Battersby.)						
Battin, Lambert B., Elizabeth, N. J. Water-tube boiler.....	469,533	Feb. 23	2542	653	58	1046
Battle Creek Machinery Company. (See Burnham, Frank A., assignor.)						
Battle, Joseph, <i>et al.</i> (See Ripson, John D., assignor.)						
Battle, Marcus L., Cairo, Ga. Plow.....	486,021	Nov. 8	1333	354	61	863
Batzel, Frank, Riverside, N. J. Folding umbrella.....	474,467	May 10	942	243	59	829
Bauch, Isidor. (See Jonas and Bauch.)						
Bauer, August, Sandusky, Ohio. Vehicle-wheel.....	473,812	Apr. 26	2267	720	59	594
Bauer, Charles A., assignor to Warder, Bushnell & Glessner Company, Springfield, Ohio. Harvester-seat.....	476,238	June 7	3	1	59	1439
Bauer, Ferdinand. (See Ruemmel and Bauer.)						
Bauer, Ferdinand, St. Louis, Mo. Combined feed-water heater, oil-extractor, and water- purifier.....	468,232	Feb. 2	487	120	58	620
Bauer, Ferdinand, Vienna, Austria-Hungary. Stuffing-box.....	470,971	Mar. 15	2070	530	58	1517
Bauer, Gotthilf, Esslingen, Germany. Slide-gage.....	474,111	May 3	357	85	59	706
Bauer, Henry, Philadelphia, Pa., assignor, by mesne assignments, to Climax Cigarette and Cigar Machine Company of Pennsylvania. Cigarette-machine.....	473,108	Apr. 19	1694	430	59	346
Bauer, John D., Philadelphia, Pa. Bookbinding.....	467,076	Jan. 12	1253	431	58	246
Bauer, Max, L. Harry, and J. Bunger, Greenville, N. J. Lamp-shade support.....	484,695	Oct. 18	1812	461	61	391
Bauer, Robert A., assignor of two-thirds to H. G. and E. G. Krekel, Grand Rapids, Mich. Machine for filling and emptying trays.....	483,488	Sept. 27	2516	634	60	1865
Bäuerlein-Germann, G. (See Wassermann, Georg, assignor.)						
Baugh, Frederick, Alliance, Ohio. Land-roller.....	474,038	May 3	244	58	59	685
Baugh, Frederick, Alliance, Ohio. Molder's flask.....	483,596	Oct. 4	119	29	61	25
Baughan, Eugene C., Philadelphia, Pa. Piano-action.....	479,407	July 19	1510	376	60	323
Bauhard, Alvin L., Bristol, Tenn. Middlings-purifier.....	487,597	Dec. 6	580	148	61	1437
Bault, William, <i>et al.</i> (See Blair, John, assignor.)						
Baum, Christian, St. Genevieve, Mo. Adjustable store-shelf.....	472,469	Apr. 5	720	183	59	136
Baum, George, Newark, N. J. Carousel.....	468,962	Feb. 16	1656	423	58	867
Baum, Gustav, and J. Müller, Berlin, Germany. Album.....	472,470	Apr. 5	721	184	59	137
Baum, Jacob, assignor to Victor Safe and Lock Company, Cincinnati, Ohio. Machine for squaring metallic boxes, frames, &c.....	481,998	Sept. 6	116	29	60	1358
Baum, Jacob, assignor to Victor Safe and Lock Company, Cincinnati, Ohio. Riveting-ma- chine.....	486,071	Nov. 15	1416	374	61	896
Baumann, Friederich, assignor of one half to V. Ohlander, Worcester, Mass. Penholder.....	467,077	Jan. 12	1255	317	58	246
Baumann, John. (See Mallet, Edmond R., assignor.)						
Baumann, Robert, assignor to Electric Alarm Lock Company, St. Louis, Mo. Combina- tion lock and alarm.....	484,577	Oct. 18	1617	411	61	351
Baumann, Rodolphe, Geneva, Switzerland. Governor.....	472,690	Apr. 12	1042	269	59	210
Baumner, Alonzo A., and J. B. Harting, Roanoke, Va. Punch.....	485,164	Nov. 1	10	3	61	575
Baumert, Paul. (See Wegener, Carl, assignor.)						
Baumgartel, Henry. (See Harris, George W., assignor.)						
Baumgarten, Herman, Washington, D. C. Hand-stamp.....	479,199	July 19	1751	439	60	367
Baumgartner, Anthony W. (See Harrison and Baumgartner.)						
Baumgartner, Rudolf A., Rosenheim, Germany. Decorticating-machine.....	471,372	Mar. 22	2680	681	58	1647
Baumgartner, William H., <i>et al.</i> (See Saxton, Harry J., assignor.)						
Baumbhoff, George W., assignor of one-half to G. D. Capen, St. Louis, Mo. Electric-fuse box.....	480,651	Aug. 9	1448	361	60	871
Baumbhoff, George W., and A. H. Hagemeier, assignors of one-third to G. D. Capen, St. Louis, Mo. Street-car.....	487,392	Jan. 19	1763	450	58	351
Barnach, John, assignor to J. F. Kitchell, Newark, N. J. Bag-fastening.....	477,097	June 14	1362	331	59	1723
Baur, Albert, Gispersleben, near Erfurt, assignor to Société Fabriques de Produits Chi- miques de Thann et de Mulhouse, Thann, Germany. Artificial musk and making the same.....	481,685	Aug. 30	3136	.....	60	1239
Baur, William, <i>et al.</i> (See Kayser, William J., assignor.)						
Bausch, George, Syracuse, N. Y. Eyeglass-guard.....	478,836	July 12	1192	296	60	251
Banscher, Albert C., assignor of one-half to H. Hepfer, Lanark, Ill. Compound for filling cob pipes.....	478,553	July 12	764	.....	60	167
Bansh, Christian H., Holyoke, Mass. Head-operating mechanism for the tool-spindles of drilling-machines, &c.....	466,553	Jan. 5	387	98, 99	58	75
Bansh, Christian H., Holyoke, Mass. Lathe.....	482,991	Sept. 20	1747	441	60	1703
Baxter, Charles S., New York, N. Y. Valve and joint.....	484,843	Oct. 25	2074	533	61	458
Baxter, Charles F., Murrietta, Cal. Shipper's folding crate or coop.....	479,545	July 26	2331	522	60	496
Baxter, Daniel N., Beardstown, Ill. Boiler-cleaner.....	468,863	Feb. 16	1493	380	58	835
Baxter Electric Motor Company. (See Baxter, William, Jr., assignor.)						
Baxter, Whitfield W., Boston, Mass. Car fender or guard.....	484,980	Oct. 25	2310	596	61	504
Baxter, William, Jr., Baltimore county, Md. Electric elevator.....	481,386	Aug. 23	2656	651	60	1129
Baxter, William, Jr., assignor to Baxter Electric Motor Company, Baltimore, Md. Elec- tric elevator.....	466,973	Jan. 12	1079	274	58	213
Bayaud, George D., <i>et al.</i> (See Harvey, George H., assignor.)						
Bayer, Rudolf, Munich, Germany. Rotary slide-valve.....	469,384	Feb. 23	2306	593	58	1002
Bayha, George, St. Louis, Mo. Railway-car.....	475,844	May 31	3133	794	56	1298
Bayless, James C., East Orange, N. J. Strake-weld pipe.....	470,738	Mar. 15	1710	441	58	1448
Bayless, Frank, Wilberforce, Ohio. Corn-planter.....	478,498	July 5	665	163	60	132
Bayless, William, Brantford, Canada. Honey-extractor.....	476,792	June 7	738	183	59	1584
Bayless, William C. (See Watkins and Bayless.)						
Bayley, Charles H., Boston, Mass. Leather-skiving machine.....	479,583	July 26	2382	594	60	504
Bayliss, Moses, London, assignor to Davies Brothers & Company, (Limited,) Wolverham- pton, England. Apparatus for galvanizing sheet metal.....	471,065	Mar. 15	2209	567	58	1543
Baylor, James. (See Baylor, Thomas J. and J.)						
Baylor, Thomas J. and J., Canton, Ill. Car-coupling.....	472,328	Apr. 5	504	131	59	95

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Baynes, Frederick, and J. Whalley, Blackburn, England; said Baynes assignor to said Whalley. Shuttle-binder for looms	475,380	May 24	2384	610	59	1142
Baynes, John, New York, N. Y. Manufacture of articles having surface figures in relief or intaglio	468,758	Feb. 9	1324	.....	58	793
Baynes, John, Westchester, assignor of one-fourth to L. De Forest, Oyster Bay, N. Y. Ornamenting vases or similar articles	468,591	Feb. 9	1073	274	58	742
Bazerque, Victor H., Washington, D. C. Cigarette-machine	462,567	Sept. 13	1086	264	60	1561
Bazerque, Victor H., Washington, D. C., assignor of one-twentieth to B. Storer, Cincinnati, Ohio. Cigarette-machine	485,146	Oct. 25	2544	{ 653 654	{ 61	552
Beach, Acad S., and A. Booth, Groton, N. Y. Knockdown paper-roll holder and cutter	481,839	Aug. 30	3404	836	60	1290
Beach, Calvin R., et al. (See Franklin, Benjamin, assignor.)						
Beach, Henry O., Livingston, N. J. Skiving heel-lifts	488,303	Dec. 20	1765	{ 444 445	{ 61	1706
Beach, Oscar W., South Riverside, Cal., assignor to J. P. Curry, Fort Morgan, Colo. Vehicle-axle	483,975	Oct. 4	683	170	61	141
Beal, Francis R., Northville, Mich. School-seat	475,076	May 17	1906	474	59	1031
Beal, George W., Highlands, Colo. Axle-lubricator	475,051	May 17	1870	474	59	1025
Beal, Thomas W. (See Radley and Beal.)						
Beal, William C., assignor of three-fourths to T. Starbuck, D. E. Maxwell, Ferdinandina, Fla., H. R. Duval, Islip, N. Y., and J. A. Henderson, Tallahassee, Fla. Car-coupling	466,594	Jan. 5	453	116	58	87
Beale, Alfred G., and T. Nesbitt, Tunbridge Wells, England. Machine for creasing powder-papers	474,716	May 10	1334	{ 339 340	{ 59	905
Beale, Oscar J., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Worm and worm-shaft	472,517	Apr. 12	802	206	59	165
Beall, Alpheus B., and P. V. Bail, Sioux City, Iowa. Track-cleaning machine	486,526	Nov. 22	2134	563	61	1052
Beam, Aaron R., Waco, N. C. Churn-motor	466,317	Jan. 5	3	2	58	3
Beam, Amanda L. (See Beam, Jacob B., assignor.)						
Beam, Aron M. (See Calhoun and Beam.)						
Beam, Henry J., Lebanon, Va. Fence	484,872	Oct. 25	2115	545	61	466
Beam, Jacob B., assignor to A. L. Beam, Big Run, Pa. Necktie	485,447	Nov. 1	459	{ 122 123	{ 61	666
Beam, William. (See Leffmann and Beam.)						
Beaman, John W., Mount Ayr, Iowa. Dividers	472,977	Apr. 19	1481	{ 378 379	{ 59	309
Bean, Edward D., Arlington, Mass. Shooting-jacket	479,385	July 19	2052	512	60	428
Bean, Frederick W., Ogden, Utah Ter. Gas-stove	473,285	Apr. 19	2004	504	59	406
Bean, George E., Tampa, Fla. Barrel-head	470,173	Mar. 8	811	201	58	1264
Bean, Joseph A., assignor of one-half to R. Barisch, Suffern, N. Y. Thill-support	480,652	Aug. 9	1450	361	60	871
Bean, Samuel L., Bean, N. D. Fishing reel	467,849	Jan. 26	2507	635	58	500
Beard, Andrew, Woodlawn, Ala. Rotary engine	478,271	July 5	337	81	60	68
Beard, Frank M., and F. P. Shepard, Guthrie, Oklahoma Ter. Permutation-padlock	470,389	Mar. 8	1194	305	58	1335
Beard, Lewis W. (See Terman, James W., assignor.)						
Beard, Lewis W. (See Westaway and Beard.)						
Beard, Lewis W., and W. C. Westaway, assignors to Decorah Windmill Company, Decorah, Iowa. Frame tower	471,373	Mar. 22	2681	682	58	1647
Beard, Lina, Flushing, N. Y. Clothes-basket protector	486,527	Nov. 22	2135	563	61	1053
Beardsell, Albert. (See Driver, Samuel, assignor.)						
Beardsley, Carlton A., Detroit, Mich. Electric-light tower	468,186	Feb. 2	426	105	58	608
Beardsley, Frank W. (See Tallmadge, James W., assignor.)						
Beardsley, Oscar E. and O., Trempealeau, Wis. Corn-husker	487,241	Dec. 6	7	2, 3	61	1322
Beardsley, Otto. (See Beardsley, Oscar E. and O.)						
Beardsley, William N., Bridgeport, Conn., assignor to M. Hartley and M. Graham, New York, N. Y. Jointed gun-rod	468,529	Feb. 9	983	251	58	725
Beardsley, William N., and A. D. Moulton, Bridgeport, Conn., assignors to M. Hartley and M. Graham, New York, N. Y. Gun-rod coupling	468,530	Feb. 9	984	252	58	725
Beardsley, William N., A. D. Moulton, Bridgeport, Conn., and L. J. Wurth, Newark, N. J. Cartridge-loading tool	481,887	Aug. 30	3479	852	60	1305
Bearse, Ephraim L., Brooklyn, N. Y. Lamp-shade	476,239	June 7	5	1	59	1439
Beart, William F., Godmanchester, England. Leak-stopper	485,121	Oct. 25	2505	643	61	545
Beaubien, Edward, Chicago, Ill. Hame-fastener	484,223	Oct. 11	1159	295	61	249
Beauchamp, Aimé, assignor of one-half to J. J. Girard, Fitchburg, Mass. Folding umbrella	485,905	Nov. 8	1141	303	61	822
Beaudry, Alexander, Boston, Mass., assignor to Beaudry Tool Company, Portland, Me. Power-hammer	487,692	Dec. 6	738	189	61	1466
Beaudry, Alexander, Somerville, and P. F. King, Malden, Mass., assignors to Beaudry Tool Company, Portland, Me. Device for securing rails	488,749	Dec. 27	2479	616	61	1863
Beaudry Tool Company. (See Beaudry, Alexander, assignor.)						
Beaudry Tool Company. (See Beaudry and King, assignors.)						
Beasley, James E., Savannah, Ga. Mattress-making device	473,204	Apr. 19	1871	{ 471 472	{ 59	379
Beasley, William F., Oxford, N. C. Cash or ticket receiver	467,146	Jan. 19	1390	{ 355 356	{ 58	281
Beasley, William F., Oxford, N. C. Mail-bag and lock therefor	471,166	Mar. 22	2370	606	58	1587
Beasley, William F., Oxford, N. C. Mail-bag and lock therefor	471,167	Mar. 22	2372	606	58	1587
Beaton, Ralph. (See Davis, Benjamin F., assignor.)						
Beattie, John Jr., Fall River, Mass. Battery-zinc and making the same	466,820	Jan. 12	825	212	58	167
Beatty, George, Tiffin, Ohio. Manufacture of glassware	469,053	Feb. 16	1809	462	58	898
Beatty, Herbert L. (See Jacobi, Oscar, assignor.)						
Beaty, William, Silverton, W. Va. Steam-engine	466,318	Jan. 5	4	2	58	4
Beaudet, Leo C., New York, N. Y. Household altar for sacramental purposes	470,098	Mar. 1	681	167	58	1231
Beaumont, Richard B., Rutherford, N. J. Gelatinous food product	480,687	Aug. 9	1510	375	60	882
Beaumont, Thomas C., assignor to Henry Huber Company, New York, N. Y. Periodical flushing-tank	475,533	May 24	2629	669	59	1188
Beaumont, Thomas C., assignor to Henry Huber Company, New York, N. Y. Siphon flushing-tank	487,464	Dec. 6	387	101	61	1397
Beanpere, Frank X. (See Lipman and Rinderknecht, assignors.)						
Beauregard, Henry T., and F. S. Flower, Chicago, Ill. Type-writing machine	479,085	July 19	1566	{ 392 393	{ 60	333
Beauregard, Victor. (See Bryant and Beauregard.)						
Beauséjour, Urgel, Saginaw, Mich. Car-coupling	470,464	Mar. 8	1317	340	58	1359
Becher, Carl, New York, N. Y. Fluid receptacle for fly-traps	477,618	June 21	2231	557	59	1905
Becher, Carl, assignor of one-half to J. Moskowitz, New York, N. Y. Fly-trap	474,514	May 10	1014	260	59	843
Bechtol, George T., assignor of one-half to F. W. Parsons, Elmira, N. Y. Differential caliper-point	482,331	Sept. 13	692	165	60	1485

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Bechtolsheim, Clemens von, assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal liquid-separator	466,484	Jan. 5	277	70	58	53
Beck, Albert P., Cleveland, Ohio. Disinfecting device	475,431	May 24	2462	627	59	1156
Beck, Bruno, assignor of one-half to P. J. Cook, Chicago, Ill. Automatic air-compressor	476,723	June 7	739	183	59	1584
Beck, Charles, Philadelphia, Pa. Box-stapling machine	473,813	Apr. 26	2868	720	59	594
Beck, Herman. (See Gross and Beck.)						
Beck, J. L., et al. (See Coleman, John, assignor.)						
Beck, John E. (See Curlin, Seth, assignor.)						
Beck, Joseph, Thomasville, N. C., and O. A. Nenninger, Newark, N. J. Apparatus for making gun-cotton	483,709	Oct. 4	279	69	61	59
Beck, Marshall, assignor of two-thirds to J. W. Skinkle and D. K. Hill, Chicago, Ill. Side-delivery rake	468,382	Feb. 9	744	185 186	58	677
Beck, Matthias A., Milwaukee, Wis. Steam-engine	483,127	Sept. 27	1955	496	60	1757
Beck, Warren F., assignor to Eureka Cash Register Company, Knoxville, Pa. Coupon-book	468,636	Feb. 9	1136	290	58	755
Beck, Warren F., assignor to Eureka Cash Register Company, Knoxville, Pa. Cash register, indicator, and recorder	481,777	Aug. 30	3304	806 807 808	60	1272
Beckman, John U., and D. W. Lukens, St. Louis, Mo. Bridle-bit	480,487	Aug. 9	1190	299	60	820
Becker, Anthony W., and E. Henry, Jacksonville, Ill. Street-sprinkler	487,508	Dec. 6	451	117	61	1411
Becker, Charles M. (See Hoffheimer, Maurice, assignor.)						
Becker, George H., et al. (See Lish, William H., assignor.)						
Becker, John, Newton, Mass. Milling-machine	474,898	May 17	1628	416	59	977
Becker, John J., Fort Wayne, Ind., assignor to Wayne Oil Tank Company. Self-measuring pump	473,891	Apr. 26	3004	758	59	620
Becker, Karl, Berlin, Germany. Cooking apparatus	471,374	Mar. 22	2681	682 683 684	58	1647
Becker, Margaret J., Cohoes, N. Y. Window-cleaner	484,284	Oct. 11	1160	295	61	249
Becker, Philip. (See English, Analdo M., assignor.)						
Becket, George E., Providence, R. I. Letter-box	483,525	Oct. 4	12	3	61	5
Beckley, Edgar H., Elkhart, Ind. Vestibule-car	479,546	July 26	2333	582 583	60	496
Beckley, Edward. (See Knight and Beckley.)						
Beckmann, Oswald, Breslau, Germany. Water-meter	470,033	Mar. 1	581	145	58	1211
Beckwith, Eugene K., Niantic, Conn. Shingling-bracket	472,633	Apr. 12	966	250	59	197
Beckwith, Francis E., Jr., assignor to Newell Brothers Manufacturing Company, Springfield, Mass. Tool holder for button-cutting machines, &c	485,147	Oct. 25	2545	655	61	555
Beckwith, Samuel V., assignor to Wm. L. Gilbert Clock Company, Winsted, Conn. Hand for time-pieces	469,673	Mar. 1	5	2	58	1099
Beckwith, Seth R. (See Uhlig, Richard W., assignor.)						
Beckwith, Sherwin C., New York, N. Y., and W. W. Street, Springfield, Mass., assignors to Matrix Manufacturing Company, New York, N. Y. Matrix-making machine	480,361	Aug. 9	983	248	60	780
Beckwith, Theodore A., assignor of part to R. P. Tapley, Jr., C. E. Clogston, F. R. Hillard, G. H. Leighton, J. and F. Callahan, C. L. Hoyt, A. McLeod, G. C. Greely, W. H. Ruddock, C. M. Hoyt, T. J. Neagle, G. A. Tuxbury, R. B. Day, J. J. Vaughn, J. McDonald, D. W. Hopkins, M. J. Kiley, M. F. Brady, H. Tattersall, G. A. Sampson, C. F. Brown, and T. P. Dutra, Haverhill, J. J. and F. Melloy, M. J. Shea, M. G. Tenney, Georgetown, M. J. Walsh, Lawrence, and D. P. McCarthy, Danvers, Mass. Car-coupling	475,103	May 17	1953	495	59	1040
Beckwith, William G., assignor to Daniel Pratt Gin Company and W. L. Ellis, Sr., Prattville, Ala. Huller cotton-gin	482,672	Sept. 13	1231	300	60	1588
Bedard, Clarisse, et al. (See Bergeron and Bedard, assignors.)						
Bedard, Firmin. (See Bergeron and Bedard.)						
Bedbury, George W., and E. F. Badgley, San Francisco, Cal.; said Bedbury assignor to said Badgley. Pile armor or casing	468,291	Feb. 2	592	147	58	638
Bedell, Thomas H., Grand Rapids, Mich. Coin-operated vending device	474,588	May 10	1134	289	59	866
Bedell, Thomas H., Grand Rapids, Mich. Carpet-sweeper	479,200	July 19	1752	439	60	368
Bederman, Henry. (See Mellon, Arnold A., assignor.)						
Bedford, Alma, Coldwater, Mich. Spoke for vehicle-wheels	477,290	June 21	1692	415	59	1799
Bedford, Jeff W. (See Oehrlé, Emanuel, assignor.)						
Bedford, Joseph, Sheffield, England. Purifying alloys of iron and chromium	477,490	June 21	2008		59	1860
Bedford, Lyman N., San Bernardino, Cal. Time-lock	478,212	July 5	220	55	60	45
Bedford, Lyman N., San Bernardino, Cal. Time-lock	478,213	July 5	221	55	60	46
Bedingfield, Fleming A. O., Mutford, England. Quoit-peg	479,614	July 26	2432	606	60	514
Bee, Benjamin F., Harwich, Mass. Centrifugal pump	478,307	July 5	387	93	60	78
Beebe, Charles F., Orion, assignor of one-half to O. F. Knowles, Oxford, Mich. Bicycle-support	485,572	Nov. 1	645	172	61	706
Beebe, Charles S., Racine, Wis. Vehicle running-gear	482,154	Sept. 6	382	89	60	1410
Beebe, John W., Waterloo, N. Y. Trolley for electric cars	468,779	Feb. 16	1397	345	58	811
Beebe, James H., Rochester, N. Y. Flexible shafting and hanger therefor	475,104	May 17	1955	495	59	1040
Beecher, Ebenezer B., et al. (See Garland, Frank M., assignor.)						
Beecher, Elmer C., Birmingham, Ohio. Register	470,174	Mar. 8	812	201	58	1265
Beecher, Walter H., Cincinnati, Ohio. Liquid-measuring device	485,026	Oct. 25	2375	610	61	517
Beecher, Zina A., Marysville, Ohio. Attachment for cultivators	485,165	Nov. 1	11	3	61	575
Beecroft, Clement, Philadelphia, Pa. Racket	484,578	Oct. 18	1620	411	61	352
Beehler, Charles W., St. Louis, Mo. Nozzle for oil-cans	470,776	Mar. 15	1770	455	58	1458
Beehler, Charles W., assignor of two-thirds to A. Kuehne and F. Hausperger, St. Louis, Mo. Box-fastener	483,953	Oct. 4	639	160	61	131
Beekman, Gerard, New York, N. Y. Transmitter for fibrous material	482,155	Sept. 6	384	90	60	1410
Beekman, Gerard, New York, N. Y. Cotton-harvester	482,156	Sept. 6	386	91	60	1411
Beekman, Gerard, New York, N. Y. Picker for cotton-harvesters	487,509	Dec. 6	452	117 118	61	1411
Beekman, John C., New York, N. Y., assignor to Beekman Salutory System Company, of New Jersey. Water-closet-bowl. (Reissue.)	11,242	June 7	808	199	59	1599
Beekman Salutory System Company. (See Beekman, John C., assignor.) (Reissue.)						
Beemer, Daniel S. (See Swartz and Beemer.)						
Beerbower, George M., Washington, D. C. Type-writing machine	472,024	Apr. 5	8	2	59	4
Beerbower, George M., Washington, D. C. Type-writing machine	480,314	Aug. 9	917	231	60	769
Beermaker, John, Waheo, Nebr. Burglar-proof car	478,554	July 12	764	186 187	60	167
Beers, Charles L., Scranton, Pa. Hot-air pipe attachment for furnaces	470,829	Mar. 15	1864	478	58	1476
Beers, Charles L., Scranton, Pa. Stove-grate	483,295	Sept. 27	2257	568	60	1814

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Beers, Frank W. (See Spears, Ralph R., assignor.)						
Beers, Franklin H., Newark, assignor to himself, W. M. Tallman, Plainfield, N. J., E. Hayes and A. R. Brandy, New York, N. Y. Electric fan	481,646	Aug. 30	3074	750	60	1927
Beers, Franklin H., Newark, assignor to himself and W. M. Tallman, Plainfield, N. J., E. Hayes, and A. R. Brandy, New York, N. Y. Electric motor	487,242	Dec. 6	10	3	61	1323
Beers, Fredric C. (See Beers, Ira F. and F. C.)						
Beers, Ira F. and F. C., Elmira, N. Y. Automatic draft-regulator	469,462	Feb. 23	2427	622	58	1025
Beers, Ira F. and F. C., Elmira, N. Y. Thermostat	483,339	Sept. 27	2317	582	60	1826
Beers, John, Greenville, Ohio. Civil engineer's leveling-rod	468,864	Feb. 16	1494	381	58	836
Beers, Louis G., Chicago, Ill. Wire desk-basket	473,054	Apr. 19	1608	410	59	331
Beers, Louis G., Chicago, Ill. Marginal binding or rim	475,973	May 31	3340	842	59	1338
Beers, Louis J. (See Hulet and Beers.)						
Beery, Isaac R., Minneapolis, Minn. Current water-wheel and means for transmitting power therefrom	482,034	Sept. 6	183	44	60	1371
Beery, Samuel M., assignor to Beery Valve Company, Chicago, Ill. Safety-valve	478,949	July 12	1345	334	60	281
Beery, Samuel M., assignor of one-half to J. H. Brown, Chicago, Ill. Coupler-head for air-brake hose	485,365	Nov. 1	337	89	61	641
Beery Valve Company. (See Beery, Samuel M., assignor.)						
Beesley, Edward, Sr., Ellis, Jr., and Edward, Jr., assignors to T. and G. M. Stone, Newark, N. J. Machine for opening fur-dags	472,025	Apr. 5	9	3	59	4
Beesley, Ellis, Jr. (See Beesley, Edward, Sr., Ellis, Jr., and Edward, Jr.)						
Beeton, Edward, Toronto, Canada. Watchmaker's gage	473,286	Apr. 19	2005	504	59	406
Begg, Alexander, assignor of one-half to D. E. Durie, Seattle, Wash. Automatic apparatus for the sale of newspapers	472,492	Apr. 5	755	192	59	143
Begg, Henry A. (See Gilbert, James, assignor.)						
Begg, Peter B., St. Louis, Mo. Duplicating flat pad	467,393	Jan. 19	1764	450	58	351
Begg, William, Glasgow, Scotland. Loom let-off motion	483,626	Oct. 4	163	40	61	34
Beggs, Johnston, and T. A. Gordon, St. Louis, Mo. Hydraulic brick-machine	475,747	May 31	2962	751	59	1265
Begley, George, Poplar Bluff, Mo. Bier	483,038	Sept. 20	1824	463	60	1719
Begy, Joseph A. (See Lockwood, Charles H., assignor.)						
Behlen, Charles A., Cincinnati, Ohio. Vehicle-spring	487,598	Dec. 6	582	149	61	1437
Behlen, Charles A., Cincinnati, Ohio. Vehicle running-gear	487,599	Dec. 6	583	149	61	1437
Behmer, Rudolf, Berlin, Germany. Measuring-band	483,642	Oct. 4	184	46	61	38
Behne, Ernst, St. Louis, Mo. Box or basket	472,849	Apr. 12	1273	336	59	254
Behr, Hans C., San Francisco, Cal. Steam-engine valve-gearing	474,717	May 10	1336	310	59	906
Behre, Conrad, Hopewell, N. J. Hot-water boiler	480,050	Aug. 2	483	123	60	674
Behrendt, Barnim L., assignor to International Identification Card Company, Chicago, Ill. Identification-card	467,460	Jan. 19	1865	476	58	372
Behren, Henry R., assignor to A. M. Taft, Worcester, Mass. Leather-stretching machine	468,392	Feb. 9	761	189	58	681
Behringer, Edward A. (See Chadbourn, Behringer, and McCoy.)						
Behrman, Samuel N., Covington, Ky. Alarm-clock	469,644	Feb. 23	2691	693	58	1077
Behrens, Herrman A., Orchard, Iowa. Guide-marker for corn-planters	477,983	June 28	2801	702	59	2034
Beidler, Herbert A., Chicago, Ill. Device for taking up wear	477,831	June 28	2574	644	59	1988
Beilby, George T., Slatford, Scotland. Making cyanides	484,579	Oct. 18	1621	411	61	352
Beile, Charles, Chicago, Ill. Hitching device	477,634	June 28	2260	565	59	1927
Beilmann, Frederick, Philadelphia, Pa. Eye-shade	485,448	Nov. 1	461	123	61	666
Beilmann, Johann J., and E. Levi, Mannheim, Germany. Scrubbing-brush	483,128	Sept. 27	1958	436	60	1758
Beimling, Henry F., assignor to J. Barker, Philadelphia, Pa. Centrifugal liquid-separator	487,943	Dec. 13	1160	290	61	1567
Beindorf, Frederick, et al. (See Nicholson, James C., assignor.)						
Beindorf, William C., et al. (See Nicholson, James C., assignor.)						
Belcher, Alexander. (See Malby and Belcher.)						
Belden, Frank E., Hartford, Conn. Bicycle-tire	467,245	Jan. 19	1545	394	58	311
Belding Manufacturing Company. (See Ranney, Fred. E., assignor.)						
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Sheet-metal pipe	470,739	Mar. 15	1710	441	58	1448
Belding, Thomas C., assignor to Canton Steel Roofing Company, Canton, Ohio. Sheet-metal-folding machine	474,253	May 3	613	152	59	756
Belknap, Frank D., New York, N. Y. Addressing-machine	477,793	June 28	2504	627	59	1975
Belknap, Jackson O., Mobile, Ala. Advertising-sign	470,034	Mar. 1	583	145	58	1212
Bell, Alonzo, Philadelphia, Pa. Woven-wire mattress	488,378	Dec. 20	1895	474	61	1731
Bell, Alonzo, assignor to C. T. Bell, New York, N. Y. Safety-guard for printing-press platens	484,751	Oct. 18	1902	485	61	411
Bell, Arthur F. L. (See Bishop and Bell.)						
Bell, Arthur F. L., San Francisco, Cal. Valve	472,914	Apr. 12	1370	351	59	275
Bell, Arthur W. D., and J. Welsby, Wellington, New Zealand. Elevator	469,368	Feb. 23	2282	586	58	997
Bell, Charles, Stroudsburg, Pa. Electric lamp or conductor support	477,984	June 28	2802	587	59	2034
Bell, Charles N. (See Bosse, Eugene, assignor.)						
Bell, Charles T. (See Bell, Alonzo, assignor.)						
Bell, David. (See Ballard, John F., assignor.)						
Bell, Edmund W., and J. W. Moser, Pawnee City, Mich. Corn-harvester	466,765	Jan. 12	734	190	58	150
Bell, Enos T., Dublin, Ind. Flue-cleaner	480,653	Aug. 9	1451	191	60	871
Bell, Frank. (See Taylor, Samuel S., assignor.)						
Bell, Frank E. (See Williams and Capps, assignors.)						
Bell, George, assignor to G. Bell, Sandown Lane, Wavertree, and J. Vivian, Godwell, England. Apparatus for making sodium bicarbonate	470,635	Mar. 8	1553	404	58	1407
Bell, George E., West Somerville, Mass. Smoke-conveyer	472,650	Apr. 12	986	405	59	200
Bell, John P. (See Decker and Bell.)						
Bell, Joseph, Troutdale, Oreg. Feed-water heater	470,972	Mar. 15	2071	255	58	1517
Bell, Joseph, Troutdale, Oreg. Feed-water heater	477,491	June 21	2009	498	59	1861
Bell, Louis, and F. H. Root, Chicago, Ill. Temperature-regulator	470,653	Mar. 15	1578	411	58	1421
Bell, Oro A., New York, N. Y., assignor to Western Electric Company, of Illinois. Key-board-circuit for multiple switchboards	476,509	June 7	430	412	59	1521
Bell, Oro A., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Test system for multiple switchboards	483,506	Sept. 27	2549	101	60	1871
Bell, Oro A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switchboards	488,053	Dec. 13	1357	337	61	1609

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Bell, Oscar W., <i>et al.</i> (See Bartholomew, Ellis, assignor.)						
Bell, Robert E., assignor to A. Dixon, Toronto, Canada. Transposing-keyboard	481,778	Aug. 30	3308	808	60	1273
Bell, Thomas H. (See Filkins, Adolbert, assignor.)						
Bell, William C., Syracuse, N. Y. Roofing-machine	487,361	Dec. 6	204	56	61	1361
Bell, William H., San Francisco, Cal. Glove-fastener	466,319	Jan. 5	7	2	58	4
Bell, William H., San Francisco, Cal. Producing stencils	485,602	Nov. 8	689	181	61	730
Bell, William H., Dennison, Ohio. Ash-trap	471,263	Mar. 22	2520	639	58	1615
Bellamy, Charles L., Arlington, N. J. Ice-cream freezer	468,092	Feb. 2	273	66	58	577
Bellamy, Charles L., Arlington, N. J. Ice-cream freezer	475,748	May 31	2965	752	59	1266
Bellamy, Leon, Arlington, N. J. Damper-regulator	484,529	Oct. 18	1550	393 391	61	337
Bellamy, Luther H., Chicago, Ill. Implement for sharpening pencils	469,036	Feb. 16	1785	455	58	893
Bellati, Anthony J., assignor of one-fourth to H. S. Williams, N. H. Brown, and M. Earle, Philadelphia, Pa. Eyeglasses	468,459	Feb. 9	856	217	58	700
Belleau, Aaron A., Brooklyn, N. Y. Automatic faucet	487,384	Dec. 6	236	64	61	1368
Bellerose, Henry E. (See Little, John R., assignor.)						
Bellerstein, Benni, Neuss, Germany. Apparatus for carbonizing the vegetable matter in wool	468,558	Feb. 9	1030	262	58	734
Belles, Roland, Moosic, Pa. Wrench	480,801	Aug. 16	1684	420	60	932
Bellino, Carl F., Göppingen, Germany. Metal roofing-plate	468,126	Feb. 2	329	80	58	588
Bellis, David C., Elizabeth, N. J. Automatic chain-motion for knitting-machines	482,892	Sept. 20	1591	400	60	1671
Bellon, David, McKownville, N. Y. Car-coupling	478,778	July 12	1093	270 271	60	233
Bellows, Benjamin F., assignor to E. T. Lufkin, Cleveland, Ohio. Sewing-machine frame	482,958	Sept. 20	1695	426	60	1692
Bellows, Benjamin F., assignor to E. T. Lufkin, Cleveland, Ohio. Feeding mechanism for sewing-machines	483,800	Oct. 4	417	103	61	87
Beltmont, Louis A., and A. C. Cload, New Orleans, La. Mortising-machine	482,224	Sept. 6	494	118	60	1431
Belsber, Horace R. (See Rhodes, James W., assignor.)						
Belt, Jared E., Minneapolis, Minn. Running-water motor	472,467	Apr. 5	718	183	59	136
Belt, Perley P., Waco, Tex., assignor to F. Osborn, Twin Lakes, Colo. Rock-drill	479,615	July 26	2433	606	60	514
Belt, Richard. (See Denham, Benjamin F., assignor.)						
Beltman, Arnold A. (See Wegner and Beltman.)						
Bement, Arthur O., Lansing, Mich. Fastening for barrow-teeth	486,072	Nov. 15	1418	375	61	897
Bement & Sons, E. (See Molitor, Aaron F., assignor.)						
Bement & Sons, E. (See Ovenshire, Elijah A., assignor.)						
Bemis, Albert T., Louisville, Ky. Kiln for drying lumber	472,600	Apr. 12	917	236	59	188
Bemis, Albert T., Louisville, Ky. System of pipes for heating lumber-kilns	475,450	May 24	2541	647	59	1171
Bemis, Albert T., Louisville, Ky. Lumber-truck	482,332	Sept. 13	693	165	60	1485
Bemis, Sumner A. (See Hoadley and Bemis.)						
Bemis, Sumner A. (See Pfingst and Bemis.)						
Bemus, Emmett H. (See Thomas, John C., assignor.)						
Benbow, Elijah B., Chicago, Ill. Adjustable mantle	482,333	Sept. 13	694	166	60	1486
Benbow, Henry, Plymouth, England. Tubular boiler	484,696	Oct. 18	1813	461	61	391
Bender, Adam, Philadelphia, Pa. Button-machine	467,394	Jan. 19	1767	451	58	352
Bender, Frederick M. (See Kirker and Bender.)						
Bender, George, Brooklyn, N. Y. Clutch	477,985	June 28	2803	702 703	59	2035
Bender, George, Keokuk, Iowa. Folding coop or crate	480,914	Aug. 16	1852	462	60	967
Bender, John, Elizabethville, Pa. Nut-lock	482,610	Sept. 13	1152	278	60	1573
Bender, Peter, Mannheim, Germany. Apparatus for cooling liquids	479,778	Aug. 2	7	2	60	583
Benduze, William H., and S. Tilbery, assignors of one-third to J. H. Hartman, Fort Wayne, Ind. Sleigh attachment for baby-carriages	485,781	Nov. 8	953	256	61	785
Benecke, Louis, Brunswick, Mo. Water-motor	468,068	Feb. 2	243	59	58	571
Benedict, Allard E., Cairo, Nebr. Type-writing machine	476,724	June 7	741	183 184	59	1585
Benedict & Burnham Manufacturing Company. (See Morse, Charles S., assignor.)						
Benedict, Heman A., assignor of one-half to T. W. Meachem, Syracuse, N. Y. Pencil-sharpener	476,361	June 7	214	53	59	1477
Benedict, Hiram A., New York, N. Y. Photographic camera	478,837	July 12	1193	296 297	60	251
Benedict, Hiram A., New York, N. Y. Cable-crossing	484,772	Oct. 25	1947	497	61	432
Benedict, Maurice G., Detroit, assignor to Coldwater Oil Stove Company, Coldwater, Mich. Oil-stove	486,063	Nov. 8	1398	370	61	874
Benedict, Maurice G., Detroit, assignor to Coldwater Oil Stove Company, Coldwater, Mich. Oil-stove	486,422	Nov. 22	1987	572	61	1023
Benedict, Milton E., assignor of one-half to R. T. Tuttle, Perry, N. Y. Grain-binder	480,226	Aug. 2	755	191	60	725
Benét, Laurence V., Paris, France, assignor to Hotchkiss Ordnance Company, Limited, London, England. Obturator for breech-loading guns	466,320	Jan. 5	8	3	58	4
Benét, Laurence V., Paris, France, assignor to Hotchkiss Ordnance Company, Limited, London, England. Projectile	477,492	June 21	2012	499	59	1861
Benham, Elijah B., Providence, R. I. Multiple-cylinder engine	487,084	Nov. 29	3072	788 789 790 791	61	1254
Benham, Elijah B., Providence, R. I., assignor to R. M. Fairfield, Holyoke, Mass. Suction-roll for paper-machines	483,340	Sept. 27	2318	583	60	1826
Benham, Herbert A., and W. H. Tomson, London, England. Candle-lamp for use in photographic dark-rooms	473,814	Apr. 26	2870	720	59	595
Bénicke, George, Neumünster, Germany. House-door parcel-box	480,704	Aug. 16	1541	384	60	902
Benjamin, Albion P. (See Taylor, Benjamin, and Allen.)						
Benjamin, Edgar P., Boston, Mass. Trousers-protector	475,749	May 31	2967	752	59	1266
Benjamin, Edwin, South Evanston, Ill. Matcher	476,221	May 31	3745	946	59	1419
Benjamin, Frank P., New York, N. Y. Railway signaling system	476,240	June 7	6	2	59	1439
Benjamin, George H., New York, N. Y. Making tin plates	472,691	Apr. 12	1044	269	59	210
Benjamin, George V., Ithaca, N. Y. Telephone-support	485,027	Oct. 25	2377	610 611	61	517
Benjamin Machine Company. (See Hackney, Herbert, assignor.)						
Benn, Alfred R. (See Bryson, Pendleton, and Benn.)						
Bennage, William D., Philadelphia, Pa. Merry-go-round	478,838	July 12	1196	297	60	252
Benner, Franklin, Minneapolis, Minn. Electric guest-call	481,919	Aug. 30	3535	865 866	60	1316
Benner, Willis, Long Island City, N. Y. Lamp	486,022	Nov. 8	1335	354 355	61	863
Benners, Edwin H., Elizabeth, N. J. Axle-lubricator	478,041	June 28	2903	725	59	2052

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bennett, Albert, Quincy, Mich. Tug-securing device.....	473,815	Apr. 26	2873	721	59	595
Bennett, Albert J., Woonsocket, R. I. Photographic-negative retoucher.....	488,705	Dec. 27	2415	549	61	1850
Bennett, Benjamin, Scranton, Pa. Gate-latch.....	480,005	Aug. 2	379	84	60	653
Bennett, Benjamin, Scranton, Pa. Railway-switch.....	487,705	Dec. 13	760	195	61	1488
Bennett, Caroline, and A. E. Parkinson, Kansas City, Mo.; said Parkinson assignor to said Bennett. House letter-box.....	486,423	Nov. 22	1989	528	61	1024
Bennett, Charles A., Montclair, N. J. Desk-cover.....	483,129	Sept. 27	1959	496	60	1758
Bennett, Charles M., Logansport, Ind. Hydraulic gas-pump.....	474,053	May 3	275	67	59	691
Bennett, Cornelia E., <i>et al.</i> (See Bennett, William H., assignor.)						
Bennett, Edwin H., Bayonne, N. J. Header for steam-boilers.....	484,393	Oct. 18	1334	340	61	295
Bennett, Edwin S., Boston, Mass. Sash-fastener.....	480,688	Aug. 9	1511	375	60	882
Bennett, Francis E., Philadelphia, Pa. Garment hook and eye.....	478,555	July 12	766	187	60	167
Bennett, Francis E., Philadelphia, Pa. Garment-fastener.....	483,988	Oct. 11	705	177	61	159
Bennett, Francis E., Philadelphia, Pa. Garment-fastener.....	482,178	Dec. 20	1565	392	61	1668
Bennett, Frederick M., New York, N. Y., assignor to J. W. Marsh, Pittsburg, Pa. Cast joint for armored conductors.....	479,386	July 19	2053	512	60	428
Bennett, George M., Burlington, Iowa. Combined scrubbing and sweeping machine.....	479,616	July 26	2434	606	60	514
Bennett, George W. (See Wiley, Charles D., assignor.)						
Bennett, H. D., <i>et al.</i> (See Johnston and Egan, assignors.)						
Bennett, Harry J., San Francisco, Cal. Broom-guard.....	483,733	Oct. 4	313	78	61	66
Bennett, Harwell L., and R. B. Adams, Westerville, Ohio. Rope-clutch.....	478,839	July 12	1197	297	60	252
Bennett, Harwell L., and R. B. Adams, Westerville, Ohio. Power-windlass.....	486,073	Nov. 15	1418	375	61	897
Bennett, Henry, Middleton, St. George, assignor to S. Alderson, Leeds, England. Time indicator and alarm.....	470,816	Mar. 15	1840	472	58	1471
Bennett, Henry P., assignor of one-half to S. C. Symonds, Phoenix, Ariz. Ter. Excavator.....	485,084	Oct. 25	2454	632	61	534
Bennett, Holland C., Raymond, Ill. Wagon end-gate.....	470,465	Mar. 8	1318	340	58	1359
Bennett, James B., <i>et al.</i> (See Smith, Thomas, assignor.)						
Bennett, John H., Worcester, Mass. Knife-handle.....	485,166	Nov. 1	12	3	61	575
Bennett, John H., Worcester, assignor to G. Draper & Sons, Hopedale, Mass. Holder for rings in spinning and twisting frames.....	480,227	Aug. 2	758	192	60	726
Bennett, John M. (See Hatfield and Bennett.)						
Bennett, Leonard E., McHenry, Ill. Tripod-head.....	476,863	June 14	978	237	59	1645
Bennett, Levi W. (See Moffitt, Williams, and Bennett.)						
Bennett, Monroe A., and V. V. Haidacher, Wilkes-Barré, Pa. Wood-turning machine.....	483,760	Oct. 4	355	89, 90	61	74
Bennett, Noble E., assignor to Bloomington Manufacturing Company, Bloomington, Ill. Cycle-wheel.....	473,995	May 3	172	41	59	671
Bennett, Oliver H., Jamestown, N. D. Recoil-operated magazine-gun.....	478,211	July 5	222	56	60	46
Bennett, Thomas B., Oriole, Mo. Ladder.....	469,534	Feb. 23	2542	653	58	1046
Bennett, Thomas G., assignor to Winchester Repeating Arms Company, New Haven, Conn. Shell.....	472,782	Apr. 12	1184	303	59	237
Bennett, Thomas G., assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably uniting barrels to stocks of guns.....	487,465	Dec. 6	389	101	61	1397
Bennett, Thomas G., assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably uniting gun-barrels to the stocks.....	487,466	Dec. 6	390	101	61	1398
Bennett, Walter E. (See Hardman, Frederick H., assignor.)						
Bennett, Walter E., Boston, Mass. Fastening for boots or shoes.....	477,923	June 28	2721	681	59	2017
Bennett, William E. T., London, England. Hand continuous self-inking rolling, marking, or impressing machine.....	469,668	Feb. 23	2739	704	58	1088
Bennett, William H., Chicago, Ill., assignor to C. E. Bennett and A. F. Bartlett. Tenoning-machine.....	474,515	May 10	1015	261	59	843
Bennetts, William J., Bucyrus, Ohio. Crane or derrick.....	470,538	Mar. 8	1418	370	58	1379
Bennitt, Mark, Buffalo, N. Y. Stereotype plate and holder.....	484,082	Oct. 11	837	212	61	186
Bennor, Joseph, Philadelphia, Pa. Knitting-machine.....	485,316	Nov. 1	242	66, 67	61	621
Bennor, Joseph, Philadelphia, Pa. Knitting-machine.....	485,317	Nov. 1	247	68, 69	61	622
Benoit, Alphonse V., Brooklyn, N. Y. Ink or color holder.....	466,974	Jan. 12	1084	274	58	214
Benoit, Fredrick, Chicago, Ill. Combined cane and stool.....	486,074	Nov. 15	1420	375	61	897
Benoit, Fredrick, Chicago, Ill. Folding stool.....	486,075	Nov. 15	1422	375	61	897
Bensinger, Moses, Chicago, Ill. Valve for beer-coolers.....	473,248	Apr. 19	1942	488	59	393
Bensinger, Moses, assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-cushion.....	481,094	Aug. 16	2153	534	60	1023
Bensinger, Moses, assignor to Brunswick-Balke-Collender Company, Chicago, Ill. Billiard-cushion.....	481,387	Aug. 23	2658	652	60	1129
Benson, Alfred G., Camden, N. J. Bow or hoop for nets.....	481,461	Aug. 23	2788	685	60	1155
Benson, Alfred G., Camden, N. J. Locking-ferule.....	481,462	Aug. 23	2788	686	60	1155
Benson, Alfred G., Camden, N. J. Gaff-hook.....	481,463	Aug. 23	2789	687	60	1155
Benson, Alfred G., Camden, N. J. Combined gaff-hook and landing-net.....	481,464	Aug. 23	2789	686	60	1156
Benson, Erastus A. (See Hoeschen, Henry, assignor.)						
Benson, J. C. (See Hatfield, Thomas J., assignor.)						
Benson, Joseph R., Sonora, Tex. Automatic railway or farm gate.....	483,890	Oct. 4	545	138	61	113
Benson, Marcus E., West Plains, Mo. Elevated carrier.....	476,600	June 7	566	135	59	1548
Benson, Peter, Minneapolis, Minn. Music-rack attachment for guitars, &c.....	487,820	Dec. 13	958	242	61	1529
Benson, Sivert, Spring Valley, Minn., assignor to Singer Manufacturing Company of New Jersey. Shuttle-carrier for sewing-machines.....	467,461	Jan. 19	1866	476	58	372
Bente, Henry F., St. Louis, Mo. Label-holder.....	472,248	Apr. 5	379	99	59	71
Bentel, Frederick, Hamilton, Ohio. Writing-tablet.....	481,686	Aug. 30	3138	765	60	1239
Bentley, A. F., <i>et al.</i> (See Jackson and Reiger, assignors.)						
Bentley, Albert E., Manchester, England. Machine for making metal canisters.....	478,389	July 5	508	{ 123 124 }	{ 60 60 }	100
Bentley, Albert F., New Bedford, Mass., assignor to American Ring Traveler Company, Providence, R. I. Ring-traveler.....	481,131	Aug. 16	2210	546	60	1033
Bentley, Alfred and T. W., Paterson, N. J. Jacquard-card wire.....	488,418	Dec. 20	1960	489	61	1744
Bentley, Charles E., New York, N. Y. Toy.....	483,537	Dec. 27	2150	531	61	1797
Bentley, Edward M., New York, N. Y. Overhead conductor for electric railways.....	469,353	Feb. 23	2255	579	58	992
Bentley, Edward M., Boston, Mass. Electric railway.....	470,654	Mar. 15	1581	412	58	1421
Bentley, Edward M., Boston, Mass. Trolley-stand for electric cars.....	488,179	Dec. 20	1566	393	61	1668
Bentley, George, <i>et al.</i> (See Smith, Samuel, assignor.)						
Bentley, John. (See Leach, Heaton, and Bentley.)						
Bentley, Thomas W. (See Bentley, Alfred and T. W.)						
Bentley, Truman, Toronto Junction, Canada. Sod-slicing machine.....	471,231	Mar. 22	2472	628	58	1606
Benton, C. A. (See Coffman, John R., assignor.)						
Benton, Charles A., Arelhus, Mich. Apple parer and corer.....	486,424	Nov. 22	1991	528	61	1024
Benton, Francis E., Stoughton, Mass. Whip-socket.....	482,717	Sept. 20	1318	322	60	1618
Benton, Francis E., Stoughton, Mass. Whip-socket fastener.....	488,109	Dec. 13	1446	363	61	1627

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Benton, John L. (See Browne and Benton.)						
Benway, James K., assignor to Albany Venetian Blind Company, Albany, N. Y. Venetian blind	480,548	Aug. 9	1279	321	60	838
Berand, Edouard. (See Blum and Beraud.)						
Berbecker & Co., Julius. (See Morris, Thomas, assignor.)						
Berberich, Valentine, Frankfort, Ky. Telescopic sight for cannon	484,285	Oct. 11	1161	295	61	249
Berch, Herman. (See Cheney and Berch.)						
Berdan, Hiram, Washington, D. C. Operating submarine guns	478,215	July 5	226	56, 57	60	47
Berdan, Hiram, Washington, D. C. Ammunition for submarine guns	478,216	July 5	229	57	60	47
Berdan, Marvin, Plymouth, Mich. Wire-tightener	473,899	May 3	5	2	59	638
Berdax, Valentin, Heilbronn, Germany. Repetition-action for pianos	474,112	May 3	358	85	59	706
Beresford, George C. (See Maxheimer and Beresford.)						
Berg, Friedrich, Sagnitz Castle, Livland, Russia. Centrifugal grain sifter and sorter	468,865	Feb. 16	1495	381	58	836
Berg, George F., assignor of two-thirds to S. L. Berg and J. M. Mann, De Witt, Nebr. Mechanical motor	488,260	Dec. 20	1695	{ 423 424 }	{ 61 61 }	{ 1693 1693 }
Berg, Per Torsten. (See Potter and Berg.)						
Berg, Peter V. P., Askor-Vejen Station, Denmark, assignor, by mesne assignments, to O. K. Weedfeld, Perth Amboy, R. J. and A. J. Preisler, Jersey City, N. J. Centrifugal cream-tester	486,390	Nov. 15	1920	511	61	999
Berg, Rudolf, New York, N. Y. Compound steam-engine	482,116	Sept. 6	315	74, 75	60	1397
Berg, S. L., et al. (See Berg, George F., assignor.)						
Berger, Anatole, C. H. Cornet, (veuve), Lyons, and C. Martin, Limoges, France. Heating-cup	468,147	Feb. 2	364	90	58	595
Berger, Christian L., Boston, Mass. Engineer's transit	476,510	June 7	433	101	59	1522
Berger, John P., Berea, Nebr. Egg-crate	469,114	Feb. 16	1885	482	58	913
Berger, Lewis A. (See Brown and Berger.)						
Berger Manufacturing Company. (See Berger, Wilson C., assignor.)						
Berger, Richard A., Brooklyn, N. Y. Lathe-tool	471,839	Mar. 29	3391	865	58	1788
Berger, Wilson C., assignor to Berger Manufacturing Company, Canton, Ohio. Eaves-trough hanger	471,936	Mar. 29	3523	900	58	1814
Berger, Wilson C., assignor to Berger Manufacturing Company, Canton, Ohio. Sheet-metal roofing	485,782	Nov. 8	955	256	61	785
Berger, Wilson C., assignor to Berger Manufacturing Company, Canton, Ohio. Sheet-metal elbow	485,783	Nov. 8	956	256	61	785
Bergeron, Aurolie, et al. (See Bergeron and Bedard, assignors.)						
Bergeron, Célestin, New York, N. Y. Change-receiver	479,751	July 26	2667	662	60	557
Bergeron, Theophore J., and F. Bedard, assignors to A. Bergeron and C. Bedard, Minneapolis, Minn. Fire-escape	481,888	Aug. 30	3481	853	60	1306
Bergfels, Henry, Newark, N. J. Bicycle-saddle spring	473,493	Apr. 26	2356	598	59	496
Bergfels, Henry, Newark, N. J. Spring for bicycle-saddles	480,838	Aug. 16	1736	434	60	943
Bergh, Axel. (See Jorgensen and Bergh.)						
Bergman, John E. (See Hanson and Bergman.)						
Bergman, Oscar W., Gothenburg, Sweden. Breech-loading firearm	468,127	Feb. 2	330	81, 82	58	588
Bergmann, Adolph, deceased, New York, N. Y.; B. Bergmann administratrix. Automatic electric controller for air-pumps	467,551	Jan. 26	2019	517	58	413
Bergmann, Bertha, administratrix. (See Bergmann, Adolph.)						
Bergmann & Company. (See Klein, Charles J., assignor.)						
Bergmann & Company. (See Robb, James T., assignor.)						
Bergmann, Sigmund, New York, N. Y. Lamp-socket and circuit-closer therefor	484,580	Oct. 18	1623	412	61	352
Bergmann, Sigmund, assignor, by mesne assignments, to Interior Conduit and Insulation Company, New York, N. Y. Switch and switch-box	472,027	Apr. 5	12	3	59	5
Bergmann, Sigmund, assignor, by mesne assignments, to Interior Conduit and Insulation Company, New York, N. Y. Composition coating for paper tubes	482,718	Sept. 20	1318	322	60	1618
Bergmann, Sigmund, and G. A. Scott, assignors, by mesne assignments, to Interior Conduit and Insulation Company, New York, N. Y. Galvanometer	472,026	Apr. 5	11	3	59	5
Bergner & Co., F. (See Bergner, William, assignor.)						
Bergner, William, assignor to F. Bergner & Co., Baltimore, Md. Album-case	478,390	July 5	509	124	60	100
Bergold, Joseph M., Canton, Ohio. Power-transmitter	485,167	Nov. 1	13	4	61	575
Bergquist, Frank, Beloit, Wis., assignor to Moline Pump Company, Moline, Ill. Fastening for tank-hands	472,723	Apr. 12	1101	283	59	221
Bergstrom, John H., Brooklyn, N. Y. Holder for grinding twist-drills	488,054	Dec. 13	1360	337	61	1609
Bering, James E., assignor to Chambers, Bering, Quinlan Company, Decatur, Ill. Corn-planter	473,413	Apr. 19	2222	{ 558 559 }	{ 59 59 }	{ 448 448 }
Berkefeld, Hermann, Vienna, assignor to A. G. Pummerer, Wels, Austria-Hungary. Insecticide	469,892	Mar. 1	363		58	1171
Berkey, Julius, Grand Rapids, Mich. Safety drapery or garment hook	487,171	Nov. 29	3214	823	61	1283
Berky, Jacob H., Mishawaka, Ind. Automatic governor for wind-wheels	481,095	Aug. 16	2155	534	60	1023
Berliner, Emile, Washington, D. C. Electric furnace generator	481,999	Sept. 6	117	29, 30	60	1358
Berliner Maschinenbau Actien-Gesellschaft, vormals L. Schwartzkopf. (See Scheibel, Adolf, assignor.)						
Berliner Maschinenbau Actien-Gesellschaft, vormals L. Schwartzkopf. (See Stein, Bernhard, assignor.)						
Bermel, Joseph, Middle Village, N. Y. Axle-nut	486,023	Nov. 8	1337	355	61	863
Berna, George E., Pelham Manor, N. Y. Conveyor for ice-cakes	487,001	Nov. 29	2947	{ 759 760 }	{ 61 61 }	{ 1229 1229 }
Bernard, Ernest. (See Bernard, Myrthil and E.)						
Bernard, Myrthil and E., Paris, France. Process of and apparatus for the extraction of aluminium	476,914	June 14	1064	256	59	1662
Bernard, Philip, Jefferson, S. D. Hay-stacker	478,979	July 19	1401	{ 347 348 }	{ 60 60 }	{ 303 303 }
Bernard, Philip, Jefferson, S. D. Hay-stacking machine	482,611	Sept. 13	1152	299	60	1573
Bernard, William A., New Haven, Conn. Dividers	479,112	July 19	1616	404	60	342
Bernard, William A., assignor to William Schollhorn Company, New Haven, Conn. Combined pliers and cutter	479,113	July 19	1618	404	60	343
Bernard, William A., assignor to William Schollhorn Company, New Haven, Conn. Belt-pliers	488,785	Dec. 27	2534	629	61	1874
Bernauer, Albert, assignor of one-half to J. E. Waugh, Chicago, Ill. Fence-making machine	472,663	Apr. 12	1001	{ 259 260 }	{ 59 59 }	{ 204 204 }
Berney, Thomas, Tidioite, Pa. Wall-paper cutter	474,899	May 17	1630	416	59	978
Bernhardt, Herman V., Brooklyn, N. Y. Apparatus for forming rings	472,959	Apr. 12	1443	368	59	288
Bernhardt, Herman V., assignor to J. B. Bowden, Brooklyn, N. Y. Apparatus for forming rings	473,139	Apr. 19	1754	442	59	357
Bernheim, Gustav. (See Flocke, Robert, assignor.)						
Bernitt, Wilhelm H. C., Hamburg, Germany. Coin-operated photographic apparatus	473,375	Apr. 19	2159	{ 542 543 }	{ 59 59 }	{ 436 436 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Bernstein, Benny, New York, N. Y. Shutter-fastener.....	475,921	May 31	3255	821	59	1322
Bernstein, Benny, New York, N. Y. Spring-bolt.....	475,922	May 31	3256	822	59	1322
Bernstein, Benny, New York, N. Y. Car-coupling.....	476,864	June 14	980	238	59	1646
Bernstein, Benny, New York, N. Y. Fastening for satchels, hand-bags, &c.....	476,865	June 14	982	238	59	1646
Bernstein Electric Company. (See Lean and Burleigh, assignors.)						
Bernstein, Joseph, Philadelphia, Pa. Trousers.....	480,060	Aug. 2	484	123	60	675
Berrenberg, William, Boston, Mass., assignor of one-half to A. L. Reinmann, New York, N. Y. Lubricating-piston.....	474,075	May 3	305	74	59	696
Berridge, Isaac L. (See Kerr and Berridge.)						
Berridge, Isaac L. (See Ward and Lancashire, assignors.)						
Berridge, Thomas, Sturgis, Mich. Shears.....	474,284	May 3	615	152	59	756
Berry, Charles A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock.....	474,790	May 10	1448	367 368	59	928
Berry, John, assignor to National Needle Company, Springfield, Mass. Swaging-machine.....	480,928	Aug. 2	759	192	60	726
Berry, John S., Tyler, Tex. Surface cattle-guard.....	483,039	Sept. 20	1825	464	60	1720
Berry, Joseph N., Boston, Mass. Thill-coupling.....	480,244	Aug. 9	759	291	60	743
Berry, Marcellus F., Brooklyn, N. Y. Paper-holder.....	474,516	May 10	1017	261	59	844
Berry, Washington, Angel Island, Cal. Sash-balance.....	470,655	Mar. 15	1552	412	58	1422
Berry, William R. (See Wright and Berry.)						
Berryman, Crayton, Sioux City, Iowa. Wire gate.....	479,394	July 26	2071	520	60	446
Bersin, Nicolaus, Dusseldorf, Germany. Axle and shaft bearing.....	470,330	Mar. 8	1994	279	58	1318
Berst, Conrad, Kansas City, Mo. Churn-dasher.....	473,900	May 3	6	2	59	638
Berst, Henry L. (See Berst, Jesse H. and H. L.)						
Berst, Jesse H. (See Carter and Berst.)						
Berst, Jesse H., Kokomo, and H. L. Berst, Leesburg, Ind. Skewer-pointing machine.....	483,205	Sept. 27	2089	530	60	1784
Berst, John E., Merriam, Ill. Swinging chair.....	466,997	Jan. 12	1120	284	58	221
Bert, Gustave W., and L. Widmayer, Chicago, Ill. Flag-staff holder.....	466,960	Jan. 12	1059	269	58	210
Bertels, Charles E., Wilkes-Barré, Pa. Seam for sheet metal.....	475,656	May 24	2814	713	59	1225
Bertelsen, Rasmus, <i>et al.</i> (See Curran, William, assignor.)						
Bertenshaw, Silas, <i>et al.</i> (See Parkison, John E., assignor.)						
Bertenshaw, Silas, Denver, assignor of one-half to W. S. Parkison, Glenwood Springs, Colo. Bed-bottom.....	472,978	Apr. 19	1483	379	59	309
Bertermann, Benedict, Indianapolis, Ind. Valve-gear for steam-engines.....	472,100	Apr. 5	138	37, 38	59	27
Bertheand, Ferdinand, and A. G. Hoegren, Chicago, Ill. Glove or mitten.....	486,024	Nov. 8	1339	355	61	864
Berthelémy, Charles, Paris, France. Lamp-shade support.....	480,989	Aug. 16	1977	494 495	60	990
Berthelet, Joseph R., Milwaukee, Wis. Separator for crushed cement, &c.....	479,617	July 26	2436	607	60	514
Berthier, Peter E., Lakeland, La. Pea-vine rake.....	484,394	Oct. 18	1836	340	61	295
Berton, Camille L. C., Paris, France. Recovering tin from scraps and waste of tin-plate.....	477,348	June 21	1781		59	1816
Bertrand, Joseph. (See Fleischel and Bertrand.)						
Bertsch, Joseph L. (See Page and Bertsch.)						
Bervin, John, Durango, Colo. Rock-drill support.....	474,206	May 3	495	119	59	733
Besemer, Andrew A., Harvey, Ill. Steamer.....	488,515	Dec. 20	2107	523	61	1775
Besly, Charles H., Chicago, Ill. Die-stock.....	474,805	May 17	1478	376 377	59	948
Besly, Charles H., Chicago, Ill., and F. N. Gardner, Beloit, Wis.; said Gardner assignor to said Besly. Force-feed lubricator.....	467,273	Jan. 19	1587	405	58	318
Besse, Lyman W., <i>et al.</i> (See Brosnan, Cornelius J., assignor.)						
Bessemer Steel Company. (See Reese, Jacob.)						
Bcssey, Merton W., Waterville, Me. Electric door-alarm.....	481,711	Aug. 30	3177	776	60	1247
Bessier, Vetal, Brooklyn, N. Y. Zither.....	477,493	June 21	2013	499	59	1861
Besson, Hyppolite, assignor of one-half to G. H. A. B., and E. W. Kent, London, England. Apparatus for drilling brooms or brushes.....	487,362	Dec. 6	205	56, 57	61	1361
Best, Clearmont V., assignor of one-half to G. W. Althouse, Canton, Ohio. Vapor-burner.....	471,536	Mar. 29	3905	765	58	1715
Best, Daniel, San Leandro, Cal. Traveling harvester.....	480,006	Aug. 2	380	94	60	653
Best, Daniel, San Leandro, Cal. Gas-engine.....	484,727	Oct. 18	1856	472	61	400
Best, Daniel, San Leandro, Cal. Gas-engine motor for cars.....	484,728	Oct. 18	1859	473	61	400
Best, Daniel, San Leandro, Cal. Lubricator.....	484,729	Oct. 18	1862	473	61	401
Best, Daniel, San Leandro, Cal. Carburetor.....	485,526	Nov. 1	566	151	61	689
Best, Henry F. (See Shaw, Irvin A., assignor.)						
Best, John C., and G. W. Anderson, Raytown, Mo. Method of and apparatus for treating yucca fiber.....	467,493	Jan. 26	1925	492	58	392
Best, John H., Galva, Ill. Display-rack.....	487,110	Nov. 29	3117	800	61	1265
Best, Julius A. (See Wheat, Edmond C., assignor.)						
Best, Peter, Newark, N. J. Coal-loading apparatus.....	488,304	Dec. 20	1766	445	61	1706
Best, Thomas C., Chicago, Ill. Steam-boiler.....	474,517	May 10	1018	262	59	844
Best, William N., Los Angeles, Cal. Portable lawn-fountain.....	469,848	Mar. 1	293	76	58	1158
Bestgen, John G., Somerville, Mass. Razor-pivot.....	482,992	Sept. 20	1749	442	60	1703
Besthoff, Samuel J., assignor of two-thirds to S. Ottenberg and H. Kahn, New York, N. Y. Cash and parcel carrier.....	486,750	Nov. 22	2493	652	61	1124
Betham, William R., Chicago, Ill. Car-coupling.....	474,806	May 17	1479	377	59	948
Betten, Hermann, Hegensdorf, Germany. Rotary engine.....	481,096	Aug. 16	2156	535	60	1023
Bettendorf, William P., Davenport, Iowa. Metallic frame for wagons.....	479,618	July 26	2437	607	60	515
Bettendorf, William P., Davenport, Iowa. Metallic frame for wagons.....	479,619	July 26	2438	607 608	60	515
Bettendorf, William P., Davenport, Iowa. Metallic frame for wagons.....	479,620	July 26	2439	608	60	515
Bettendorf, William P., Davenport, Iowa. Wagon-holster.....	479,621	July 26	2440	608	60	516
Bettendorf, William P., Davenport, Iowa. Metallic wagon-tongue.....	479,622	July 26	2441	608	60	516
Betterman, Henry C. (See Everest and Betterman.)						
Bettini, Gianni, New York, N. Y. Phonograph.....	488,379	Dec. 20	1896	475	61	1732
Bettini, Gianni, New York, N. Y. Phonograph.....	488,380	Dec. 20	1898	475	61	1732
Bettini, Gianni, New York, N. Y. Phonograph.....	488,381	Dec. 20	1900	475	61	1732
Bettmann, Charles F., Jr., New Albany, Ind. Gate-latch.....	478,556	July 12	767	187	60	167
Betts, Arlington U. (See Deardorff and Betts.)						
Betts, Edgar K., <i>et al.</i> (See McKinney, Samuel C., assignor.)						
Betts, James E., Wilmington, Ohio. Beam-compass.....	486,553	Nov. 22	2167	572	61	1059
Betts, T. G., <i>et al.</i> (See Rose, Robert, assignor.) (Reissue.)						
Betts, Walter, and W. B. Herbert, Galveston, Tex. Blotter.....	471,531	Mar. 29	2912	741	58	1699
Betts, William H., Brooklyn, N. Y. Belt-heading machine.....	475,657	May 24	2816	713	59	1225
Betts, William H., assignor to Model Mop, Pail, and Wringer Company, Lincoln, Nebr. Mop-wringer.....	487,821	Dec. 13	958	242	61	1529
Betz, Rufus. (See Dorn, Charles A., assignor.)						
Bencke, August. (See Fitz Gerald and Bencke.)						
Baugler, John B., assignor of one-half to C. Wilber, Dayton, Tenn. Burial apparatus.....	481,840	Aug. 30	3406	836	60	1291

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Beust, Max, New Albany, Ind. Combined cork and corkscrew	476,777	June 14	833	205	59	1616
Beuster, Carl. (See Prenzlau, Hermann, assignor.)						
Beverly, David S., <i>et al.</i> (See Campbell, Cydnor B., assignor.)						
Bevier, Andrew J. (See Mayloy, Edward C., assignor.)						
Bevier, Dennis, <i>et al.</i> (See Watrous, Thomas A., assignor.)						
Bevier, Silas W., <i>et al.</i> (See Watrous, Thomas A., assignor.)						
Bevin, Abner A., and J. C. Wells, East Hampton, Conn. Bell	483,341	Sept. 27	2321	583	60	1827
Bevin Brothers Manufacturing Company. (See Wells, John C., assignor.)						
Bevin, William D., Syracuse, N. Y. Index attachment for books	482,612	Sept. 13	1153	279	60	1573
Bevington, James H., Chicago, Ill. Umbrella-locking device	474,356	May 10	768	200	59	796
Bevington, James H., Peoria, assignor, by mesne assignments, to Acme Railway Signal and Manufacturing Company, Galesburg, Ill. Torpedo	474,718	May 10	1339	340	59	906
Bew, Charles, Angola, Ind. Door-check	475,105	May 17	1957	496	59	1041
Bex, Frederick, Washington, D. C. Means for operating heavy ordnance	483,130	Sept. 27	1960	497	60	1758
Beyer, Albin, assignor to H. Gernshym & Brother, Brooklyn, N. Y. Electrical stop-motion for knitting-machines	477,986	June 28	2807	703	59	2035
Beyer, Augustus, assignor to himself and A. W. Brown, New Philadelphia, Ohio. Annealing-box	479,345	July 19	1982	496	60	414
Beyer, Charles, Brooklyn, N. Y., and D. M. Lester, assignors to Lester & Wasley, Norwich, Conn. Feeding device for envelope-machines	478,779	July 12	1095	271	60	233
Beyrle, Robert, Los Angeles, Cal. Filtering system	487,467	Dec. 6	392	101 102	61	1398
Bezer, Henry, and T. W. Burley, South Easton, Pa. Mechanism for operating railway switch and signal interlocking gear	469,645	Feb. 23	2693	693	58	1078
Bibb, John T., and A. T. Timewell, Spokane Falls, Wash. Automatic sack filling and sewing machine	476,778	June 14	834	205 206 340 341 342 343	59	1616
Bicheroux, Toussaint, Dusseldorf, Germany. Method of and apparatus for the manufacture of iron rails, &c.	470,466	Mar. 8	1319	58	58	1359
Bickel, John F. (See Diehl, John, assignor.)						
Bickelhaupt, William H., New York, N. Y. Box for hats, bonnets, &c.	477,494	June 21	2014	499	59	1862
Bickford, John H., Salem, Mass. Car-truck	466,595	Jan. 5	454	117	58	87
Bicknell, Emery O., <i>et al.</i> (See Gilman, Willard H., assignor.)						
Biddlecome, Hannah J. (See Evans, Owen F., assignor.)						
Bidelman, Robert M., assignor to Petroleum Light and Heat Company, Adrian, Mich. Manufacture of gas	483,489	Sept. 27	2517	634	60	1865
Bidwell, George A., Pittsfield, Mass. Fire-escape	475,175	May 17	2059	518	59	1061
Bidwell, George R. (See De Wolfe, Edward R., assignor.)						
Bidwell, George R. (See Parkinson, John, assignor.)						
Bieder, Jacob L., Cleveland, Ohio. Attachment for lawn-mowers	469,916	Mar. 1	398	100	58	1178
Biedermann, William. (See Stenert, Samuel, assignor.)						
Biehn, George, Tacoma, Wash. Window-shade fixture	477,495	June 21	2015	499 500	59	1862
Bierce, Will W., Montgomery, Ala. Warehouse	486,367	Nov. 15	1895	501	61	991
Bierer, George W., Allegheny, assignor of one-half to G. W. Bowers, Pittsburg, Pa. Metallurgical furnace	483,985	Oct. 4	696	174	61	144
Bierley, Henry A., Lexington, Ky. Cash-register	473,723	Apr. 26	2734	688	59	568
Bierley, Henry A., Lexington, Ky. Cash-register. (Reissue)	11,256	Aug. 2	782	198 199	60	729
Bierley, Henry A., assignor of one-half to D. F. Frazee and M. C. Alford, Lexington, Ky. Railway-ticket	477,496	June 21	2017	500	59	1862
Bierline, Michael, Chaska, Minn. Brick-machine	469,225	Feb. 23	2062	530 531	58	954
Biffar, Charles F. (See Haight and Biffar.)						
Bigelow, Alfred, <i>et al.</i> (See Cartwright, Edward, assignor.)						
Bigelow, Austin W., Everett, Mass., assignor to Goodyear Shoe Machinery Company, Hartford, Conn. Sewing-machine	480,229	Aug. 2	761	192	60	726
Bigelow, Buel S. (See White and Bigelow.)						
Bigelow, Frank R., Gloucester City, N. J. Differential gear for bicycles	476,031	May 31	3419	863	59	1356
Bigelow, John, Minneapolis, Minn. Grain-sampling machine	480,651	Aug. 9	1453	362	60	872
Bigelow, Jonah H., Worcester, Mass. Wire agitator for flour-sifters	466,576	Nov. 22	2212	580	61	1066
Bigelow, Paul. (See Tompkins and Bigelow.)						
Bigelow, Timothy, Brooklyn, N. Y. Type-writing machine	471,090	Mar. 22	2250	578	58	1564
Bigelow, Timothy, Brooklyn, N. Y. Type-writing machine	471,091	Mar. 22	2251	578 579	58	1564
Bigelow, Timothy, Brooklyn, N. Y. Type-writing machine	471,092	Mar. 22	2253	579	58	1564
Bigelow, Timothy, Brooklyn, N. Y. Type-writing machine	471,093	Mar. 22	2255	579	58	1565
Bigelow, William P., Natick, Mass. Corset	481,294	Aug. 21	2516	618	60	1104
Biggs, Charles H., and F. H. Fairchild, Detroit, Mich. Adjustable seat	478,840	July 12	1198	297	60	252
Biggs, William H. (See Krom and Biggs.)						
Bigland, Hubert H., and J. Burns, Newcastle-on-Tyne, England. Electric-arc lamp	482,568	Sept. 13	1088	264	60	1561
Bigler, Reed & Co., <i>et al.</i> (See Bailey, Archibald, assignor.)						
Bigley, Richard, Toronto, Canada. Heater	478,557	July 12	768	187	60	167
Bigley, Richard, Toronto, Canada. Gas attachment for cooking-stoves	478,558	July 12	770	188	60	168
Bigney, Sidney O., Attleborough, Mass. Swaging-machine	475,077	May 17	1907	484	59	1031
Bildt, Carl W., Worcester, Mass. Lining for Bessemer converters	484,286	Oct. 11	1162	61	61	250
Bilharz, Oscar, Freiberg, Germany. Apparatus for treating ores	469,037	Feb. 16	1786	455 456	58	893
Billhimer, Levi. (See Cissner, Charles, assignor.)						
Billings, Albert S. (See Haughawort, John W., assignor.)						
Billings, Charles E., Hartford, Conn. Pocket-knife	470,777	Mar. 15	1771	456	58	1458
Billings, Harry E., Hartford, Conn. Picture-cord take-up	468,637	Feb. 9	1137	290	58	755
Billings, Henry A., Dayton, Ohio. Molding-machine	488,055	Dec. 13	1361	337 338	61	1609
Billington, James H. (See Hall, Frank J., assignor.)						
Bills, James A., assignor to himself and J. Varty, Chicago, Ill. Steam-jet pump	475,716	May 24	2904	736	59	1241
Bilz, John A., Pleasanton, Cal. Two-wheeled vehicle	475,974	May 31	3341	842	59	1339
Bina, Julius, Fürth, Germany. Package for pulverized substances	481,521	Aug. 23	2870	705	60	1172
Binder, Carl. (See Meyer and Binder.)						
Binet, Eward C., Clipper Mills, Cal. Barbed strap for bunching lumber	483,040	Sept. 20	1826	464	60	1720
Bingaman, Joseph, Princeton, Kans. Pruning implement	470,636	Mar. 8	1556	405	58	1408
Bingen, John, <i>et al.</i> (See Muckenhirn, Charles H., assignor.)						
Bingham, Harry F., Pittsburg, Pa. Gage-cock	476,222	May 31	3746	946	59	1419

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Bingham, Herbert M., Avondale, N. J., and G. Runge, Cleveland, Ohio. Inclosure for packing and carrying printers' rollers	481,465	Aug. 23	2791	686	60	1156
Bingham, John F. (See Wood and Bingham.)						
Bingham, John H., Chicago, Ill. Tire for vehicle-wheels	483,131	Sept. 27	1962	497	60	1759
Bingham, L. W., <i>et al.</i> (See Cook, Herbert F., assignor.)						
Bingham, Robert O., assignor to Wagner Manufacturing Company, Sidney, Ohio. Combined ball-journal and hinge	479,731	July 26	2636	654	60	551
Bingham, Tracy F., Abronia, Mich. Bee-smoker	473,724	Apr. 26	2736	629	59	568
Bingham, Wells A. (See Liddell, William, assignor.)						
Brinkard, Alfred, Des Moines, Iowa. Paper-straightener for printing-presses	478,079	July 5	7	2	60	4
Binns, Leedham, Philadelphia, Pa. Sash-cord	473,287	Apr. 19	2006	504	59	407
Binns, William H., assignor to Chicago Sewing Machine Company, Chicago, Ill. Ball-bearing for bicycles	473,816	Apr. 26	2574	721	59	595
Binns, William H., assignor to Chicago Sewing Machine Company, Chicago, Ill. Chain adjustment for bicycles	473,817	Apr. 26	2374	721	59	595
Binns, William H., assignor to Chicago Sewing Machine Company, Chicago, Ill. Hub and shaft coupling for bicycles	473,818	Apr. 26	2875	721	59	596
Binswanger, Gustav, London, England. Electrical switch	485,028	Oct. 25	2379	611	61	518
Biores, James C., Newark, N. J. Safety cuff-button link	477,349	June 21	1782	436	59	1817
Bireh, James, North Ontario, Cal. Cultivator	487,978	Dec. 13	1206	301	61	1577
Birch, John T., Pittsburg, assignor of one-half to W. B. Henderson, Ingram, Pa. Electric-lamp	482,157	Sept. 6	387	91, 92	60	1411
Birch, Joseph R. S., San Diego, Cal. Cigar-lighter	483,891	Oct. 4	546	138	61	113
Birchard, Francis H., Milwaukee, Wis. Bicycle-support	480,061	Aug. 2	485	124	60	675
Bird, Henry J., Hoboken, N. J. Disintegrating vegetable substances	482,537	Sept. 13	1040		60	1552
Bird, Horace G. (See Burling and Bird.)						
Bird, John, Warren, Ill. Gate-latch	470,539	Mar. 8	1420	370	58	1379
Bird, John L. (See Bird, Robert L. and J. L.)						
Bird, Robert L. and J. L., Durango, Tex. Car-coupling	473,445	Apr. 26	2275	574	59	481
Birdsall, Edward T., New York, N. Y. Coin-controlled theatrical show	487,510	Dec. 6	455	118 119	61	1411
Birdsong, Mary L., Arcola, Miss. Sewing-machine operating attachment	471,462	Mar. 22	2818	718	58	1672
Birge, George K., Buffalo, N. Y. Method of and apparatus for making wall-paper	471,287	Mar. 22	2551	648	58	1621
Birge, George K., Buffalo, N. Y. Apparatus for printing wall-paper	479,346	July 19	1983	496 497 498	60	414
Birge, William H., Franklin, Pa. Apparatus for manufacturing oxides of metals	468,216	Feb. 2	463	114 115	58	616
Birkenbauer, William H., <i>et al.</i> (See Weis, William C. and F. N., assignors.)						
Birkery, Cornelius, assignor to Birkery Manufacturing Company, Hartford, Conn. Valve	476,511	June 7	435	102	59	1522
Birkery, Cornelius, assignor to Birkery Manufacturing Company, Hartford, Conn. Tank-valve	483,296	Sept. 27	2258	568	60	1815
Birkery Manufacturing Company. (See Birkery, Cornelius, assignor.)						
Birkholz, Joseph A., Racine, Wis. Lock for the wheels of children's carriages	484,873	Oct. 25	2117	545	61	467
Birkholz, Richard. (See Theurer and Birkholz.)						
Birkinshaw, William K. (See Heard and Birkinshaw.)						
Birkinshaw, William K. (See Mitchell and Birkinshaw.)						
Birmingham, William, Philadelphia, Pa. Eyeglass or spectacle case	475,995	May 31	3369	849	59	1345
Birney, Charles O., assignor of nine-sixteenths to J. Birney and F. M. Bressler, Kansas City, Mo. Sash-fastener	481,546	Aug. 30	2920	718	60	1198
Birney, John, <i>et al.</i> (See Birney, Charles O., assignor.)						
Birrell, James. (See Brintnell, George N., assignor.)						
Bischoff, Gustavus A., Chicago, Ill. Gas cooking-stove	471,208	Mar. 22	2436	620	58	1599
Bischoff, Gustavus A., Chicago, Ill. Signal-lantern	483,507	Sept. 27	2551	640	60	1872
Bishop, Charles E. (See Fox, Frank A., assignor.)						
Bishop, Daniel H. (See Reed, George M., assignor.)						
Bishop, George H., Northport, N. Y. Combined dust-pan and broom-holder	468,433	Feb. 9	819	206	58	693
Bishop, George W., <i>et al.</i> (See Thomas, George W., assignor.)						
Bishop, George W., deceased; S. E. Bishop, Springfield, Mass., administratrix. Case for ribbons	474,518	May 10	1021	262	59	845
Bishop, George W., deceased; S. E. Bishop, Springfield, Mass., administratrix. Method of and apparatus for making inked ribbon	488,786	Dec. 27	2535	629 630 631	61	1874
Bishop, Ira, and A. F. L. Bell, San Francisco, Cal. Cable-railway switch	473,652	Apr. 26	2629	662 663	59	548
Bishop, Ira, and A. F. L. Bell, San Francisco, Cal. Automatic trap for cable-conduits	478,910	July 12	1289	320	60	270
Bishop, Ira, and A. F. L. Bell, San Francisco, Cal. Lifting mechanism for cable-grips	478,911	July 12	1291	321	60	270
Bishop, Richard T., St. Louis, Mo. Sash-fastener	467,615	Jan. 26	2138	543	58	429
Bishop, Sarah E., administratrix. (See Bishop, George W.)						
Bishop, Thomas R., Chicago, Ill. Gas-lighting attachment	488,804	Dec. 27	2565	637	61	1881
Bishop, William, Brooklyn, N. Y. Valve for suction-pipes of pumps	468,926	Feb. 16	1592	403	58	855
Bissell Carpet Sweeper Company. (See Drew, Walter J., assignor.)						
Bissell Carpet Sweeper Company. (See Stinson, Charles K., assignor.)						
Bissell, Isaac F. (See Reeves, Thomas H., assignor.)						
Bissell, Isaac F., Trenton, N. J. Nut-lock	370,973	Mar. 15	2073	531	58	1518
Bissell, Thelus M., and J. B. Huber, South Bend, Ind. Reversible plow-point	479,696	July 26	2564	638	60	538
Bissell, Thomas A., Buffalo, N. Y. Railway-car	470,799	Mar. 15	1807	464 465	58	1466
Bissell, Thomas A., Buffalo, N. Y. Car-buffer	482,538	Sept. 13	1041	251 252	60	1552
Bissell, Thomas A., Buffalo, N. Y. Draw-gear for railway-cars	488,326	Dec. 20	1805	453	61	1714
Bissell, Torrence E., administrator. (See Hill, Andrew G.)						
Bithorn, Richard, assignor to H. M. and W. Eltbogen, Vienna, Austria-Hungary. Sliding ladder	475,287	May 17	2231	572	59	1097
Bitner, David P. (See Colvin, Robert J., assignor.)						
Bitner, Harry, <i>et al.</i> (See Fordham, Arthur, assignor.)						
Bitner, Reuben, Lebanon, Pa. Washing-machine	481,659	Aug. 30	3096	754	60	1231
Bittenbender, John K., Bloomsburg, Pa. Composing-stick	484,514	Oct. 18	1528	388	61	333
Bittinger, Frank D. (See Baker, Albert, assignor.)						
Bittman, George M. (See Stinson and Bittman.)						
Bittnar, Adam, Custer, Ill. Car-coupling	479,623	July 26	2443	609	60	516
Bixby, Arthur, Philadelphia, Pa. Operating mechanism for railway-switches	479,584	July 26	2384	594	60	505
Bixby, C. C. (See Griffin, John H., assignor.)						
Bixler, Henry D., and G. C. Ferguson, Odell, Nebr. Windmill attachment	483,206	Sept. 27	2091	530	60	1785
Bjorlin, Carl G., Stockholm, Sweden, assignor to himself and R. D. Harris, New York, N. Y. Centrifugal apparatus for cooling or heating liquids	476,441	June 7	335	76	59	1502

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bjorlin, Carl G., Stockholm, Sweden, assignor to himself and R. D. Harris, New York, N. Y. Butter-cutter	476,442	June 7	337	77	59	1503
Blachly, Henry W., <i>et al.</i> (See Brown, James W., assignor.)						
Black, Albert B., Concord, Mass. Snow-plow	482,720	Sept. 20	1320	322	60	1618
Black, Alexander, Toledo, Ohio. Passenger-car cooler and ventilator	483,710	Oct. 4	280	70	61	59
Black, Arthur J., Beeston, near Nottingham, England. Apparatus for producing elastic looped fabrics	466,898	Jan. 12	967	247	58	193
Black, Charles A. (See Bromwell, John R., assignor.)						
Black & Clawson Company. (See Black, Frank X., assignor.)						
Black & Clawson Company. (See Clawson, Linus P., assignor.)						
Black & Clawson Company. (See Clawson and Keller, assignors.)						
Black, David. (See Barnett and Black.)						
Black, David M., Newark, Ohio. Automatic cheese-protector	488,598	Dec. 27	2248	557	61	
Black, Eihn. (See Hill, Charles D., assignor.)						
Black, Ellen A., Beckwith, Cal. Hose-supporter	486,076	Nov. 15	1424	376	61	898
Black, Frank X., assignor to Black & Clawson Company, Hamilton, Ohio. Mold for closed cylinders	481,295	Aug. 23	2517	619	60	1104
Black, George S., assignor to E. C. Atkins & Company, Indianapolis, Ind. Holder for insertible saw-teeth	468,012	Feb. 2	162	39	58	555
Black, John, and F. C. A. Natus, South Chicago, Ill. Tea-kettle	473,819	Apr. 26	276	722	59	596
Black, John J., Cleveland, Ohio. Vehicle running-gear	474,113	May 3	359	86	59	706
Black, Robert H. (See Shaddick, John P., assignor.)						
Black, William D., Port Perry, Pa. Pencil-sharpener for school-slates	481,097	Aug. 16	2158	535	60	1024
Black, William L., Fort McKavett, Tex. Antifriction sucker-rod coupling	467,494	Jan. 26	1928	492	58	392
Black, William L., Fort McKavett, Tex. Antifriction-clasp	484,947	Oct. 25	2243	578	61	491
Blackall, Robert C. (See Cory, John L., assignor.)						
Blackall, Robert C., <i>et al.</i> (See Shepherd, John H., assignor.)						
Blackburn, Joseph S., and F. G. Bartholomew, Salem, Ohio. Nail-machine	467,362	Jan. 19	1721	440	58	343
Blackburn, William T. (See Carse, Blackburn, and Owens.)						
Blackerby, Thomas W., Mackville, Ky. Animal-trap	472,651	Apr. 12	989	{ 255 256 }	59	201
Blackman, Charles M., Brooklyn, assignor to S. H. Wetmore Company, New York, N. Y. Atomizer	487,873	Dec. 13	1053	263	61	1547
Blackman, Henry, New York, N. Y. Apparatus for recovering alkali	478,980	July 19	1402	348	60	303
Blackman, Henry, New York, N. Y. Apparatus for and process of recovering alkali	478,981	July 19	1405	{ 348 349 }	60	304
Blackman, Henry, New York, N. Y. Electrolytic process and apparatus	484,990	Oct. 25	2312	{ 596 597 }	61	505
Blackmer Bros. & Co. (See McDonough, James W., assignor.)						
Blackmer, Frank A., assignor of one-half to A. F. French, Fredonia, N. Y. Basket	466,917	Jan. 12	996	255	58	198
Blackmore, George C., Newark, N. J. Radiator-valve	487,901	Dec. 13	1091	273	61	1555
Blackmore, George C., assignor to Blackmore Heating Company, Newark, N. J. Pipe-hanger	475,006	May 17	1805	457	59	1011
Blackmore, George C., assignor to Blackmore Heating Company, Newark, N. J. Steam or hot-water heating boiler	484,083	Oct. 11	839	{ 212 213 }	61	186
Blackmore Heating Company. (See Blackmore, George C., assignor.)						
Blackmore, Henry S., Mount Vernon, N. Y. Purifying water-gas	470,974	Mar. 15	2075	531	58	1518
Blackmore, Henry S., Mount Vernon, N. Y. Reducing metals	478,907	July 12	1282	319	60	269
Blackmore, Henry S., Mount Vernon, N. Y. Furnace for reducing metals	478,908	July 12	1285	{ 319 320 }	60	269
Blackmore, Henry S., Mount Vernon, N. Y. Condenser	486,554	Nov. 2	2168	572	61	1059
Blackstock, George T., <i>et al.</i> (See Bunker, Harman, assignor.)						
Blackstone, George V., Jamestown, N. Y. Washing-machine	472,979	Apr. 19	1485	{ 379 380 }	59	309
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Rheostat	467,078	Jan. 12	1256	{ 317 318 }	58	217
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-motor truck	468,492	Feb. 9	922	235	58	712
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Motor for electric cars	470,656	Mar. 15	1583	412	59	1422
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Contact device for electric railways	470,657	Mar. 15	1584	413	58	1423
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Conduit for electric railways	471,375	Mar. 22	2683	{ 624 625 }	58	1648
Blackwell, Francis O., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Conduit for electric railways	482,719	Sept. 20	1319	322	60	1618
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-motor regulation	468,128	Feb. 2	333	82, 83	58	589
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-railway motor	470,817	Mar. 15	1841	472	58	1472
Blackwell, Francis O., New York, N. Y., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-wire support	470,844	Mar. 15	1886	483	58	1480
Blackwell, John W., assignor to F. M. Whiting & Co., North Attleborough, Mass. Spoon	468,592	Feb. 9	1075	275	58	742
Blackwell, Thomas M. (See Stretch and Blackwell.)						
Blades, Robert T. (See Farren, James, assignor.)						
Blades, William C., Brooklyn, N. Y. Base-ball apparatus	475,432	May 24	2463	628	59	1156
Bladholm, Axel L., Chicago, Ill. Steam-boiler	475,288	May 24	2233	575	59	1113
Blagen, Niles J., Portland, Oreg. Device for closing elevator-shafts	473,116	Sept. 27	2428	611	60	1847
Blaine, George E., New Carlisle, Ohio. Window	484,489	Oct. 18	1489	379	61	325
Blair Camera Company. (See Blair and Kelley, assignors.)						
Blair, George M. (See Taylor, Melvin A., assignor.)						
Blair, James, Worcester, Mass. Support for spinning-spindles	482,860	Sept. 20	1529	380	60	1661
Blair, James L. (See Tate, Frank R., assignor.)						
Blair, John, Brooklyn, N. Y. Fountain-pen	468,322	Feb. 9	649	161	58	659
Blair, John, Spokane, Wash. Making white pigments	477,735	June 28	2411	602	59	1959
Blair, John, assignor to R. Greenwood, W. Banlt, and J. T. Greenwood, Philadelphia, Pa. Stop-motion for warp-sizing and like machines	466,596	Jan. 5	457	117	58	88
Blair, John C., Louisville, Ky. Dental instrument	484,287	Oct. 11	1163	296	61	250
Blair, John C., Wilmington, Del. Ore-rake	487,511	Dec. 6	458	119	61	1411
Blair, Thomas H., and F. H. Kelley, assignors to Blair Camera Company, Boston, Mass. Camera-shutter	478,909	July 12	1288	320	60	270
Blair, Thomas S., Jr., Allegheny, Pa. Manufacturing steel	467,147	Jan. 19	1396	{ 356 357 }	58	282

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Blair, Thomas S., Jr., Allegheny, assignor to Steel and Iron Improvement Company, Pittsburg, Pa. Reducing oxides of iron.....	466,452	Jan. 5	229	58, 59	58	44
Blake, Charles E., Sr., San Francisco, Cal. Dental forceps.....	478,217	July 5	231	58	60	47
Blake, Edward A., Chicago, Ill. Printing-press.....	487,468	Dec. 6	394	102	61	1398
Blake, Isaac E., G. E. Smith, and E. M. Doig, Denver, Colo. Lamp.....	482,290	Sept. 6	602	{ 143 144 }	{ 60	1452
Blake, John W., and J. T. Sackett, assignors of one-third to F. St. Auhyn, Kansas City, Mo. Carbureted-hydrogen-gas generator and burner.....	475,381	May 21	2385	610	59	1142
Blake, Joseph E., <i>et al.</i> (See Stewart, Harry B., assignor.)						
Blake, Theodore A., <i>et al.</i> (See Cribb, Ira P., assignor.)						
Blake, Theodore A., New Haven, Conn. Pitman for stone-crushers.....	477,400	June 21	1866	459	59	1833
Blake, William H., Warren, Mass. Steam-actuated valve.....	480,167	Aug. 2	651	{ 165 166 167 }	{ 60	706
Blakeney, Benona A., Grand Haven, Mich. House-door letter-box.....	488,419	Dec. 20	1961	490	61	1744
Blakeney, Benona A., Grand Haven, Mich. House-door letter-box.....	488,420	Dec. 20	1962	490	61	1744
Blaker, Paul, Newtown, Pa. Harrow.....	486,925	Nov. 29	2830	{ 732 733 }	{ 61	1207
Blakeslee, Ezra. (See Sundwall and Blakeslee.)						
Blakeslee, Harvey D. (See Baker, Henry H., Jr., assignor.)						
Blakey, William J., assignor to himself and E. Darby, Auckland, New Zealand. Clothes-pin.....	470,975	Mar. 15	2077	532	58	1518
Black, William B., and J. A. Muir, Huntsville, Tex. Penholder.....	481,158	Aug. 23	2277	561	60	1059
Blanchard, Allen I. (See Lomax and Anderson, assignors.)						
Blanchard, Allen I., Chicago, Ill., assignor to National Cash Register Company, Dayton, Ohio. Cash-register.....	482,514	Sept. 13	993	{ 240 241 }	{ 60	1543
Blanchard, Edward R., <i>et al.</i> (See Moss, Julian, assignor.)						
Blanchard, Edwin C. (See True and Blanchard.)						
Blanchard, George R., <i>et al.</i> (See Gould, Samuel A., assignor.)						
Blanchard, George W., Waterville, Me. Electric wheel-locking device.....	472,329	Apr. 5	507	131	59	95
Blanchard, Horace, Boston, Mass. Street-railway switch and operating device.....	486,836	Nov. 22	2641	690	61	1154
Blanchard, Lewis D. (See Nunamaker and Blanchard.)						
Blanchard, Myra. (See Minnick, Albert, assignor.)						
Blanchard, Virgil W., New York, N. Y. Milk-creamer.....	475,658	May 24	2817	{ 713 714 }	{ 59	1225
Blandy Machine Company. (See Dietz, Frederick C., assignor.)						
Blaney, William H., assignor to himself and E. B. Bullock, Attleborough, Mass. Lock.....	481,889	Aug. 30	3483	853	60	1306
Blanke, Ferdinand J., Cold Spring, Wis. Whiffletree attachment.....	467,223	Jan. 19	1506	385	58	303
Blanke, Ferdinand J., Cold Spring, Wis. Plow-beam attachment.....	476,779	June 14	837	207	59	1617
Blankenbaker, Silas J., Louisville, Ky. Slat-fence-wire twister.....	486,025	Nov. 8	1339	355	61	864
Blankenburg, Henry, Lohrville, Iowa. Wire-fence gate.....	482,334	Sept. 13	697	166	60	1486
Blaukenship, Bennett, Belleville, Kans. Listing-plow.....	479,779	Aug. 2	10	3	60	584
Blaukensop, Peter, Jr., assignor of one-half to L. Walter, Wellsburg, W. Va. Mold for glassware.....	486,392	Nov. 15	1933	512	61	1000
Blanthier, Joseph E., Chicago, Ill. Manufacture of contour relief-maps.....	473,901	May 3	7	2	59	638
Blass, Talmadge, Brewster, N. Y. Dust-guard for attrition-mills.....	479,547	July 26	2336	583	60	497
Bláthy, Otto T., Buda-Pesth, Austria-Hungary. Electric fuse.....	480,802	Aug. 16	1686	420	60	932
Bláthy, Otto T., Buda-Pesth, Austria-Hungary. Alternating-current motor.....	482,974	Sept. 20	1721	434	60	1697
Blattner, Joseph, Allegheny, Pa. Air and steam coupling.....	474,207	May 3	497	119	59	734
Blanss, Ferdinand, New York, N. Y. Blind-stop.....	483,096	Sept. 20	1910	483	60	1737
Blauvelt, Howard E., and J. A. Polhemus, Nyack, N. Y. Type-writing machine.....	477,882	June 28	2658	{ 664 665 }	{ 59	2004
Blay, Charles W., Janesville, Wis. Mason's hawk.....	483,132	Sept. 27	1963	498	60	1750
Blechschiidt, Gustav and P., Quincy, Ill. Vehicle-hub.....	473,607	Apr. 26	2560	645	59	535
Blechschiidt, Paul. (See Blechschiidt, Gustav and P.)						
Blein, Tony, and E. Beraud, Lyons, France. Piston meter.....	483,278	Sept. 27	2231	560	60	1810
Blenkhorn, Sidney, Canning, Canada. Bolt-header.....	468,383	Feb. 9	748	186	58	678
Blenkinsop, William E. B. (See Hartley and Blenkinsop.)						
Blesch, August F. (See Wilkins and Blesch.)						
Blessing, James H., Albany, assignor to New York Filter Company, New York, N. Y. Apparatus for purifying water.....	482,515	Sept. 13	998	{ 241 242 }	{ 60	1544
Blessing, John L., Chicago, Ill. Draw-bar for cars.....	479,048	July 19	1511	377	60	324
Blessing, Luther N., Baltimore, Md. Filter.....	471,840	Mar. 29	3392	865	58	1788
Blessing, Oskar, Dresden, Germany. Motor-car.....	486,660	Nov. 22	2351	{ 615 616 }	{ 61	1094
Bletzer, Henry. (See Wentzel and Bletzer.)						
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine.....	472,692	Apr. 12	1045	{ 270 271 272 }	{ 59	210
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine.....	472,693	Apr. 12	1054	273	59	212
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine.....	472,694	Apr. 12	1059	273	59	213
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Attachment for type-writing machines.....	472,695	Apr. 12	1060	274	59	213
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing machine.....	472,696	Apr. 12	1062	274	59	213
Blickensderfer, George C., Stamford, Conn., assignor to Blickensderfer Manufacturing Company, New York, N. Y. Type-writing-machine attachment.....	472,850	Apr. 12	1273	326	59	254
Blickensderfer Manufacturing Company. (See Blickensderfer, George C., assignor.)						
Blickenstorfer, Diethelm. (See Pearson and Sperle, assignors.)						
Blinn, Charles P., Brooklyn, N. Y. Game apparatus.....	469,928	Mar. 1	416	104	58	1181
Blinsdorf, Anton S. von, and C. Adler, Baden, Austria-Hungary. Railway-signal.....	476,666	June 14	983	238	59	1646
Bliss, Alvin E. (See Tregoning, Edgar, assignor.)						
Bliss, Eliphalet W., New Utrecht, assignor to United States Projectile Company, Bay Ridge, N. Y. Gear-wheel.....	472,664	Apr. 12	1005	260	59	204
Bliss, George H. (See Root, Francis H., assignor.)						
Bliss, Irving W., Providence, R. I. Apparatus for heating railway-cars.....	470,830	Mar. 15	1864	478	58	1476
Bliss, James F., Boston, Mass. Downward-draft furnace.....	479,697	July 26	2565	638	60	539
Bliss, Mary M., Pawtucket, R. I. Corset.....	472,613	Apr. 12	938	242	59	192
Bliven, Alonzo P., Brooklyn, N. Y. Construction of ships.....	484,888	Oct. 25	2145	550	61	472
Blizzard, Jennie, Fort Recovery, Ohio. Dress-chart.....	479,548	July 26	2337	583	60	497
Bloch, Solomon. (See Wells, George H., Jr., assignor.)						
Block, Emil. (See Dübm, Block, and Sauter.)						
Block, Israel, and J. Goldstein, New York, N. Y. Oil-stove.....	467,850	Jan. 26	2510	635	58	500

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Block, Louis, New York, N. Y. Refrigerating-machine	487,706	Dec. 13	762	195	61	1489
Blodgett, Edward G., <i>et al.</i> (See Keene, Samuel D., assignor.)						
Blodgett, John W., assignor to himself and Abbott Machine Company, Chicago, Ill. Tack- ing attachment for sewing-machines	477,636	June 28	2263	566	59	1928
Blodgett, William E. Faribault, Minn. Electrical keyboard	477,635	June 28	2261	566	59	1927
Blöbaum, William H. F., Cincinnati, Ohio. Printer's miter-tool	473,689	Apr. 26	2681	675	59	558
Bloeser, Rudolph, Scranton, Pa. Bottle-closure	480,168	Aug. 2	655	167	60	707
Blomgren, Theodor. (See Dahlman and Blomgren.)						
Blood, Benjamin P., Amsterdam, N. Y. Saddle	469,957	Mar. 1	470	117	58	1190
Blood, Clarence C. (See Blood, Maurice E. and C. C.)						
Blood, Eben D. (See Keyes, Atwood B., assignor.)						
Blood, Edward, <i>et al.</i> (See Jackson, William H., assignor.)						
Blood, Erastus R. (See Wenstrau and Blood.)						
Blood, Erastus R., assignor to M. P. Blood, Kane, Pa. Lampblack-machine	480,990	Aug. 16	1979	495	60	990
Blood, John, <i>et al.</i> (See Jackson, William H., assignor.)						
Blood, Martha P. (See Blood, Erastus R., assignor.)						
Blood, Martha P. (See Wenstrau and Blood, assignors.)						
Blood, Maurice E., assignor to Kalamazoo Cycle Company, Kalamazoo, Mich. Seat attach- ment for bicycles	480,760	Aug. 16	1616	406	60	919
Blood, Maurice E., assignor to Kalamazoo Cycle Company, Kalamazoo, Mich. Carrier at- tachment for bicycles	481,890	Aug. 30	3483	853	60	1306
Blood, Maurice E., assignor to Kalamazoo Cycle Company, Kalamazoo, Mich. Child's seat or parcel-carrier for bicycles	482,938	Sept. 20	1655	417	60	1685
Blood, Maurice E., Kalamazoo, and C. C. Blood, assignors of one-half to O. T. Blood, Pe- toskey, and Fuller Brothers Manufacturing Company, Kalamazoo, Mich. Cut-off saw- ing-machine	479,049	July 19	1512	377	60	394
Blood, Orville T., <i>et al.</i> (See Blood, Maurice E. and C. C., assignors.)						
Bloom, Nicklos H., assignor of one-half to J. F. Loos, Nashua, Iowa. Vehicle-spring	487,414	Dec. 6	307	79	61	1382
Bloomer, John. (See Stehling and Bloomer.)						
Bloomer, Stephen H., East Portland, Oreg. Rotary engine	475,176	May 17	2061	518 519	59	1062
Bloomhardt, John D. (See Gantt and Bloomhardt.)						
Bloomington Manufacturing Company. (See Bennett, Noble E., assignor.)						
Bloomsburg, Harry. (See Bloomsburg, Peter and H.)						
Bloomsburg, Peter and H., Wilmington, Del. Water-circulator	472,915	Apr. 12	1372	351 352	59	275
Blount, Ambrose A., Springfield, and F. K. Way, Dayton, Ohio, assignors, by mesne assign- ments, to Boston Filter Company, Boston, Mass. Machine for making hollow articles	479,347	July 19	1986	497	60	414
Blount, Daniel D. (See Wever and Blount.)						
Blount, William C., Ebenezer, assignor of one-third to J. P. Coffin, Florence, S. C. Scythe attachment	472,652	Apr. 12	990	256	59	201
Blueher, Ernst J., assignor of one-half to C. E. Nixdorf, St. Louis, Mo. Grater	471,937	Mar. 29	3524	900	58	1814
Bluhm, Charles A., Michigan City, Ind. Ventilated water-closet	470,740	Mar. 15	1711	441	58	1448
Bluhm, Charles A., Michigan City, Ind. Refrigerator	478,080	July 5	8	2, 3	60	4
Blume, Charles A., Attica, assignor to F. E. Minor, Colfax, Ind., and O. C. Minor, Gard- ner, Ill. Hay-ricker	486,751	Nov. 22	2497	652 653	61	1125
Blumer, Jacob, Brooklyn, and C. Schlagenhauser, New York, N. Y. Manufacture of yeast	474,942	May 17	1693	.....	59	991
Blumer, Jacob, Brooklyn, and C. Schlagenhauser, New York, N. Y. Making yeast	474,943	May 17	1695	.....	59	991
Blundell & Co., Henry. (See Hinkley, Adelbert H., assignor.)						
Blundstone, Benjamin. (See Moseley and Blundstone.)						
Bly, James F., assignor to C. R. Cipperly, Mayville, N. Y. Butter-package	482,613	Sept. 13	1155	279	60	1573
Blydenburgh, Charles M., Riverhead, N. Y. Running-gear for vehicles	482,839	Sept. 20	1499	372	60	1655
Boardman, Alphonso F., Brooklyn, N. Y. Fishing-reel	467,714	Jan. 26	2298	584	58	459
Boardman, Alphonso F., Brooklyn, N. Y. Fishing-reel	475,030	May 17	1838	466	59	1018
Boardman, Anson P., Watertown, Wis. Abrading-cylinder for polishing-machines	469,226	Feb. 23	2064	531	58	954
Boardman, Frederick R., Manor Park, England. Electric-arc lamp	469,362	Feb. 23	2270	582 583	58	995
Boardman, William, Chicago, Ill. Artificial arm	469,115	Feb. 16	1886	482	58	913
Boatman, Frank P., Indianapolis, Ind., assignor to Morris Box Lid Company, Pittsburg, Pa. Car-axle-box lid	483,801	Oct. 4	419	104	61	87
Boatner, Jacob, Township 1, Range 2, East, Amite county, Miss. Tool	483,148	Oct. 25	2551	655	61	553
Boatner, Willie. (See Anderson and Boatner.)						
Boatwright, Valentine, Adel, Iowa. Apparatus for elevating and conveying water	481,099	Aug. 16	2160	536	60	1024
Boaz, George R., Tampa, Fla. Phosphate-separator and screen-washer	480,549	Aug. 9	1280	321 322	60	838
Bobrick, Gabriel A., New York, N. Y. Nursing-bottle	468,759	Feb. 9	1325	335	58	793
Böcher, Adam, New York, N. Y. Darning implement	475,659	May 24	2818	714	59	1225
Bodani, Joseph. (See Lehr and Bodani.)						
Bodding, Andor, Drammen, Norway. Apparatus for drawing maps and plots of ground	484,905	Oct. 25	2171	558 559	61	478
Boden, August J., Litchfield, Ill. Fire-escape ladder	478,559	July 12	770	188 189	60	168
Bodenbrown, William, Jr., Boston, Mass. Type-writing machine	470,346	Mar. 8	1121	287	58	1323
Bodenstein, John G., Staatsburg, N. Y. Ice-cultivator	470,099	Mar. 1	684	168	58	1232
Bodette, George H., assignor to F. H. Lincoln, Toledo, Ohio. Vertically-extensible plat- form for wagons	478,841	July 12	1200	298	60	253
Bodfish, William H., Everett, assignor of one-half to R. Carleton, Boston, Mass. Metallic packing	480,943	Aug. 16	1892	474	60	974
Bodley, Homer S., Baton Rouge, La. Car starter and brake	488,865	Dec. 27	2661	659	61	1900
Boeck, Charles H., Jackson, Mich., assignor to Central Oilgas Stove Company, of Maine. Oil-stove	475,262	May 17	2191	558	59	1088
Boeckh, Charles, Jr., Toronto, Canada. Bridle for paint-brushes	472,425	Apr. 5	652	166	59	122
Boeckh, Charles, Port Royal, S. C. Device for regulating the flow of streams	473,205	Apr. 19	1873	472	59	379
Boeckmann, Eduard, St. Paul, Minn. Sterilizer for surgical instruments, &c.	484,927	Oct. 25	2216	571	61	486
Boegner, Franz F., New York, N. Y. Alarm	478,982	July 19	1410	349	60	304
Boehme, Carl L., Dresden, Germany. Transom-lifter	483,597	Oct. 4	120	29, 30	61	25
Boehncke, Max A. T., Centinela, Cal. Continuous kiln	474,807	May 17	1480	378 379	59	948
Boehncke, Max A. T., Centinela, Cal., and D. D. McLean, Underwood, Canada. Brick-kiln	475,433	May 24	2464	628	59	1156
Boehringer, Joseph A., and F. X. Müller, Buffalo, N. Y. Printer's press-guide	478,679	July 12	937	233	60	201
Boehringer & Soehne, C. F. (See Ach, Fritz, assignor.)						
Boeing, Ernst, Bad Nauheim, Germany. Filter	468,984	Feb. 16	1706	435	58	877
Boeklen, Reinhold. (See Elkins and Boeklen.)						
Boeklen, Reinhold, Omaha, Nebr., assignor of one-half to I. S. Elkins, New York, N. Y. Water-gas generator	484,730	Oct. 18	1863	474	61	401

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Boemermann, George, Brooklyn, N. Y. Actuating device for cash-registers	477,883	June 28	2660	665	59	2004
Boemermann, George, Brooklyn, N. Y. Cash register, indicator, and check-printer	486,577	Nov. 22	2214	580 581 582	61	1066
Boenker, Henry H., St. Charles, Mo. Oscillating grain-meter	483,417	Sept. 27	2430	611	60	1848
Boenning, William M., Port Washington, Wis. Rocker	472,330	Apr. 5	510	132	59	96
Boeselager, Otto J. B., Mount Angel, Oreg. Warehouse gang-plank	476,601	June 7	567	135	59	1549
Boettcher, Adolph, South Stillwater, Minn. Window-chair	480,991	Aug. 16	1980	496	60	990
Boettiger, John P., Cold Spring, N. Y. Plate for filter-presses	471,741	Mar. 29	3236	824	58	1757
Boettiger, John P., Cold Spring, N. Y. Vacuum-pump	472,802	Apr. 12	1210	310	59	242
Boettler, Robert, Cleveland, Ohio. Spring draft attachment	482,504	Sept. 13	982	238	60	1541
Bofinger, W. H., <i>et al.</i> (See Wilson, Robert R., assignor.)						
Bofinger, William H. (See Cook, Gustave, assignor.)						
Bofinger, William H. (See Durieux, Charles, assignor.)						
Bofinger, William H. (See Tannenber, August O., assignor.)						
Bogardus, Evva W. (See Little and Bogardus.)						
Bogen, Albert A., and R. Nix, New Ulm, Minn. Side-stick and quoin	466,650	Jan. 5	536	139	58	104
Bogress, J. S., agent. (See Grant and Murray, assignors.)						
Boggs, Joseph O., Fayetteville, Pa., assignor of one-half to G. W. Bothwell, Jersey City, N. J. Coin-handling facilitator	475,660	May 24	2819	714	59	1225
Boggs, Nathan G. (See Brown and Boggs.)						
Boggs, Robert R., assignor of one-half to A. M. Bair, Spring Run, Pa. Combined ironing-table and clothes-rack	470,467	Mar. 8	1321	343	58	1359
Boggs, William L., <i>et al.</i> (See Grantland, John W., assignor.)						
Bogle, Walter S. (See Tefft, Henry B., assignor.)						
Bogue, Charles J., New York, N. Y. Dynamo-regulator	488,261	Dec. 20	1697	424	61	1693
Bogumil, George. (See Bogumil, Herman and G.)						
Bogumil, Herman and G., New York, N. Y. Music-leaf turner	467,632	Jan. 26	2157	548 549	58	434
Bohannan, Jenetta V., Baltimore, Md. Meat-slicer	481,159	Aug. 23	2277	561	60	1059
Bohan, Herman H., assignor of one-half to B. Korman, Leavenworth, Kans. Metallic shingle	471,938	Mar. 29	3525	900	58	1814
Bohls Cigarette Machine Company. (See Bohls, Henry, assignor.)						
Bohls, Henry, San Francisco, Cal., assignor to Bohls Cigarette Machine Company, Lynchburg, Va. Cigarette-machine	472,101	Apr. 5	140	38, 39	59	27
Böhm Brothers. (See Sternoff-Beyer, Otto, assignor.)						
Bohn, René, Mannheim, assignor to Badische Anilin and Soda Fabrik, Ludwigshafen, Germany. Blue dye	484,697	Oct. 18	1814	.....	61	392
Bohner, George, Chicago, Ill. Hanging lamp	467,462	Jan. 19	1867	476	58	372
Bohner, Joseph E., assignor to Wallace & Sons, Ansonia, Conn. Lamp-shade support	481,154	Aug. 16	2262	558	60	1042
Bohner, Joseph E., assignor to Wallace & Sons, Ansonia, Conn. Extension-chandelier	482,712	Sept. 13	1303	318	60	1603
Boice, John W., Allegheny, assignor of one-third to A. H. Jarecki, Erie, and E. A. Weart, Pittsburg, Pa. Protector for car-platforms	468,760	Feb. 9	1326	335	58	793
Boice, Joseph C. W., assignor of one-third to W. W. Bailey, Bates City, Mo. Sediment-gatherer for coffee-pots, &c.	481,547	Aug. 30	2921	718	60	1198
Boies, Charles P. (See Walker and Peifer, assignors.)						
Boileau, Etienne, St. Louis, Mo., assignor to Improved Zigzag Grate Bar Company, of Missouri. Furnace grate-bar	485,527	Nov. 1	567	152	61	689
Boiron, Louis, Lyons, France. Brake for vehicles	469,958	Mar. 1	471	117	58	1190
Boisvert, Napoleon. (See Hamilton and Boisvert.)						
Boiteau, Octave, Eagleton, Wis. Hook	466,766	Jan. 12	738	191	58	150
Bökelund, Jacob E. A., Majorna, Sweden. Varnish for use in oil-painting	466,393	Jan. 5	128	.....	58	27
Bokop, Henry D. (See Sites, Frank B., assignor.)						
Boldeck, Friedrich W. L., Jersey City, N. J. Spinning-top	468,233	Feb. 2	491	120	58	620
Bolding, Arch, assignor of one-half to G. F. French, Sumner, Ill. Animal-poke	483,508	Sept. 27	2552	640	60	1872
Boldt, Charles, Annapolis, Md. Refrigerator	474,357	May 10	769	200	59	796
Bolenbaugh, Cyrus, and E. B. Wagner, Warsaw, Ind. Bolting-reel	488,866	Dec. 27	2662	659	61	1901
Boles, Jacob E., assignor of one-half to A. Wilson, Alta, Iowa. Band-cutter and feeder	487,363	Dec. 6	208	57	61	1361
Bolinger, Andrew, Speedwell, Tenn. Gage for determining the age of horses	478,560	July 12	773	189	60	168
Bolinger, William. (See Summers and Bolinger.)						
Bolito, John H., Boone, Iowa. Car-coupling	471,376	Mar. 22	2685	685	58	1648
Boll, Otto, Lehigh, Iowa. Corn-planter	484,991	Oct. 25	2317	597	61	505
Bollentin, Adam, New York, N. Y. Woven tufted fabric	467,633	Jan. 26	2160	549	58	434
Bollentin, Adam, New York, N. Y. Tufted woven fabric	468,051	Feb. 2	217	53	58	567
Bollentin, Adam, assignor of two-thirds to R. Stuntz, New York, N. Y., and A. Cudell, Chicago, Ill. Loom for weaving tufted fabrics	468,479	Feb. 9	892	226 227 228	58	707
Bollermann, Arthur. (See Bollermann, Dominik L., assignor.)						
Bollermann, Dominik L., assignor to A. Bollermann, New York, N. Y. Stringing pianofortes	478,912	July 12	1293	322	60	271
Bolles, William P. (See Henry, Bolles, and McKee.)						
Bolling, Allen G., Denison, Tex. Fish and game trap	475,845	May 31	3134	795	59	1298
Bollinger, Cornelius, Harrisburg, Pa. Cable railway and grip therefor	470,280	Mar. 8	984	243	58	1299
Bollmann, George. (See Reuter and Bollmann.)						
Bolt, Renhen J. (See Frost and Bolt.)						
Bolte, Frank H., assignor to Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Bicycle-frame	476,974	June 14	1163	281	59	1681
Bolte, Frank H., assignor to Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Bicycle-frame	478,391	July 5	510	124	60	101
Bolte, Frank H., assignor to Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Crank-securing means	483,342	Sept. 27	2323	584	60	1827
Bolte, Frank H., assignor of one-half to P. H. Sercombe, Milwaukee, Wis. Velocipede-wheel tire	479,201	July 19	1752	439	60	368
Bolte, Frank H., assignor of one-half to P. H. Sercombe, Milwaukee, Wis. Pneumatic tire	479,202	July 19	1754	440	60	368
Bolte, Frank H., assignor of one-half to P. H. Sercombe, Milwaukee, Wis. Pneumatic tire	479,203	July 19	1757	440	60	368
Bolthoff, William H., assignor to Milner Manufacturing Company, Denver, Colo. Permutation-padlock	488,516	Dec. 20	2109	523	61	1776
Bolton, George and J. R., Detroit, Mich. Boiler	473,055	Apr. 19	1609	410 411	59	332
Bolton, Horace W. (See Jordan, Franklin E., assignor.)						
Bolton, James. (See Rontke, Albert, assignor.)						
Bolton, James, Chicago, Ill. Sewing-machine	470,281	Mar. 8	987	243 244	58	1300
Bolton, James, Chicago, Ill. Feeding mechanism for sewing-machines	470,282	Mar. 8	989	244	58	1300

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Bolton, James, Chicago, Ill. Shuttle for sewing-machines.....	470,283	Mar. 8	990	245	58	1301
Bolton, James, Chicago, Ill. Shuttle for sewing-machines.....	484,395	Oct. 18	1338	340	61	296
Bolton, James, Chicago, Ill. Feeding mechanism for sewing-machines.....	484,396	Oct. 18	1338	341	61	296
Bolton, James, Chicago, Ill. Shuttle-operating mechanism for sewing-machines.....	484,397	Oct. 18	1340	341	61	296
Bolton, James, Chicago, Ill. Take-up for sewing-machines.....	484,398	Oct. 18	1341	341	61	296
Bolton, James, Chicago, Ill. Dress-guard and driving-wheel support.....	484,399	Oct. 18	1342	342	61	297
Bolton, James, Chicago, Ill. Shuttle-operating mechanism for sewing-machines.....	484,400	Oct. 18	1343	342	61	297
Bolton, James, Chicago, Ill. Sewing-machine stand.....	484,401	Oct. 18	1344	342 } 343 }	61	297
Bolton, James, Chicago, Ill. Feeding mechanism for sewing-machines.....	484,402	Oct. 18	1345	343	61	298
Bolton, James R. (See Bolton, George and J. R.)						
Bolton, William E. (See Padgett and Bolton.)						
Boltz, Jacob W., Galesburg, Ill. Brick and tile cutter.....	473,446	Apr. 26	2277	574 } 575 }	59	481
Bolus, William G., assignor to Gravity Twine Box Company, Cleveland, Ohio. Gravity twine-box.....	474,076	May 3	306	74	59	697
Boluss, Alfred R., <i>et al.</i> (See Hill, Thomas E., assignor.)						
Bolze, Heinrich A., Hanover, assignor to C. Gronert, Berlin, Germany. Double-acting injector.....	469,674	Mar. 1	6	2	58	1100
Boman, Claes W., assignor to Eagle Pencil Company, New York, N. Y. Pencil.....	481,100	Aug. 16	2162	536	60	1024
Boman, Claes W., assignor to Eagle Pencil Company, New York, N. Y. Lead or crayon holder.....	481,133	Oct. 11	905	232	61	200
Bomar, Thomas B., Wolfe City, Tex. Sash-fastener.....	478,272	July 5	338	81	60	68
Bonar, William A., Metropolis City, Ill. Sash-holder.....	477,291	June 21	1693	415	59	1799
Bommer, Lorenz, Brooklyn, N. Y. Spring-hinge.....	485,366	Nov. 1	338	59	61	641
Bonbrake, Lewis S., Waynesburg, assignor to Fostoria Steel Roofing Company, Fostoria, Ohio. Eaves-trough.....	485,573	Nov. 1	646	172	61	706
Bond, Edward S., Birmingham, England. Wire-netting machine.....	478,561	July 12	773	199	60	168
Bond, Edward S., Birmingham, England. Detector stop-motion for wire-netting machines.....	484,992	Oct. 25	2318	597 } 598 }	61	506
Bond, Elijah J., <i>et al.</i> (See Plunkett, Michael H., assignor.)						
Bond, Frederick W., Springfield, Mo. Railway-joint.....	478,983	July 19	1410	349	60	305
Bond, John, Waterloo, N. Y. Mechanism for controlling the friction-clutch in the head-stock of spinning-mules.....	467,532	Jan. 26	2002	507	58	405
Bond, John R., <i>et al.</i> (See Morgan, Joseph U., assignor.)						
Bond, Nathan O., Fairfax Court-House, Va., assignor to W. F. Phinney, Standish, Me. Wash-stand.....	479,148	July 19	1669	417	60	352
Bond, Nathan O., Fairfax Court-House, Va., assignor of three-fourths to G. B. Mathews, Washington, D. C. Water-receptacle for wash-stands.....	483,526	Oct. 4	14	3	61	6
Bond, Nathan O., Fairfax Court-House, Va., assignor of one-half to S. J. Meeks, Washington, D. C. Wash-stand.....	484,649	Oct. 18	1744	443	61	376
Bonham, Walter R., St. Paul, Minn. Propeller.....	482,225	Sept. 6	496	118	60	1432
Bonin, Joseph E. (See Lussier, John, assignor.)						
Bonis, Harry, Blanchard, Ontario, Canada. Electro-therapeutic electrode.....	471,850	Mar. 29	3404	868	58	1790
Bonnafon, Albert L. (See Lindsay, James G., assignor.)						
Bonnafon, Albert L., Philadelphia, Pa. Fence.....	486,752	Nov. 22	2501	653	61	1125
Bonnafon, Albert L., assignor of one-half to J. G. Lindsay, Philadelphia, Pa. Fence.....	479,050	July 19	1515	377	60	324
Bonnar, William, Mono Mills, Canada. Running-gear.....	477,401	June 21	1867	459 } 460 }	59	1833
Bonnef, Adrien. (See Virgile, Edouard de, assignor.)						
Bonsiel, Charles A., <i>et al.</i> (See Esty, William, assignor.) (Reissue.)						
Bonta, James W., Wayne, Pa. Link-welding machine.....	483,418	Sept. 27	2432	611 } 612 }	60	1848
Bonta, James W., Wayne, assignor to J. H. Shakespeare, trustee, Philadelphia, Pa. Leer or annealing-furnace for sheet or plate glass.....	480,230	Aug. 2	762	192	60	726
Bonta, James W., Wayne, assignor to J. H. Shakespeare, trustee, Philadelphia, Pa. Machine for grinding glass.....	483,527	Oct. 4	15	3, 4	61	6
Bonwell, William H., Jr. (See Smolley and Bonwell.)						
Bonwill, William G. A., Philadelphia, Pa. Ear-trumpet.....	473,608	Apr. 26	2561	645	59	535
Bonwill, William G. A., Philadelphia, Pa. Ear-trumpet.....	473,865	Apr. 26	2954	745	59	611
Booher, Everett L., Tippecanoe City, Ohio. Bending machinery.....	474,358	May 10	770	200 } 201 }	59	796
Booi, Charles E., Danforth, Ill. Cultivator.....	471,841	Mar. 29	3394	866	58	1788
Booker, Isaac N. (See Whallon, Clement V., assignor.)						
Bookwalter, Francis M. (See Bookwalter, John W. and F. M.)						
Bookwalter, Francis M., Springfield, Ohio. Water-wheel.....	469,959	Mar. 1	472	118	58	1190
Bookwalter, John W. and F. M., Springfield, Ohio. Water-wheel.....	488,056	Dec. 13	1363	338 } 339 }	61	1610
Bookwalter, Francis M., and W. W. Tyler, Springfield, Ohio; said Tyler assignor to said Bookwalter. Water-wheel.....	483,133	Sept. 27	1964	498 } 499 }	60	1759
Boonhour, Eli E., Morrisville, Vt. Truss.....	486,753	Nov. 22	2502	653	61	1126
Boone, James H., <i>et al.</i> (See Campbell, George W., assignor.)						
Boone, Manly B., Galveston, Tex. Two-wheeled delivery vehicle.....	467,912	Feb. 2	10	3, 4	58	529
Boone, Sarah, New Haven, Conn. Ironing-board.....	473,653	Apr. 26	2631	663	59	549
Booss, Catharina, New York, N. Y. Muff.....	470,100	Mar. 1	685	168	58	1232
Booss, Catharina, New York, N. Y. Guiding attachment for fur-sewing machines.....	476,725	June 7	747	184	59	1586
Booth, Albert A., Odell, N. D. Band-cutter and feeder.....	469,907	Mar. 1	385	96, 97	58	1175
Booth, Alonzo, Augusta, Mont. Bundle-carrier and band-cutter.....	467,707	Dec. 13	764	196	61	1489
Booth, Alvin. (See Beach and Booth.)						
Booth, Caleb H., Dubuque, Iowa. Hydraulic dredge.....	479,486	July 26	2250	564 } 565 }	60	480
Booth, Caleb H., Dubuque, Iowa. Steam-pump.....	482,840	Sept. 20	1500	373	60	1655
Booth, Charles P., Camden, N. J., assignor to Magic Introduction Company, of New Jersey, Tape-winding mechanism for lighting devices or other articles.....	475,996	May 31	3370	850	59	1345
Booth, Chris S., Camp Point, Ill. Type-writing machine.....	469,675	Mar. 1	6	3, 4	58	1100
Booth, Ebenezer H., Kirkwood, N. Y. Vehicle-spring.....	468,234	Feb. 2	491	120	58	621
Booth, Ebenezer H., Kirkwood, N. Y. Vehicle-spring.....	471,414	Mar. 22	2748	701	58	1659
Booth, Edgar H., San Francisco, Cal. Stone or ore crushing machine.....	473,725	Apr. 26	2737	689	59	568
Booth, Edgar H., San Francisco, Cal., assignor to Risdon Iron and Locomotive Works, of California. Stone and ore crushing machine.....	480,761	Aug. 16	1618	406 } 407 }	60	920
Booth, George P. (See Van Valkenburg, Randall T., assignor.)						
Booth, Isaac J. (See Hendrick, Augustus D., assignor.)						
Booth, Isaac J., Birmingham, Conn. Box for bits.....	479,180	July 19	1721	432	60	362
Booth, Jacob. (See Hilton, William, assignor.)						
Booth, John, Central Falls, R. I. Spinning-ring.....	483,297	Sept. 27	2260	569	60	1815

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Booth, Richard A., assignor to Ives, Blakeslee & Williams Company, Bridgeport, Conn. Toy extension-ladder.	482,402	Sept. 13	812	195	60	1508
Booth, Thomas C., New York, N. Y. Bottle-stopper.	486,321	Nov. 15	1821	481	61	978
Booth, Thomas C., and E. G. Rutty, New York, N. Y. Glove-fastener.	487,822	Dec. 13	959	242	61	1529
Bootman, William H., Waterford, assignor to J. Knickerbacker, Troy, N. Y. Hydrant.	485,603	Nov. 8	690	182	61	730
Booz, Thomas J., assignor of one-half to J. N. Veweg, Baltimore, Md. Car-coupling.	481,891	Aug. 30	3485	854	60	1306
Borchardt, Albert, deceased, Brooklyn, N. Y.; L. Borchardt, executrix. Portable cylindrical drier for fabrics.	487,600	Dec. 6	585	149 150	61	1437
Borchardt, John, Jersey City, N. J. Fishing-reel.	481,743	Aug. 30	3245	790	60	1260
Borchardt, Louise, executrix. (See Borchardt, Albert.)						
Borchardt, Oswald, Königs-Wusterhausen, assignor to F. Pretzel & Co., Berlin, Germany. Boiler-tube scraper.	469,676	Mar. 1	11	4	58	1101
Borchers, Richard C., Philadelphia, Pa. Friction device.	483,892	Oct. 4	548	138	61	114
Borchers, William H., Pheasant Branch, Wis. Car-coupling.	490,976	Mar. 15	2078	531	58	1518
Borchers, William H., Pheasant Branch, Wis. Car-coupling.	486,949	Nov. 29	2870	742	61	1215
Borden, William J., Hico, and J. W. Johnson, Houston, Tex. Type-writing machine.	477,165	June 14	1461	359	59	1743
Bordner, Jerome M., Palmyra, Pa. Metallic cross-tie.	486,077	Nov. 15	1425	376	61	898
Borgarelli, Paolo, Turin, Italy. Drier for cereals.	469,849	Mar. 1	294	77	58	1158
Borgel, Francois, Geneva, Switzerland. Watchcase.	478,734	July 12	1027	252	60	219
Borgfeldt, Nicholas H., Brooklyn, N. Y. Cigar-bunching machine.	472,331	Apr. 5	511	132	59	96
Borgmann, Otto, assignor to Actien-Gesellschaft für Anilin Fabrikation, Berlin, Germany. Red dye.	468,539	Feb. 9	997		58	727
Borgner, Cyrus, Philadelphia, Pa. Brick.	474,285	May 3	616	152	59	756
Born, F. W., deceased; M. Born, Cleveland, Ohio, administratrix. Oven and closet door for ranges.	481,924	Sept. 6	6	2	60	1336
Born, Mary, administratrix. (See Born, F. W.)						
Bornemann, Herman F. A., and J. Daab, Columbus, Ohio. Spiral stairway.	485,449	Nov. 1	461	123	61	666
Bornemann, Frederick, New York, N. Y. Child's carriage.	482,779	Sept. 20	1419	351	60	1638
Bornemann, Frederick, New York, N. Y. Combined stool and coal-receptacle.	482,912	Sept. 20	1625	407	60	1678
Bornholdt, Adolph, assignor of one-half to J. Glatz, Brooklyn, N. Y. Duplex pump.	467,587	Jan. 26	2097	532	58	422
Bornstein, Henry, Boston, assignor of one-half to J. A. W. Seabery, Malden, Mass. Wrench.	479,698	July 26	2566	638	60	539
Bosch, Carl G., Davenport, Iowa. Malt-drying kiln.	481,687	Aug. 30	3139	765	60	1239
Borsch, John L., Philadelphia, Pa. Test-frame and trial-lens for eyes.	466,597	Jan. 5	459	117	58	88
Borsch, John L., Philadelphia, Pa. Artificial eye.	474,808	May 17	1483	379	59	949
Bortner, Uriah. (See Schnarr, Henry R., assignor.)						
Borton, Stockton. (See Willcox and Borton.)						
Bosart, Timothy L., assignor to Yaryan Fifth Wheel Company, Indianapolis, Ind. Fifth-wheel.	471,806	Mar. 29	3344	852	58	1778
Bosch, Adam, Newark, N. J. Electrical door-trip for engine-houses.	485,367	Nov. 1	339	89	61	642
Bosmann, Nicolas, assignor of one-half to G. M. Sterne, Chicago, Ill. Bridge-gate.	472,009	Mar. 29	3620	925 926	58	1833
Bosmann, Nicolas, assignor of one-half to G. H. Sterne, Chicago, Ill. Nut-lock.	488,958	Dec. 27	2812	693	61	1932
Bossard, Anselm C., et al. (See Newell, James L., assignor.)						
Bosse, Eugene, St. Paul Park, assignor of one-half to C. N. Bell, St. Paul, Minn. Machine for treating flax or other fiber-yielding plants.	485,734	Nov. 8	898	240 241	61	773
Bosse, Friedrich, Berlin, Germany. Apparatus for polishing and sharpening knives, forks, &c.	479,114	July 19	1619	405	60	343
Bossert, William F., Utica, and J. H. Findlay, Ogdensburg, assignors to Utica Electrical Manufacturing and Supply Company, Utica, N. Y. Securing device for cables.	482,939	Sept. 20	1659	418	60	1686
Bossert, William F., Utica, and J. H. Findlay, Ogdensburg, assignors to Utica Electrical Manufacturing and Supply Company, Utica, N. Y. Frame for electric-arc lamps.	482,940	Sept. 20	1661	418	60	1686
Bostedo Package and Cash Carrier Company. (See Gillespie, Alfred J., assignor.)						
Bostick, Alonzo, Millington, Mich., assignor to National Harrow Company, Jersey City, N. J. Spring-tooth harrow.	470,390	Mar. 8	1197	306	58	1336
Bostick, William D. (See Kunkle, Erastus B., assignor.)						
Boston and Lockport Block Company. (See Rusgrove, Henry W., assignor.)						
Boston Cash Register Company. (See Foote, Edward N., assignor.)						
Boston Cash Register Company. (See Foote and Range, assignors.)						
Boston Cash Register Company. (See Knapp and Little, assignors.)						
Boston Cash Register Company. (See Range, John J., assignor.)						
Boston Cash Register Company. (See Saunders, Range, and Foote, assignors.)						
Boston Cash Register Company. (See Webster, Jerome J., assignor.)						
Boston Cash Register Company. (See Webster and Saunders, assignors.)						
Boston Electric Company. (See Crockett and Allen, assignors.)						
Boston Filter Company. (See Blount and Way, assignors.)						
Boston Lasting Machine Company. (See Copeland, George W., assignor.)						
Boston Manufacturing Company. (See Coult, Walter, assignor.)						
Boston Street Sweeping Machine Company. (See Ethridge, Martin V. B., assignor.)						
Boston Welt Machine Company. (See Ober, William Y., assignor.)						
Boston Woven Hose Company. (See Cowen, Robert, assignor.)						
Bostwick, Charles E., Du Bois, Pa. Track-cleaner.	485,528	Nov. 1	569	152	61	689
Bostwick, Joseph M., Janesville, Wis. Safety device for railway-trucks.	476,123	May 31	3571	897	59	1386
Bostwick Metal Lath Company. (See Ohl, George A., assignor.)						
Boswell, George G. F., assignor of one-fifth to J. E. Boswell, Indianapolis, Ind. Bicycle-wheel.	478,735	July 12	1028	252	60	220
Boswell, Henry L., Chase City, Va., assignor of one-fourth to R. T. Burton, Philadelphia, Pa. Packing-receptacle.	476,223	May 31	3747	946	59	1419
Boswell, Joseph E. (See Boswell, George G. F., assignor.)						
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Automatic boiler-feeder.	467,148	Jan. 19	1399	357	58	282
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Governor for heaters.	473,056	Apr. 19	1611	411	59	332
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Automatic governor for regulating the supply of gas to burners.	473,447	Apr. 26	2280	576	59	482
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Device for testing pressure-gages.	476,512	June 7	436	102 103	59	1523
Bosworth, Charles B., Everett, assignor to Crosby Steam Gage and Valve Company, Boston, Mass. Pressure-gage.	485,404	Nov. 1	397	107	61	654
Bosworth, Martin L., Warren, R. I. Dental plugger.	477,610	June 21	2232	558	59	1905
Bosworth, Wendell P., Brockton, Mass. Leather-cutting die.	473,690	Apr. 26	2683	675	59	559
Bothe, Herman H., St. Louis, Mo. Fifth-wheel.	488,110	Dec. 13	1447	363	61	1627
Bothwell, George W. (See Boggs, Joseph O., assignor.)						
Bothwell, William T. (See Hill, Thomas E., assignor.)						
Botof, Peter H., Utica, Ind. Attachment for harvesters.	475,434	May 24	2466	628 629	59	1156

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Botsford, Alban B., Grand Rapids, Mich. Syringe-case	478,081	July 5	12	3	60	5
Botsford, Frederick G., Cleveland, assignor of one-half to J. H. Werner, Canton, Ohio. Drinking-fountain for fowls	479,549	July 26	2340	584	60	497
Botsford, George, New Haven, Conn. Hydrocarbon-oil vaporizer and burner	486,036	Nov. 8	1340	356	61	864
Botsford, George, and W. Holtz, Nineveh, Ind. Axle-bearing	476,602	June 7	569	136	59	1549
Botsford, George, assignor to E. J. Toof, New Haven, Conn. Hydrocarbon-oil vaporizer and burner	470,138	Mar. 1	736	183	58	1242
Bott, Joseph E., Stockport, England. Fire-extinguisher	474,208	May 3	499	119	59	734
Bott, Joseph E., Stockport, England. Automatic fire-extinguishing apparatus	474,209	May 3	500	120	59	734
Bott, Joseph E., Stockport, and G. H. Cammell, Hathersage, England. Shell or other projectile	472,748	Apr. 12	1138	292	59	228
Bottle, Edward K., assignor to Carter & Company, Limited, Niagara Falls, N. Y. Manifold memorandum-book	469,929	Mar. 1	417	105	58	1181
Bottle, Edward K., assignor to Carter & Company, Limited, Niagara Falls, N. Y. Manifold memorandum-book	469,930	Mar. 1	418	105	58	1181
Bottlers' and Brewers' Machine Manufacturing Company. (See Mueller, David, assignor.)						
Bottlers' Specialty Company. (See Wile and La Casse, assignors.)						
Bottome, Turner D., Hoosick, N. Y. Antifriction alloy	484,084	Oct. 11	841	-----	61	187
Botton, Georges A., Beaumont-du-Perigord, France. Type-setting machine	473,691	Apr. 26	2684	676	59	559
Botts, Isaac, assignor of one-half to V. J. Miller, Coldwater, Kans. Lifting-jack	469,116	Feb. 16	1887	483	58	913
Bonco, Frederick W., et al. (See Johnson, Bernt M., assignor.)						
Bouchard, Adolphe, St. Elmo, Ala. Corset	471,597	Mar. 29	3006	765	58	1716
Bouchard, Adolphe, St. Elmo, Ala. Waist	480,062	Aug. 2	487	124	60	675
Boucher, Frank, assignor of one-half to P. T. Corbeille, Fond du Lac, Wis. Draw-bridge guard	482,291	Sept. 6	608	144	60	1453
Bouchet, Peter A., Merced, Cal. Mechanical movement	483,041	Sept. 20	1827	464	60	1720
Bouck, Hiram, and J. H. Lovendale, Salt Lake City, Utah Ter. Balance-wheel	486,754	Nov. 22	2503	653	61	1126
Bonck, Philip, Trent, S. D. Draft-equalizer	473,902	May 3	9	3	59	638
Bonghton, Clandius V., Buffalo, N. Y. Signal-teletograph	482,780	Sept. 20	1422	352	60	1628
Boughton, William, Mansfield, Ohio. Vehicle-spring coupling	472,724	Apr. 12	1101	283	59	221
Boulanger, Emil, St. Louis, Mo. Waterproof woven snare-string for drums	480,063	Aug. 2	488	124	60	675
Boulanger, Emil, St. Louis, Mo. Device for adjusting drum-snare	480,064	Aug. 2	489	124	60	675
Boulard, Joseph, Newport, R. I. Match and toothpick machine	481,522	Aug. 23	2871	706	60	1173
Boulter, William E., administrator. (See Rudolph, Ernst B.)						
Bound, Henry. (See O'Donnell, Smith, and Bound.)						
Bourell, George B., Grant, Nebr., assignor to M. K. Bourell, Bloomington, Ill. Truck	466,899	Jan. 12	968	248	58	193
Bourell, Mary K. (See Bourell, George E., assignor.)						
Bourgin, Pierre, Oakland, Cal. Bean-thresher	481,841	Aug. 30	3408	838	60	1291
Bourke, Martin, Youngstown, Ohio. Sash-fastener	486,425	Nov. 22	1993	529	61	1024
Bourlier, Alphonse, et al. (See Dyer, Nelson M., assignor.)						
Bourlier, Emile, et al. (See Dyer, Nelson M., assignor.)						
Bourne, Henry H., Trinidad, Colo. Combined cement mill and furnace	480,381	Aug. 9	1021	257	60	788
Bourne, Theodore F., Clifton, N. Y. Temporary binder	467,339	Jan. 19	1691	433	58	338
Bouret, Louis H. (See Bredsvold, Paul A., assignor.)						
Bouscareu, Gustave, Cincinnati, Ohio. Railway-rail joint	476,241	June 7	9	2	59	1440
Bouse, William G., Lorain, Ohio. Sled	469,227	Feb. 23	2066	531	58	955
Bontell, William H., Fort Payne, Ala. Apple-corer	474,077	May 3	307	74	59	697
Bouton, Arthur A., Brooklyn, assignor to J. Kayser, New York, N. Y. Attachment for sewing-machines	483,097	Sept. 20	1910	483	60	1737
Bouvé, Crawford & Company. (See Webster, Lawrence J., assignor.)						
Bouvier, Louis P., Toronto, assignor of one-half to W. Harty, Kingston, Canada. Envelope-machine	481,779	Aug. 30	3309	808	60	1273
Bovet, Armand de, Paris, France. Magnetic brake	481,842	Aug. 30	3409	837	60	1292
Bovet, Armand de, Paris, France. Application of magnetic attraction	486,393	Nov. 15	1935	513	61	1000
Bovy, Victor, New York, N. Y. Revolving firearm	473,903	May 3	9	3	59	639
Bow, Lafayette T., Glasgow, Ky. Thill-spool	467,395	Jan. 19	1769	451	58	352
Bowden, Fountain P. (See Kirksey and Bowden.)						
Bowden, Joseph B. (See Bernhardt, Herman V., assignor.)						
Bowditch, Ernest W., et al. (See Drew, Joseph N., assignor.)						
Rowe, Wallace F., Meriden, Conn. Spoke-extractor	481,342	Aug. 23	2589	636	60	1117
Bowen, Calvin C., assignor of one-half to W. Rice, Saratoga, Cal. Device for moving and displaying speakers' manuscripts	471,066	Mar. 15	2211	568	58	1544
Bowen, Calvin C., San Francisco, assignor of one-half to W. Rice, Saratoga, Cal. Manuscript-holder for speakers	471,067	Mar. 15	2213	568	58	1544
Bowen, Emmer, South Los Angeles, Cal. Automatic car-coupling	469,228	Feb. 23	2068	532	58	955
Bowen, Eugene B., Centerville, Md. Corn-harvester	474,359	May 10	774	201 } 202 }	59	797
Bowen, James H., Philadelphia, Pa. Cigar-cutter	467,731	Jan. 26	2325	590	58	464
Bowen, James H., Philadelphia, Pa. Cigar-cutter	474,626	May 10	1192	303	59	877
Bowen, Newton M. (See Constant, Boston S., assignor.)						
Bowen, William J., Norwalk, Ohio, assignor to W. Hubbard, Elgin, Ill. Insulator	481,132	Aug. 16	2210	546	60	1034
Bowen, William J., Norwalk, Ohio, assignor to W. Hubbard, Elgin, Ill. Mechanical telephone	481,133	Aug. 16	2211	547	60	1034
Bower, Jacob, Newark, N. J. Fire-escape	474,155	May 3	415	100	59	719
Bowerbank, John W., New York, N. Y. Hinge for pail-lids	476,032	May 31	3420	864	59	1356
Bowerbank, John W., Jersey City, N. J., assignor to E. and S. Tansig, New York, N. Y. Disinfecting device	487,979	Dec. 13	1207	302	61	1577
Bowers, Alphonso B., Washington, D. C. Apparatus for dredging and transporting spoil	485,834	Oct. 18	1921	490	61	414
Bowers, Andrew, Bucklin, Mo. Fire-escape	485,834	Nov. 8	1025	275	61	798
Bowers, Edward L., and J. E. Titus, assignors of one-third to W. L. Grout, Orange, Mass. Slotting-machine	469,323	Feb. 23	2212	567 } 568 }	58	983
Bowers, Edward L., and J. E. Titus, assignors of one-third to W. L. Grout, Orange, Mass. Machine for operating upon screw-blanks	469,324	Feb. 23	2215	568 } 569 }	58	983
Bowers, Edward L., and J. E. Titus, assignors of one-third to W. L. Grout, Orange, Mass. Screw-machine	469,325	Feb. 23	2218	569	58	984
Bowers, Eugene M. (See Van Dyke and Stobangh, assignors.)						
Bowers, George W. (See Bierer, George W., assignor.)						
Bowers, John K. (See Goodman, Adam C., assignor.)						
Bowers, Riley, Springfield, Ill. Rapid-firing gun	476,242	June 7	11	2, 3	59	1440
Bowers, William, assignor of one-half to C. M. Woolcott, New York, N. Y. Cable-crossing	482,262	Dec. 20	1699	424	61	1693
Bowers, William H. H., assignor of one-half to Colorado Iron Works, Denver, Colo. Ore-concentrator	481,101	Aug. 16	2164	536	60	1024
Bowers, Winfield T. (See Greene, Thomas C., assignor.)						
Bowie, Washington, et al. (See Plunkett, Michael H., assignor.)						
Bowie, William S., Boston, Mass. Lounge	482,473	Sept. 13	1233	301	60	1589

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Bowin, Edward, deceased, McKeesport, Pa.; M. A. Bowin, administratrix. Tag for butt-weld tubing	476,124	May 31	3571	898	59	1386
Bowin, Martha A., administratrix. (See Bowin, Edward.)						
Bowler, Giles, Layton, Utah Ter. Automatic brake	469,535	Feb. 23	2543	654	58	1047
Bowler, Harry S. (See Bowler, William H. and H. S.)						
Bowler, William H. and H. S., O'Fallon, Ill. Dumping-cart	481,843	Aug. 30	3411	837	60	1292
Bowman, Charles, Hanover, Pa. Machine for stripping and booking leaf-tobacco	479,550	July 26	2341	584	60	497
Bowman, Charles M., Lebanon, Pa. Inking-roller	477,497	June 21	2018	500	59	1862
Bowman, Ezra F. (See Bradshaw, Charles T., assignor.)						
Bowman, Frank, Brooklyn, N. Y. Blank book	467,788	Jan. 26	2408	613	58	481
Bowman, Frank, Brooklyn, N. Y. Press-copy book	467,789	Jan. 26	2409	613	58	481
Bowman, Frank, Brooklyn, N. Y. Blank book	467,851	Jan. 26	2511	636	58	500
Bowman, Frank, Brooklyn, N. Y. Blank book	468,780	Feb. 16	1368	345	58	811
Bowman, Frank, Brooklyn, N. Y. Blank book	469,054	Feb. 16	1811	463	58	898
Bowman, Frank, Brooklyn, N. Y. Scrap-book	477,040	June 14	1261	305	59	1702
Bowman, Frank, Brooklyn, N. Y. Temporary binder	480,992	Aug. 16	1981	496	60	991
Bowman, Frank, Brooklyn, N. Y. Book	483,893	Oct. 4	549	139	61	114
Bowman, Frank, Brooklyn, N. Y. Index	486,755	Nov. 22	2503	654	61	1126
Bowman, George W., and J. C. Godfrey, Red Cliff, Colo. Pipe cutter and threader	472,426	Apr. 5	653	166	59	132
Bowman, Henry A., Worcester, Mass. Making flags	469,395	Feb. 23	2320	597	58	1004
Bowman, James D. (See Miller and Bowman.)						
Bowman, Michael C., A. F. Rose, and C. B. Morse, New York, N. Y. Counter-skiving machine	483,509	Sept. 27	2553	{ 640 641 }	{ 60 }	1872
Bowman, Minard S. (See Ross and Keller, assignors.)						
Bowman, William F., Keeseville, N. Y. Wall-protector	469,117	Feb. 16	1888	483	58	913
Bowman, William M., and E. F. Shaw, assignors to Plymouth Foundry Company, Plymouth, Mass. Oil-stove	482,539	Sept. 13	1042	252	60	1552
Bowne Pneumatic Signal Company. (See Bowne, Robert T., assignor.)						
Bowne, Robert T., Benson, Md., assignor to Bowne Pneumatic Signal Company, of West Virginia. Railway-signal	479,395	July 26	2073	{ 520 521 }	{ 60 }	446
Bowne, Robert T., Benson, Md., assignor to Bowne Pneumatic Signal Company, of West Virginia. Signaling device	479,396	July 26	2076	521	60	446
Bowring, Henry E., Mole Bank, East Molesey, England. Boat-davit	475,923	May 31	3257	822	59	1323
Bowring, Henry E., East Molesey, England. Boat-lowering apparatus	479,387	July 19	2054	513	60	428
Bowser, Asbury E. (See Bowser, Lafayette E. and A. E.)						
Bowser, Augustus. (See Bowser, Sylvanus F. and A.)						
Bowser, Lafayette E. and A. E., San Francisco, Cal. Step-ladder	479,051	July 19	1516	377	60	325
Bowser, Sylvanus F. and A., Fort Wayne, Ind. Measuring-pump	480,550	Aug. 9	1281	322	60	838
Bowser, Sylvanus F. and A., Fort Wayne, Ind. Measuring-pump	480,551	Aug. 9	1283	322	60	839
Bowser, Sylvanus F. and A., Fort Wayne, Ind. Measuring-pump	480,552	Aug. 9	1285	322	60	839
Bowsher, Nelson P., South Bend, Ind. Grinding-mill	477,498	June 21	2019	{ 500 501 }	{ 59 }	1862
Bowyer, John A., and U. L. Hull, assignors of one-eighth to T. Carson, Chicago, Ill. Vending-machine	476,513	June 7	438	103	59	1523
Boyd, Birt K., et al. (See Butcher, John F., assignor.)						
Boyd, Charles N., et al. (See Ratchford, Nicholas, assignor.)						
Boyd, Frederick C., and R. Martin, New Haven, Conn. Fare-register	479,388	July 19	2055	{ 513 514 }	{ 60 }	428
Boyd, Henry P., Southampton, England. Die for swaging screws	478,219	July 5	237	58	60	49
Boyd, James M., Jr. (See Brewer, Andrew T., assignor.)						
Boyd, John. (See Boyd, John A., assignor.)						
Boyd, John, Elmhurst, Ill. Apparatus for tempering cream	487,708	Dec. 13	765	196	61	1489
Boyd, John A., assignor to J. Boyd, Houston, Tex. Frame building	467,533	Jan. 26	2004	{ 507 508 }	{ 58 }	405
Boyd, Lawson A., Indianapolis, Ind. Railway-signal case	483,528	Oct. 4	17	4	61	6
Boyd, Robert L., New York, N. Y. Cover and adjustable ink-well	479,132	July 19	1643	411	60	347
Boyd, Samuel M. (See Dubbs, Jesse A., assignor.)						
Boyd, Samuel M., Middletown, N. Y. Toy	480,065	Aug. 2	490	125	60	676
Boyd, William, et al. (See Wright, Samuel, assignor.)						
Boyd, William F., Alum Rock, assignor to C. M. Heeter, Butler, Pa. Fishing-tool for deep wells	468,738	Feb. 9	1297	329	58	788
Boyden Brake Company of Baltimore City. (See Boyden, George A., assignor.)						
Boyden, George A., Baltimore, Md., assignor to Boyden Brake Company of Baltimore City, of Maryland. Valve for air-brakes	481,134	Aug. 16	2212	547	60	1034
Boyden, George A., Baltimore, Md., assignor to Boyden Brake Company of Baltimore City, of Maryland. Fluid-pressure brake	481,135	Aug. 16	2218	548	60	1035
Boyden, George A., Baltimore, Md., assignor to Boyden Brake Company of Baltimore City, of Maryland. Valve for automatic air-brakes	481,136	Aug. 16	2223	{ 548 549 }	{ 60 }	1035
Boyden, Lewis H., assignor to H. M. Rowell, Boston, Mass. Attachment for screw-drivers	470,778	Mar. 15	1772	456	58	1459
Boyer, Charles H. (See Sweeney, Peter, assignor.)						
Boyer, Israel D., Dayton, Ohio. Cash-register	471,094	Mar. 22	2255	580	58	1555
Boyer, Israel D., Dayton, Ohio. Instrument for facilitating the use of tabulated data	480,245	Aug. 9	790	201	60	743
Boyer, Joseph, St. Louis, Mo. Recording-velocimeter	470,468	Mar. 8	1321	{ 343 344 }	{ 58 }	1359
Boyer, Joseph, assignor to S. Cupples and J. West, St. Louis, Mo. Device for punching webs of paper	477,402	June 21	1868	460	59	1833
Boyle, Homer L., Grand Rapids, Mich. Vehicle	470,175	Mar. 8	814	{ 201 202 }	{ 58 }	1266
Boyle, James E., Jr., administrator. (See Boyle, James E.)						
Boyle, James E., deceased; J. E. Boyle, Jr., Brooklyn, N. Y., administrator. Siphon water-closet	476,867	June 14	983	239	59	1646
Boyle, William H., Oswego, N. Y. Attachment for blinds, sashes, &c.	471,939	Mar. 29	3527	901	58	1815
Boyles, William M., assignor to Jackson and Woodin Manufacturing Company, Berwick, Pa. Die for making links	476,514	June 7	440	104	59	1523
Boynton, Eben M., West Newbury, Mass. Electric-conductor support	467,679	Jan. 26	2232	568	58	447
Boynton, Eben M., West Newbury, Mass. Bicycle passenger, day-palace, and sleeping car	471,340	Mar. 22	2624	{ 666 667 }	{ 58 }	1636
Boynton, Eben M., West Newbury, Mass. Bicycle electric car	471,331	May 3	715	{ 186 187 }	{ 59 }	774
Boynton, Edward S., assignor to E. T. Wilkinson, Brooklyn, N. Y. Toy money-bank	469,732	Mar. 1	100	27	58	1118
Boynton, Edward S., assignor to E. T. Wilkinson, Brooklyn, N. Y. Means for surface-printing	475,534	May 24	2630	669	59	1188
Boynton Furnace Company. (See Boynton, Nathaniel A., assignor.)						
Boynton, Nathaniel A., assignor to Boynton Furnace Company, New York, N. Y. Hot-air furnace	471,095	Mar. 22	2261	581	58	1566

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Boynton & Plummer. (See Kindred, James, assignor.)						
Bozza, Carlo, London, England. Musical instrument	480,315	Aug. 9	918	232	60	769
Brace, De Witt B., Lincoln, Nebr. System of electrical distribution	484,549	Oct. 18	1581	401	61	344
Bracey, Smith H., Weston, W. Va. Railway-spike	487,111	Nov. 29	3119	800	61	1265
Bracher, Thomas W., New York, and S. W. Balch, Yonkers, N. Y.; said Balch assignor to said Bracher. Machine for stitching sweat-bands for hats	488,934	Dec. 27	2768	683	61	1923
Brachhausen, Gustav A., and P. Riessner, Entritzsch, near Leipsic, Germany. Damping device for music-boxes	480,993	Aug. 16	1982	496	60	991
Brachmann, William P., Newark, N. J. Nut-lock	467,627	Jan. 26	2151	547	58	432
Brack, John, Albany, N. Y. Truck	474,360	May 10	776	202	59	797
Brackon, John, assignor of one-half to J. Kennedy, Toronto, Canada. Extension-key for transposing music	471,713	Mar. 29	3187	813	58	1748
Brackett, John W., Boston, Mass. Pianoforte	484,403	Oct. 18	1347	344	61	298
Brada, Charles, assignor to Goetz & Brada, Chicago, Ill. Countersinking-machine	485,425	Nov. 1	513	135	61	676
Bradberry, David S., Boleman, S. C. Heel-sweep set for plows	470,469	Mar. 8	1324	344	58	1360
Bradbrook, Walter, Dysart, Iowa. Vise	466,859	Jan. 12	895	220	58	179
Bradburn, Joseph A., E. N. Trump, and J. D. Pennock, Syracuse, N. Y. Purifying water	466,709	Jan. 5	624		58	121
Bradburn, Robert E., assignor of one-half to F. C. Dickson, Louisville, Ky. Clamp for bending sheet-iron	466,733	Jan. 5	681	175	58	129
Bradbury, Alfred, Greenfield, England. Cloth-tentering machine	470,741	Mar. 15	1712	441	58	1448
Bradbury, Ed. L. <i>et al.</i> (See Lawrence, Lester G., assignor.)						
Bradbury, John F., Bombay, India. Carding-engine	472,653	Apr. 12	991	256	59	201
Bradbury, John M., and A. B. Griswold, Bunker Hill, Kans. Automatic damper	472,102	Apr. 5	144	39	59	27
Braden, Samuel M., Ligonier, Ind. Steaming attachment for wheat-heaters	478,151	July 5	119	30	60	26
Bradford, Benjamin P., Worcester, Mass. Leather-tanning vat	483,734	Oct. 4	313	79	61	66
Bradford, Charles W., assignor of one-half to F. J. Martin, Clinton, Me. Automatic circuit-closer for telegraph-keys	480,689	Aug. 9	1512	376	60	882
Bradford, John, Jr., Winslow, Ill. Thill-coupling	476,443	June 7	339	77	59	1503
Bradford, John, Marcelline, Ill. Car-coupling	487,243	Dec. 6	11	3	61	1323
Bradford, Julien M., Portland, Me. Electric regulating apparatus	477,637	June 28	2266	567	59	1928
Bradford, Nelson E., Allegheny, Pa. Vehicle-jack	486,064	Nov. 8	1400	370	61	875
Bradford, Park A., Oswego, Kans. Dissolving mechanism for magic lanterns	470,907	Mar. 15	1970	503	58	1498
Bradley, Charles S., New York, N. Y. Separating aluminium	468,148	Feb. 2	365	90	58	595
Bradley, Charles S., New York, N. Y. Armature for dynamo-electric machines and electric motors	486,078	Nov. 15	1426	376	61	898
Bradley, Charles S., Yonkers, N. Y. Electric motor	488,305	Dec. 20	1767	415	61	1706
Bradley, Charles S., Avon, N. Y. Alternating-current motor	488,306	Dec. 20	1768	446	61	1707
Bradley, Charles S., Avon, N. Y. System of distribution for polyphase alternating currents	488,307	Dec. 20	1771	446	61	1707
Bradley, Charles S., Yonkers, assignor to G. P. Lowrey, New York, N. Y. Obtaining metals from their ores or compounds	473,866	Apr. 26	2955	745	59	611
Bradley, Charles S., Avon, N. Y., and J. J. Wood, Fort Wayne, Ind. Electric motor and generator	481,220	Aug. 23	2376	585	60	1080
Bradley, Christopher C. (See Faulder, Thomas, assignor.)						
Bradley, Christopher C., <i>et al.</i> (See Bunnell, Francis A., assignor.)						
Bradley, Christopher C., Syracuse, N. Y. Spring-vehicle	472,518	Apr. 12	804	206	59	166
Bradley, Christopher C., Syracuse, N. Y. Thill-coupling	485,368	Nov. 1	340	90	61	642
Bradley, Christopher C., Syracuse, N. Y. Thill-coupling	485,856	Nov. 8	1059	282	61	806
Bradley, Harry M., Canon City, Colo. Load-binder	467,363	Jan. 19	1722	440	58	343
Bradley, Henry. (See Hill, Elias M., assignor.)						
Bradley, Henry L., New Haven, Conn. Wire shelf-bracket	472,285	Apr. 5	436	113	59	82
Bradley, Henry L., New Haven, Conn. Shelf-bracket	485,857	Nov. 8	1061	282	61	806
Bradley & Hubbard Manufacturing Company. (See Jauch, Joseph, assignor.)						
Bradley & Hubbard Manufacturing Company. (See Upson, Waldo L., assignor.)						
Bradley, James, assignor of one-half to H. W. Bullock, Albany, N. Y. Bicycle	477,292	June 21	1694	415	59	1799
Bradley, John, North Chelmsford, assignor to Byfield Manufacturing Company, Chelmsford, Mass. Circular-knitting machine for knitting striped fabrics	471,415	Mar. 22	2749	701	58	1660
Bradley, John, North Chelmsford, assignor to Byfield Manufacturing Company, Chelmsford, Mass. Circular-knitting machine for knitting checkered fabrics	471,416	Mar. 22	2751	702	58	1660
Bradley, John, and G. Y. Hodge, North Chelmsford, Mass. Circular spring-beard-needle knitting-machine	469,006	Feb. 16	1746	444	58	885
Bradley, John F. and J. S. Clark, Mo. Pump	467,697	Jan. 26	2263	575	58	454
Bradley, John S. (See Bradley, John F. and J. S.)						
Bradley, Lindsay H., Flushing, Ohio. Truss for mining-machines	488,349	Dec. 20	1846	461	61	1722
Bradley, Powell M. (See Douglas, Pendleton G., assignor.)						
Bradley, Smith W., South Butte, assignor of one-half to G. Lindoff, Anaconda, Mont. Dumping-car	470,658	Mar. 15	1586	413	58	1423
Bradley, Stephen R., Nyack, N. Y. Electrical surgical instrument	472,968	Apr. 12	1454	371	59	290
Bradley, Stephen R., Nyack, N. Y. Cord-carrier for underground conduits	479,397	July 26	2077	521	60	447
Bradley, William, Fort Wayne, Ind. Conduit for electric railways	476,603	June 7	570	136	59	1549
Bradley, William E., Roscoe, N. Y. Tether	476,726	June 7	748	185	59	1586
Bradley, William E., Frankfort, Ky. Making whisky	481,925	Sept. 6	7		60	1336
Bradley, William H., <i>et al.</i> (See Drew, Joseph N., assignor.)						
Bradshaw, Charles T., Philadelphia, assignor to E. F. Bowman, Lancaster, Pa. Apparatus for cleaning jewelry or like objects	486,756	Nov. 22	2505	654	61	1126
Bradshaw, George, assignor of one-half to G. W. Hoyt, Chicago, Ill. Garment-fastener	479,163	July 19	1689	422	60	357
Brady, Charles N., <i>et al.</i> (See Huggins, Ulysses S., assignor.)						
Brady, Edward, <i>et al.</i> (See Calcutt, Marvii Y., assignor.)						
Brady, James. (See Smith and Brady.)						
Brady, James G., Parkinson, Mich. Car-coupling	469,055	Feb. 16	1812	463	58	898
Brady, James W., Bartow, Fla. Broiler	480,316	Aug. 9	919	232	60	769
Brady, Michael F., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Brady, Thomas H., New Britain, Conn. Insulator-bracket	476,604	June 7	571	136	59	1550
Bradford, William H., <i>et al.</i> (See Foster, Washington H., assignor.)						
Bragdon, William B., Cumberland Mills, Me. Electric-wire support	479,052	July 19	1517	378	60	325
Bragger, John W., assignor of two-thirds to J. B. Wise and W. E. Bragger, Watertown, N. Y. Automatic alcohol-injector for service-pipes	466,998	Jan. 12	1120	284	58	221
Bragger, Walter E., <i>et al.</i> (See Bragger, John W., assignor.)						
Brahe, Frederick H., Chicago, Ill. Combined wash-stand and chamber-pail	475,052	May 17	1872	475	59	1025
Braid, James W. (See Wharton and Braid.)						
Braidwood, William, Mount Vernon, N. Y. Ventilator for cars, &c	470,540	Mar. 8	1421	370	58	1379
Brailly, Philippe, Bellaire, Ohio. Carriage-brake	487,512	Dec. 6	459	119	61	1411

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Brainard, Adelbert M., Chicago, Ill. Wardrobe-bedstead.....	479,624	July 26	2444	609	60	516
Brainard, Adelbert M., Chicago, Ill. Wardrobe-bed.....	482,158	Sept. 6	390	92	60	1411
Brainard, Adelbert M., Chicago, Ill. Wardrobe-bedstead.....	482,159	Sept. 6	391	92, 93	60	1412
Brainard, Amos H., Hyde Park, Mass. Gear-cutting machine.....	472,519	Apr. 12	805	207	59	166
Brainard, Curtis B., Joliet, Ill. Wire straightening and cutting machine.....	482,000	Sept. 6	121	30	60	1358
Brainard, Curtis B., Joliet, Ill. Bale-tie.....	485,253	Nov. 1	151	44	61	604
Brainard, Julius D., St. Paul, Minn. Fire-escape.....	481,252	Aug. 23	2441	601	60	1091
Brainard, Julius D., St. Paul, Minn. Earth-scraper.....	482,711	Sept. 13	1301	318	60	1603
Brake, Archibald, Toronto, Canada. Hot-air furnace.....	471,664	Mar. 29	3098	788	58	1732
Brambach, Aloys, New York, N. Y. Upright-piano case.....	476,915	June 14	1066	257	59	1662
Brambach, Carl, New York, N. Y. Sounding-board for pianofortes.....	480,488	Aug. 9	1191	299	60	820
Bramma, Arthur J. (See Campbell and Bramma.)						
Brampton, Walter, Birmingham, England. Saddle for bicycles.....	473,609	Apr. 26	2563	646	59	536
Brand, Henry, Duluth, assignor of one-fourth to A. Johnson and R. Davenport, St. Paul, Minn. Belt-tightener.....	486,135	Nov. 15	1570	416	61	926
Brand, Silas H., Chicago, Ill. Blacksmith's and hand bellows.....	472,187	Apr. 5	277	72	59	52
Brande, Wilhelm H. E., Hamburg, Germany. Clamp.....	474,719	May 10	1340	341	59	907
Brandenburg, Frederick C. (See Brandenburg, George, assignor.)						
Brandenburg, George, assignor of one-half to F. C. Brandenburg, Philadelphia, Pa. Shears.....	488,959	Dec. 27	2815	693	61	1933
Brandenburg, George G., <i>et al.</i> (See O'Donnell, Michael J., assignor.)						
Brandley, Al. R., <i>et al.</i> (See Beers, Franklin H., assignor.)						
Brandley, Arnold, Cherryvale, Kans., assignor of one-half to W. P. Hammon, Oakland, Cal. Hand-setting mechanism for timepieces.....	476,515	June 7	441	104	59	1523
Brandon, Alexander, New York, N. Y. Bar-fixture.....	477,987	June 28	2811	704	59	2036
Brandt, Carl, Cedar Falls, Iowa. Combined stove and furnace.....	482,466	Sept. 13	911	232	60	1526
Brandt, Franz, Philadelphia, Pa. Thermometer-scale.....	478,984	July 19	1411	349	60	305
Brandt, John R. (See Busse, William J., assignor.)						
Brandt, Otto, and F. Hoffmann, Newark, N. J. Sirup-strainer.....	470,315	Mar. 8	1062	270	58	1313
Brandy, James, Lawrence, assignor to W. Stetson, Boston, Mass. Machine for forming felt boots.....	469,007	Feb. 16	1749	445	58	885
Branford Lock Works. (See Morton, Henry, assignor.)						
Branner, Philip C. (See Sterne, Samuel, assignor.)						
Branner, Bernard, New York, N. Y. Awning.....	480,553	Aug. 9	1287	323	60	840
Bransom, William S., Hunter's Lodge, Va. Steam-generator.....	466,651	Jan. 5	538	140	58	104
Branson, Edwin R., Philadelphia, Pa. Circular-knitting machine.....	468,323	Feb. 9	650	{ 161 162 }	{ 58 58 }	{ 659 659 }
Brant, Charles W. (See Brant, John W., assignor.)						
Brant, John W., assignor of one-third to C. W. Brant, York, Pa. Spring-tooth harrow.....	480,705	Aug. 16	1541	384	60	902
Brantingham, Allen C., Columbus, Ohio. Dust-collector.....	469,646	Feb. 23	2695	693	58	1078
Brantingham, Allen C., Columbus, Ohio. Dust-collector.....	470,035	Mar. 1	584	145	58	1212
Brash, Albert W., Newark, S. D. Water-motor.....	469,536	Feb. 23	2545	654	58	1047
Brasington, John M., Morven, N. C. Electric railway-signal.....	473,288	Apr. 19	2007	{ 504 505 }	{ 59 59 }	{ 407 407 }
Brassfield, James L. (See Scott and Brassfield.)						
Brassfield, James L., <i>et al.</i> (See Scott, Matthew T., assignor.)						
Bratney, James C., Sparta, Ill. Sack-holder.....	478,913	July 12	1294	322	60	271
Bratoluboff, Alexander, Bielaia Tserkov, Russia. Means for superheating steam.....	487,317	Dec. 6	133	39	61	1347
Braut, Henri A. A., <i>et al.</i> (See Désy, Louis A., assignor.)						
Braun, Henry, <i>et al.</i> (See Ellis, Josiah W., assignor.)						
Braun, John, and H. Deck, assignors to J. Braun & Sons, Philadelphia, Pa. Lawn-mower.....	476,184	May 31	3675	929	59	1406
Braun, John N., Roslyn, Wash. Car-coupling.....	482,614	Sept. 13	1156	280	60	1574
Braun, Samuel J. (See Moskowitz, Jacob D., assignor.)						
Braun & Sons, John. (See Braun and Deck, assignors.)						
Bray, Alvin A., Lynn, Mass. Thill-coupling jack.....	478,043	June 28	2906	726	59	2053
Bray, Charles W., assignor to Lloyd Booth Company, Youngstown, Ohio. Rolling-mill.....	488,395	Dec. 27	2770	684	61	1923
Brav, Hugo, Berlin, Germany. Till-lock.....	478,392	July 5	512	{ 124 125 }	{ 60 60 }	{ 101 101 }
Bray, Isabella, New York, N. Y. Dress-stay.....	469,442	Feb. 23	2397	614	58	1019
Bray, Isabella, New York, N. Y. Dress-stay.....	480,994	Aug. 16	1983	496	60	991
Bray, James B., Waverly, N. Y. Stair-climbing perambulating-chair.....	468,022	Feb. 2	177	43, 44	58	559
Bray, Joseph F. (See Gillette, Charles F., assignor.)						
Bray, Mellen. (See Gates, William H., assignor.)						
Bray, Mellen N., Brookline, and E. M. Pope, Quincy, Mass.; said Pope assignor to said Bray. Rivet-setting machine.....	483,598	Oct. 4	121	30, 31	61	26
Bray, Robert V., <i>et al.</i> (See Trump, John G., assignor.)						
Bray, William C., Newton Centre, Mass. Lacing-hook.....	477,242	June 21	1616	395	59	1785
Bray, William C., Newton Centre, and E. A. Hemmenway, Boston, Mass., assignors to Tubular Rivet Company, New Haven, Conn. Rivet-setting tool.....	477,241	June 21	1615	395	59	1784
Brayton, George B., Chicago, Ill. Frictional gearing for street-cars.....	476,243	June 7	13	3	59	1441
Brayton, Richard, assignor to Michigan Fire Ladder and Engine Company, Grand Rapids, Mich. Fire-ladder.....	487,235	Nov. 29	3342	851	61	1305
Brazelle, Benjamin, St. Louis, Mo. Distilling carbonaceous material.....	482,614	Apr. 12	939	242	59	192
Brazelle, Benjamin, St. Louis, Mo. Process of and apparatus for purifying, refining, and carburizing metals.....	482,001	Sept. 6	123	31	60	1359
Brazier, Edwin, assignor to E. J. Brazier, M. B. Watt, North Topeka, and T. B. Peacock, Topeka, Kans. Counter-stiffener.....	485,604	Nov. 8	691	182	61	730
Brazier, Eleanor J., <i>et al.</i> (See Brazier, Edwin, assignor.)						
Brecher, Philip, Louisville, Ky. Ash and coal guard for Franklin stoves.....	473,057	Apr. 19	1612	411	59	332
Brecht, Gustavus A. V. (See Schraudner, Frederick, assignor.)						
Breck, George E. (See Welch, Thomas, assignor.)						
Bredannaz, Louis, Toronto, Canada. Picker-stick-operating mechanism.....	469,056	Feb. 16	1813	463	58	898
Bredol, Frederick, Milwaukee, Wis. Process of and apparatus for purifying gas.....	467,605	Jan. 26	2125	{ 539 540 }	{ 58 58 }	{ 427 427 }
Breden, Stephen, and J. Sheridan, Franklin, Pa. Paving-block.....	475,924	May 31	3260	822	59	1323
Bredenber, Alfred. (See Lovell and Bredenber.)						
Bredenber, Alfred, Brooklyn, assignor of two-thirds to J. W. and C. W. Lovell, New York, N. Y. Sheet-gathering machine.....	466,719	Jan. 5	657	169	58	125
Bredsvold, Paul A., assignor of one-half to L. H. Bonnet, Chicago, Ill. Adjustable chair or stool.....	483,777	Oct. 4	387	96	61	81
Breed, David R., Chicago, Ill. Magic lantern.....	488,057	Dec. 13	1365	339	61	1611
Breed, David R., Chicago, Ill. Clamp for binding the edges of lantern-slides.....	488,058	Dec. 13	1368	339	61	1611
Breed, De Witt C., Medina, N. Y. Parlor sleeping-car.....	479,240	July 19	1810	{ 453 454 455 }	{ 60 60 60 }	{ 379 379 379 }
Breed, Edwin S., Paterson, N. J. Oil-filter.....	483,599	Oct. 4	124	31	61	26

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Breed, Zephaniah, North Weare, N. H. Sulky cultivator and weeder	473,289	Apr. 19	2009	505	59	407
Breeden, William M. (See Williams, Alexander P., assignor.)						
Breen, Thomas W., Saucelito, Cal. Gardening implement	467,364	Jan. 19	1723	440	58	343
Breeze, Herbert J., Olean, N. Y. Embalming apparatus	487,244	Dec. 6	12	4	61	1323
Brézier, Eugène, Terrebbonne, Minn. Wind-wheel	483,098	Sept. 20	1912	484	60	1737
Brehmer, Hugo, Philadelphia, Pa. Book-sewing machine	466,554	Jan. 5	389	99	58	75
Breinig, Granville M., New Milford, Conn. Check-book	475,661	May 24	2820	714	59	1226
Breisch, Michel, New York, N. Y. Stud or button	476,362	June 7	215	53	59	1478
Breitschwerth, Conrad, Syracuse, N. Y. Pottery-machine	471,807	Mar. 29	3344	852	58	1778
Bremner, John A. (See Lefever and Bremner.)						
Brencke, Henry, Jr. (See Weaver and Brencke.)						
Brendlinger, Joseph E., Denver, Colo. Ratchet-wrench	478,680	July 12	937	233	60	201
Brenizer, Orson W., assignor of one-half to T. H. Pressnell, Duluth, Minn. Switching attachment for street-cars	471,714	Mar. 29	3188	813	58	1749
Brenkert, J. W. (See Hood, Willis F., assignor.)						
Brennman, Jacob W., Abilene, Kans. Fence-building tool	485,835	Nov. 8	1025	275	61	799
Brennan & Company Southwestern Agricultural Works. (See Christman, Edward, assignor.)						
Brennan & Company Southwestern Agricultural Works. (See Munn and Christman, assignors.)						
Brennan, Daniel, Jr., Bayonne, N. J. Crnsbing-roll	488,867	Dec. 27	2664	660	61	1901
Brennan, Dominick C., Philadelphia, and F. Webber, Pittsburg, Pa. Toy	471,232	Mar. 22	2473	628	58	1606
Brennan, Henry A., Jersey City, N. J. Transom-lifter	474,720	May 10	1341	341	59	907
Brennan, John A. (See Croom, Wiley G., assignor.)						
Brennan, Matthew, et al. (See Klenha, Vaclav, assignor.)						
Brenner, David H., assignor to J. T. Phillips, Grand Rapids, Mich. Miter-cutting machine	484,874	Oct. 25	2117	545	61	467
Brent, Edwin. (See Brent, Richard and E.)						
Brent, Richard and E., Wilkes-Barre, Pa. Wheel-hub	473,904	May 3	10	3	59	639
Brentano, Simon, et al. (See De Kalb, Courtenay, assignor.)						
Brentano, Simon, New York, N. Y. Fire-hydrant	468,781	Feb. 16	1369	345	58	812
Brentano, Simon, New York, N. Y. Fire-hydrant	468,782	Feb. 16	1371	346	58	812
Breslin, Joseph, Newport, Ky., assignor to H. S. Livingston, Cincinnati, Ohio. Machine for breaking and cleaning hemp	477,794	June 28	2507	629	59	1976
Bressnahan, Maurice V., and J. J. Heys, Lynn, Mass. Sole-machine	479,053	July 19	1518	378	60	325
Bressler, Allen P. (See Bressler, Jacob C., L., and A. P.)						
Bressler, Frank M., et al. (See Birney, Charles O., assignor.)						
Bressler, Frederick. (See Ilbery, William, assignor.)						
Bressler, Jacob C., L., and A. P., Cedar Rapids, Iowa. House-moving truck	471,598	Mar. 29	3007	765	58	1716
Bressler, Lowell. (See Bressler, Jacob C., L., and A. P.)						
Brett, Edward S., Coventry, England. Steam-stamp	478,393	July 5	513	125	60	101
Brett, Henry W., Boston, Mass. Cementing-machine	479,699	July 26	2567	639	60	539
Bretz, Jacob S., Philadelphia, Pa. Bicycle-wheel	478,394	July 5	514	126	60	102
Breul, Richard A., assignor to Bridgeport Chain Company, Bridgeport, Conn. Machine for making wire chain	467,331	Jan. 19	1671	426 427 428 429	58	34
Brewer, Albert G. (See Stewart and Brewer.)						
Brewer, Andrew T., assignor of one-half to J. M. Boyd, Jr., Minneapolis, Minn. Combination feed-water heater and boiler	478,395	July 5	516	126	60	102
Brewer, Charles W., Cambridge, Mass., assignor to Brewer Longitudinal Axle Lubricator Company, Portland, Me. Axle-lubricator	477,620	June 21	2233	558	59	1905
Brewer, Charles W., Cambridge, Mass., assignor to Brewer Longitudinal Axle Lubricator Company, Portland, Me. Machine for forming lubricator-grooves in vehicle-axes	477,638	June 28	2269	568	59	1929
Brewer, David, Emporia, Kans. Car-coupling	482,615	Sept. 13	1158	280	60	1574
Brewer Longitudinal Axle Lubricator Company. (See Brewer, Charles W., assignor.)						
Brewer, Samuel F., Washington county, Ky. Bee-hive	468,783	Feb. 16	1374	346	58	813
Brewer, William N., Cleveland, Ohio. Book or case for exhibiting goods	469,733	Mar. 1	101	27, 28	58	1119
Brewers and Distillers CO ₂ Company. (See Tiebhorne, Darley, Purcell, and Geoghegan, assignors.)						
Browing Improvement Company. (See Frings, Charles H., assignor.)						
Browing Improvement Company. (See Frings, Charles H. and E. O., assignors.)						
Brewington, Henry S., et al. (See Huey, William, assignor.)						
Brewington, Henry S., Baltimore, Md. Fountain marking-brush	469,990	Mar. 1	524	131	58	1200
Brewington, Henry S., Baltimore, Md. Music-leaf turner	470,151	Mar. 1	753	187 188	58	1246
Brewster, James N., Coney Island, N. Y. Hose-nozzle guide for walls	488,624	Dec. 27	2289	567	61	1825
Brewster, Richard I. (See Norgrave, George B., assignor.)						
Brewster, Robert. (See Johnson and Brewster.)						
Brewster, Robert, New Barnet, England. Step and bearing for machinery	474,286	May 3	617	153	59	757
Brewster, Robert, New Barnet, England. Artificial tooth	476,605	June 7	572	136	59	1550
Brewster, Tomlinson F. (See Dennis, Joseph L., assignor.)						
Breyer, Johannes F., Hamburg, Germany. Aquatic velocipede	485,369	Nov. 1	342	90, 91	61	642
Brianne, Lucien, Paris, France. Electric arc lamp	475,289	May 24	2234	575	59	1113
Brice, George A., Titusville, Pa. Four-wheeled vehicle	469,118	Feb. 16	1889	483	58	914
Brice, John F., Cantril, Iowa. Temporary binder	476,444	June 7	340	77	59	1503
Brickell, Edward N., Winton, N. C. Cotton-chopper	486,661	Nov. 22	2354	616	61	1095
Bricker, Moses. (See McIntosh, John, assignor.)						
Bricker, William H., Canton, Ohio. Permutation-lock	474,078	May 3	308	74	59	697
Bridgum, Cyrus W., North Hector, N. Y. Dumping-car	476,780	June 14	838	207	59	1617
Bridgeport Brass Company. (See Morton, Augustus, assignor.)						
Bridgeport Chain Company. (See Breul, Richard A., assignor.)						
Bridger, Henry C., Wood Ridge, N. J., assignor to United States Autograph Telegraph Company, New York, N. Y. Device for reproducing characters	478,152	July 5	120	30	60	27
Bridges, Charles L. (See Crocker and Bridges.)						
Bridges, Charles W., Independence, Ind. Ornamental fence-wire	478,985	July 19	1413	350	60	305
Bridges, Hiram A., et al. (See Cochran, John J., assignor.)						
Bridges, James T., Hagerstown, Md. Car-wheel	466,988	Jan. 12	1107	280	58	219
Bridges, William J., Elkhart, Tex. Railway stock-guard	467,913	Feb. 2	11	4	58	529
Briedwell, Edgar M., McMinnville, assignor of one-half to M. Holmes, McCoy, Oreg. Anti-friction axle-box	467,968	Feb. 2	88	22	58	542
Briegel, Jacob J. (See Stutt, John H., assignor.)						
Brielmaier, John E., St. Francis, Wis. Carving-machine	470,659	Mar. 15	1587	413	58	1423

Alphabetical list of patents—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Brien, James T., Hoosick Falls, N. Y. Water-trap	476,224	May 31	3748	947	59	1420
Brierley, William, Rochdale, England. Confectioner's kettle	484,134	Oct. 11	907	232	61	200
Brigg, Thomas H., Bradford, England. Means for connecting draft-animals to vehicles.	486,837	Nov. 22	2643	690	61	1155
Briggs, Alfred, Ottumwa, Iowa, assignor to himself and J. T. Hackworth. Friction-clutch	477,245	Dec. 6	13	4	61	1323
Briggs, Arthur E., assignor to Post & Company, Cincinnati, Ohio. Bracket and supporting device for railings	473,376	Apr. 19	2162	543	59	437
Briggs, Frank H., Cleveland, Ohio. Means for indicating discharge from or into hoppers	468,970	Feb. 16	1673	426	58	870
Briggs, Frank H., Cleveland, Ohio, assignor to American Water Transportation Company, Chicago, Ill. Conveyer-barge storage-vessel	485,836	Nov. 8	1026	275 276	61	799
Briggs, Frederick H., Boston, Mass. Billiard-cushion	468,076	Feb. 2	252	62	58	573
Briggs, George E., Pittsburg, Pa. Building-block	479,054	July 19	1519	378	60	325
Briggs, George T. (See Burton, Eddy, and Briggs.)						
Briggs, Ira J., assignor of one-half to A. W. Sanborn, San Francisco, Cal. Lubricating-cup	482,674	Sept. 13	1235	301	60	1589
Briggs, Jerome C. (See Winget, Marion A., assignor.)						
Briggs, La Mont L., New Hampton, Iowa. Broiler	476,916	June 14	1063	257	59	1062
Briggs, Orlando P., assignor of one-half to C. L. Jenness, Chicago, Ill. Wire-clamping device	471,096	Mar. 22	2262	581 94 95 96	58	1567
Briggs, Orlando P., and F. L. Bryant, Chicago, Ill. Machine for weaving coiled-wire fabric	480,007	Aug. 2	381	95 96	60	653
Briggs, Otis, Jr., Nevada, Iowa. Time-damper-operating mechanism	478,562	July 12	775	189	60	169
Briggs, Robert. (See Johnson, Lafayette M., assignor.)						
Briggs, Thomas A., Arlington, Mass. Printing-machine	469,931	Mar. 1	420	105 106 106 107	58	1182
Briggs, Thomas A., Arlington, Mass. Paper-feeding machine	469,932	Mar. 1	423	106 107 280 281 282 283	58	1182
Briggs, Thomas A., Arlington, Mass. Paper-feeding machine	480,447	Aug. 9	1125	281 282 283	60	806
Briggs, Thomas A., Arlington, Mass. Feed-machine attachment for printing-presses	480,448	Aug. 9	1135	283	60	808
Briggs, Thomas A., Arlington, Mass. Device for converting oscillatory into reciprocating motion	480,449	Aug. 9	1136	284	60	809
Briggs, Thomas A., Arlington, Mass. Compound lever	480,450	Aug. 9	1138	284 285	60	809
Briggs, Thomas A., Arlington, Mass. Paper-feeding machine	487,513	Dec. 6	460	120 121 121 122	61	1412
Briggs, Thomas A., Arlington, Mass. Paper-separating mechanism	487,514	Dec. 6	463	121 122	61	1412
Brigham, Arthur A., Weston, Mass. Spindle	484,698	Oct. 18	1815	461	61	392
Brigham, Charles F., Boston, Mass. Steam-trap	467,634	Jan. 26	2161	549	58	434
Brigham, John S., et al. (See Swift, Henry D and D. W., assignors.)						
Brigham, Joseph, Northampton, Mass. Last	473,654	Apr. 26	2632	663	59	549
Brigham, Martin E., Philadelphia, Pa. Wrapping-machine	478,396	July 5	518	127 128	60	102
Bright, William H. (See Packham, William H., assignor.)						
Brill, George M., Philadelphia, Pa. Door for cars	468,434	Feb. 9	820	206 207	58	693
Brill, George M., Philadelphia, Pa. Car-truck	478,218	July 5	232	58	60	48
Brill, George M., Philadelphia, Pa. Brake mechanism for car-trucks	485,858	Nov. 8	1062	282 283	61	806
Brill, John A., Philadelphia, Pa. Motor-truck	480,362	Aug. 9	985	248 249	60	780
Brill, John A., and W. S. Adams, Philadelphia, Pa. Equalizing device for car-trucks	476,244	June 7	15	4	59	1441
Brillié, Lucien V., Paris, France, assignor to Compagnie Anonyme Continentale pour la Fabrication des Comptens à Gaz et Autres Appareils. Electric meter	479,932	Aug. 2	245	60, 61	60	629
Brimingham, Oliver M., Victoria, Tex. Car-coupling	467,365	Jan. 19	1724	441	58	344
Brind, Ivor L., et al. (See Gunn, John A., assignor.)						
Brine, Henry J., Chicago, Ill. Butter-packing machine	473,494	Apr. 26	2358	598	59	496
Brink, Thomas E., Dunmore, Pa. Pipe-holder	471,940	Mar. 29	3527	901	58	1815
Brinkerhoff, George, Brooklyn, N. Y. Joint for woodwork	475,997	May 31	3372	850	59	1345
Brinkerhoff, Nelson M., Bloomville, Ohio. Axle-washer	477,639	June 28	2271	569	59	1929
Brinkerhoff, Warren M. (See Markham, De Witt C., assignor.)						
Brinkman, George P., Eureka, Cal. Lifting-jack	473,206	Apr. 19	1875	472	59	380
Brinkman, Herman M., assignor to Harrow Spring Company, Kalamazoo, Mich. Machine for bending harrow-teeth	472,960	Apr. 12	1445	369	59	288
Brinkmann, Augustus H. (See Jones, Harry W., assignor.)						
Brintnall, Thomas M., Chicago, Ill. Safe	481,137	Aug. 16	2229	549 550	60	1036
Brintnall, Thomas M., Medina, Ohio. Safe	488,960	Dec. 27	2815	694	61	1933
Brintnall, Thomas M., Medina, Ohio. Safe	488,961	Dec. 27	2817	695	61	1934
Brintnall, Thomas M., Medina, Ohio. Safe	488,962	Dec. 27	2818	695	61	1934
Brintnell, Archibald H., Toronto, Canada. Annunciator	470,631	Mar. 15	1867	479	58	1477
Brintnell, Archibald H., Toronto, Canada. Thermostat	474,542	May 10	1059	271	59	851
Brintnell, Archibald H., Toronto, Canada. Rotary engine	476,868	June 14	986	239	59	1647
Brintnell, George N., Canifton, assignor of one-half to J. Birrell, Nananee, Ontario, Canada. Feeder and band-cutter	467,698	Jan. 26	2269	576	58	454
Brinton, Henry A., Harrisburg, Pa. Locking means for hammer-handles	468,784	Feb. 16	1375	347	58	812
Brinton, John H., Jr., Philadelphia, Pa. Lathe-dog	485,405	Nov. 1	398	107	61	654
Brisben, William M., Philadelphia, Pa. Rigging for sailing-vessels	469,076	Feb. 16	1838	470	58	904
Briscoe, Henry, assignor of one-half to A. E. Gowin, Morrisonville, Ill. Hay-loader	467,366	Jan. 19	1726	441	58	344
Bristol Brass and Clock Company. (See Brown, George S., assignor.)						
Bristol, William H., Hoboken, N. J. Photographic camera	478,780	July 12	1097	272	60	233
Bristol, William H., Hoboken, N. J. Camera-shutter	480,995	Aug. 16	1984	497	60	991
Bristol, William H., Hoboken, N. J. Camera-shutter	481,343	Aug. 23	2591	636 637	60	1117
Bristol, William S. (See Moore, James S., assignor.)						
Brittain, Arlington D. (See Brittain and Shrum, assignors.)						
Brittain, Herbert C., and P. J. Shrum; said Shrum assignor to A. D. Brittain, Beaver Falls, Pa. Wire mat	487,700	Dec. 6	747	191	61	1468
Brittain, Howard M., Martin's Creek, Pa. Egg-beater	472,803	Apr. 12	1212	311	59	242
Brittingham, Martha E. (See Brittingham, William B., assignor.)						
Brittingham, William B., New York, N. Y. Bleaching compound	480,554	Aug. 9	1289		60	840
Brittingham, William B., assignor to M. E. Brittingham, New York, N. Y. Detergent	477,403	June 21	1870		59	1834

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Britton, John A. (See Gallagher, James, assignor.)						
Britton, Joseph W., Cleveland, Ohio. Scaling sheet metal	479,780	Aug. 2	10	3	60	584
Britton, Louis H., assignor of one-half to J. B. Warner, New Lisbon, Ohio. Sheet-metal roof.	487,172	Nov. 29	3215	823	61	1283
Britton, Samuel H., Muskegon, Mich. Rod and broom-handle turning machine.	472,332	Apr. 5	514	133	59	96
Broad, Charles H., Rochester, N. Y. Wick-raiser for lamps	467,571	Jan. 26	2075	524	58	418
Broadbent, Eli W. (See Weber, Theodore A., assignor.)						
Broadbent, Robert, Stalybridge, England. Machine for winding yarn or thread	474,171	Oct. 11	975	249	61	213
Broadbooks, Peter, Batavia, N. Y. Thill-coupling	474,566	Oct. 18	1602	407	61	348
Broadbooks, Peter, Batavia, N. Y. Pocket-gage	484,567	Oct. 18	1603	407	61	348
Broadbridge, Edward, Jr. (See Jordan and Broadbridge.)						
Broadfoot, Peter M., Decatur, Ala. Wheeled scraper	485,085	Oct. 25	2456	632	61	534
Broadhead, Ernest W., Dolores, Colo. Vehicle-brake	481,466	Aug. 23	2762	687	60	1156
Broadley, Joseph, Elkhorn, Canada. Nut-lock	481,344	Aug. 23	2592	637	60	1117
Broadnax, Francis, New York, N. Y. Electric switch	476,781	June 14	840	207	59	1618
Brock, Arthur. (See Ashby, George J. M., assignor.)						
Brock, Charles, et al. (See Morrell, Robert, assignor.)						
Brock, Henry C., and J. Hunter, Albany, N. Y.; said Brock assignor to said Hunter. Re- volving show-frame	466,767	Jan. 12	738	{ 191 192 }	58	151
Brock, William E., Plainfield, N. J. Veneered lumber	468,435	Feb. 9	821	207	58	693
Brock, William E., Plainfield, N. J. Portable building	468,785	Feb. 16	1376	347	58	813
Brock, William E., Plainfield, N. J. Gluing-machine	474,572	May 10	1111	284	59	862
Brock, William E., Plainfield, N. J. Implement for veneering lumber	476,782	June 14	841	208	59	1618
Brock, William E., Plainfield, N. J. Gluing-table	476,975	June 14	1164	281	59	1082
Brock, William H., Brooklyn, N. Y. Chain-wrench	483,419	Sept. 27	2433	612	60	1848
Brockie, James, London, England. Electric-arc lamp	486,757	Nov. 22	2507	654	61	1126
Brockington, George, Newark, N. J. Bridle-bit	466,485	Jan. 5	279	70	58	53
Brockley, Jacob. (See Hymas, Alfred, assignor.)						
Brocksieper, Fredrick W., New Haven, Conn. Earth-auger	481,345	Aug. 23	2593	637	60	1117
Brockway, Edward, Separ, N. Mex. Ter. Car-coupling	481,660	Aug. 30	3097	755	60	1231
Broda, Joseph, Mannheim, Germany. Machine for pressing and bundling cigars	475,290	May 24	2235	575	59	1113
Brodbeck, George W., Los Angeles, Cal. Bee-smoker	484,172	Oct. 11	976	250	61	213
Brodesser, Peter H., Milwaukee, Wis. Elevator and carrier	481,926	Sept. 6	7	2, 3	60	1336
Brodie, William H., Plainfield, N. J. Fire protecting-shutter	480,394	Aug. 9	1042	262	60	791
Broer, Joseph W., H. J. and G. H. Merriell, Chicago, Ill. Lamp-burner attachment	466,939	Jan. 12	1027	262	58	204
Broga, Franklin D., assignor of one-fourth to A. S. Annis, North Bay, N. Y. Car-coupling	470,616	Mar. 8	1527	393	58	1402
Broggelwirth, Emil, Brooklyn, N. Y. Sash-holder	479,324	July 19	1930	492	60	403
Brohard, Joseph M., Clarksburg, W. Va. Sash-holder	472,851	Apr. 12	1274	326	59	255
Broichgans, Stephan, Milwaukee, Wis. Lawn-sprinkler	469,023	Feb. 16	1768	451	58	890
Brokaw, Norman H., Kaukauna, Wis. Making paper-pulp	474,944	May 17	1697		59	992
Brolin, Peter, assignor of one-half to J. H. Edinger, Ransom, Mich. Wrench	484,288	Oct. 11	1164	296	61	250
Broman, John G., Chicago, Ill. Steam-joint packing	477,640	June 28	2271	569	59	1929
Bromley, William I. (See Dobson and Bromley.)						
Bromley, Daniel W., assignor of one-half to M. T. McEldowney and S. P. Kerr, Winches- ter, Ky. Press	476,662	Nov. 22	2355	{ 616 617 }	61	1095
Bromwell, John R., assignor to C. A. Black, Nashville, Tenn. Animal-trap	488,111	Dec. 13	1447	364	61	1627
Bronder, Gaston A., New York, N. Y. Steam steering-gear	487,401	Dec. 6	281	72, 73	61	1376
Brong, George W. (See Trine, Samuel G., assignor.)						
Bronson, Milton H., assignor of one-half to W. Richmond, Providence, R. I. Cable-rail- way conduit	477,884	June 28	2662	666	59	2005
Bronson, Milton H., assignor of one-half to W. Richmond, Providence, R. I. Carrier-pul- ley for cable roads	477,885	June 28	2663	666	59	2005
Bronson, Benjamin, Rockford, Ill. Swinging saw	481,744	Aug. 30	3246	790	60	1260
Bronson, Charles E. (See Heiland and Bronson.)						
Bronson, Levi, assignor of one-half to Pitts Agricultural Works, Buffalo, N. Y. Grain- measure	479,551	July 26	2342	584	60	498
Bronson, Lorenzo M., Richmond Hill, N. Y. Sash-fastener	477,500	June 21	2023	{ 501 502 }	59	1863
Bronson, Thomas C., Hiawatha, Kans. Rubber	470,101	Mar. 1	686	168	58	1232
Brook, James W., Lynchburg, Va. Elevator	483,294	Oct. 4	550	139	61	114
Brooke, Edward B., Huddersfield, England. Machine for molding earthenware pipes, &c.	475,481	May 24	2542	{ 647 648 }	59	1171
Brooke, Homer. (See Bates, John L., assignor.)						
Brooke, Isaac, Pottstown, assignor to Floyd, Wells & Company, Royer's Ford, Pa. Oven- plate	487,911	Dec. 13	1109	277	61	1558
Brooke, Robert G., Blackpool, England. Injector	474,361	May 10	777	{ 202 203 }	59	797
Brooke, William E., assignor to American Saw Company, Trenton, N. J. Saw-tooth	470,977	Mar. 15	2079	532	58	1519
Brooke, William E., assignor to American Saw Company, Trenton, N. J. Wrench	486,758	Nov. 22	2508	655	61	1127
Brooke, William E., assignor to American Saw Company, Trenton, N. J. Combined wrench and screw-driver	486,759	Nov. 22	2510	655	61	1127
Brookfield, William. (See Pease, Jacob, assignor.)						
Brooks, Bartholomew, assignor of one-half to J. R. C. McAllister, Philadelphia, Pa. Awn- ing	478,842	July 12	1201	298	60	253
Brooks, Byron A., Brooklyn, N. Y. Type-writing machine	476,941	June 14	1110	268	59	1672
Brooks, Byron A., Brooklyn, N. Y. Type-writing machine	476,942	June 14	1113	268	59	1672
Brooks, Byron A., Brooklyn, N. Y. Type-writing machine	482,781	Sept. 20	1423	352	60	1638
Brooks, Chapin C., Cape Elizabeth, Me. Knife	486,426	Nov. 22	1994	529	61	1024
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Post-office hand-stamp	481,296	Aug. 23	2519	619	60	1104
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal	481,892	Aug. 30	3486	854	60	1307
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Seal-press	485,370	Nov. 1	343	91, 92	61	643
Brooks, Edward J., East Orange, N. J., assignor to E. J. Brooks & Company, New York, N. Y. Registering hand-stamp	487,657	Dec. 6	677	174	61	1455
Brooks, Edward S., York, Pa. Harrow-tooth fastening	468,446	Feb. 9	838	212	58	697
Brooks, Franklin W., assignor of one-half to W. C. Rogers, New York, N. Y. Car-seal	481,388	Aug. 23	2659	652	60	1130
Brooks, George F., assignor to Harrington & Richardson Arms Company, Worcester, Mass. Scar and rebound-catch for revolvers	466,952	Jan. 12	1050	266	58	208
Brooks, George W. (See Brooks, Texas, assignor.)						
Brooks, Henry M., Everett, Mass. Cordage-manufacturing apparatus	483,665	Oct. 4	217	54	61	44
Brooks, Herbert H., Cambridge, assignor of one-half to A. T. Clark, Boston, Mass. In- sulator	482,913	Sept. 20	1626	407	60	1678

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Brooks, J. O. (See Tudor, James H., assignor.)						
Brooks, James G., Rochester, N. Y. Insole	469,537	Feb. 23	2546	654	58	1047
Brooks, James M., Molena, Ga. Road-scraper	481,160	Aug. 23	2279	562	60	1060
Brooks, James W., et al. (See Ramsden and Ellis, assignors.)						
Brooks, James W., et al., trustees. (See Goddu, Louis, assignor.)						
Brooks, James W., trustee. (See Brown and McCoy, assignors.)						
Brooks, James W., trustee. (See Harrigan and Packard, assignors.)						
Brooks, James W., trustee. (See Packard, Jerome L., assignor.)						
Brooks, James W., trustee. (See Wead, Charles K., assignor.)						
Brooks, James W., trustee. (See Webster, Harold A., assignor.)						
Brooks, John, et al. (See Oliver, John S., assignor.)						
Brooks, John B., Birmingham, England. Cycle-saddle	484,289	Oct. 11	1165	296	61	250
Brooks, John B., Birmingham, England. Cycle-saddle	484,290	Oct. 11	1166	297	61	250
Brooks, John C., assignor of one-half to B. Eastwood, Paterson, N. J. Swivel-loom	471,665	Mar. 29	3099	788 789	58	1732
Brooks, John C., Paterson, N. J., assignor to G. Draper & Sons, Hopedale, Mass. Shuttle-supplying mechanism for looms	473,377	Apr. 19	2162	543 544	59	437
Brooks, John C., Paterson, N. J., assignor to G. Draper & Sons, Hopedale, Mass. Electric stop-motion for looms	473,378	Apr. 19	2166	544 545	59	437
Brooks, John C., Paterson, N. J., assignor to G. Draper & Sons, Hopedale, Mass. Loom-shuttle	473,414	Apr. 19	2226	559	59	449
Brooks Locomotive Works. (See Player, John, assignor.)						
Brooks, Luther F., Boston, Mass. Cuff-button	484,291	Oct. 11	1168	297	61	251
Brooks, Robert E. (See Abbott, Nathan M., assignor.)						
Brooks, Samuel H. (See Edge, James, assignor.)						
Brooks, Samuel H. (See Shaw, George, assignor.)						
Brooks, Sidney R., Uniontown, Pa., assignor of one-half to P. C. Sheldon, Allegheny, N. Y. Checkrein	480,865	Aug. 16	1779	445	60	952
Brooks, Texas, Harwood, assignor of one-half to G. W. Brooks, Luling, Tex. Plow-stock	485,254	Nov. 1	152	44	61	604
Brooks, Wash W. (See Crisp, James E., assignor.)						
Brooks, William S., Toronto, Canada. Saddle for bicycles	472,427	Apr. 5	655	167	59	123
Brooksbank, Frederick C., et al. (See Glossop, Gilbert, assignor.)						
Brooksbank, Frederick C., Cleveland, Ohio. Power-hammer	485,168	Nov. 1	14	4	61	576
Brooksbank, Frederick C., Cleveland, Ohio. Power-hammer	485,169	Nov. 1	16	5	61	576
Broom, Henry, assignor to A. Whiteley, Springfield, Ohio. Lawn-mower	487,711	Dec. 13	769	197 198	61	1490
Broomell, Henry, assignor to Rush & Gildemeyer Manufacturing Company, Philadelphia, Pa. Pencil-sharpener	466,734	Jan. 5	681	175	58	130
Brophy, Owen, assignor of one-third to J. J. Rooney, New Bedford, Mass. Clearer-roll for drawing-frames	487,693	Dec. 6	740	189	61	1467
Brorby, Jacob I. (See Opprud and Brorby.)						
Brosius, Alva C., Cochranville, Pa. Dehorning implement	480,246	Aug. 9	791	202	60	743
Brosius, J. M., et al. (See Wood, Albert A., assignor.)						
Brosnan, Cornelius J., assignor of three-fifths to F. M. Coe, H. A. Chapin, and L. W. Besse, Springfield, Mass. Bicycle-wheel lock	473,867	Apr. 26	2956	745	59	611
Brostrom, Carl F., assignor of one-half to W. S. Minty, Chicago, Ill. Oil-burner	476,445	June 7	341	77, 78	59	1504
Brothwell, John G., Torrington, Conn., assignor to Turner & Seymour Manufacturing Company, New York, N. Y. Extension-bracket	476,446	June 7	342	78	59	1504
Broughton, Charles A., Conway, N. H. Method of and machine for forming spool-blanks	488,421	Dec. 20	1963	490 491	61	1745
Broughton, William, Oberlin, Ohio. Brick and tile cutter	473,565	Apr. 26	2491	629	59	522
Brouillard, Anthony J., New Britain, Conn. Gong door-bell	475,960	May 31	3321	838	59	1335
Brousseau, Harry, and G. Patterson, Newberry, Mich. Valveless engine	477,041	June 14	1962	306	59	1703
Brouwer, Theophilus A., Jr., East Hampton, N. Y. Artist's sketching-screen	486,322	Nov. 15	1822	481	61	978
Brouwer, Theophilus A., Jr., East Hampton, N. Y. Screen for lamps or gas-lights	486,323	Nov. 15	1824	481	61	978
Brower, Bloomfield, New York, N. Y. Letter-tilt	473,448	Apr. 26	2281	576	59	482
Brower, John H., assignor of one-half to R. S. Sargent, Waupun, Wis. Wire-fence stay	475,717	May 24	2906	737	59	1241
Brower, John H., and H. C. Ross, assignors of one-third to F. L. Stiles, Minneapolis, Minn. Automatic envelope-feeder for type-writing machines	476,727	June 7	749	185	59	1586
Brower, Thaddeus B., Templeton, assignor of one-half to W. H. Scott, San Francisco, Cal. Car-coupling	487,694	Dec. 6	740	189	61	1467
Brown, A. W. (See Beyer, Augustus, assignor.)						
Brown, Albert F. (See Dougherty, Harvey H., assignor.)						
Brown, Alexander E., Cleveland, Ohio. Device for supporting flexible pipes	467,746	Jan. 26	2348	595	58	469
Brown, Alexander E., Cleveland, Ohio. Hoisting and conveying machine	474,494	May 10	979	252 253	59	836
Brown, Alexander F. G., Swindridge Muir, Dalry, Scotland. Rotary engine	478,843	July 12	1202	298	60	253
Brown, Alexander O., San Francisco, Cal. Book or music-leaf holder	484,292	Oct. 11	1169	298	61	251
Brown, Alexander T., Syracuse, N. Y. Vehicle-tire	474,589	May 10	1135	290	59	866
Brown, Alexander T., Syracuse, N. Y. Type-making machine	484,135	Oct. 11	908	232 233	61	200
Brown, Alexander T., Syracuse, N. Y. Type-writer cabinet	484,136	Oct. 11	911	234	61	201
Brown, Alexander T., and G. F. Stillman, Syracuse, N. Y. Pneumatic tire for vehicles	488,494	Dec. 20	2075	516	61	1769
Brown, Alfred H., et al. (See Gould, Samuel A., assignor.)						
Brown, Allen B., Los Angeles, Cal. Ventilator and drip-tray	468,786	Feb. 16	1377	348	58	813
Brown, Alvin M., and D. S. King, Hamilton, Mo. Hame	466,768	Jan. 12	740	192	58	151
Brown, Arthur F., assignor to Stoddard Manufacturing Company, Dayton, Ohio. Harrow	486,207	Nov. 15	1638	433 434	61	939
Brown, Arthur F., and W. R. Knaub, assignors to Stoddard Manufacturing Company, Dayton, Ohio. Horse hay-rake	478,083	July 5	13	4	60	5
Brown, Arthur F., and W. R. Knaub, assignors to Stoddard Manufacturing Company, Dayton, Ohio. Horse hay-rake	478,084	July 5	15	5	60	6
Brown, Arthur S. (See Robinson, Charles H., assignor.)						
Brown, Augustus P., Fort Madison, Iowa. Machine for slitting and winding paper	484,173	Oct. 11	978	250	61	214
Brown & Bailey. (See Brown, Robert P., assignors.)						
Brown, Benjamin F., Blackstone, Kans. Lamp-stove	480,395	Aug. 9	1043	262	60	792
Brown, Callum H., Nashville, Tenn. Shirt	478,082	July 5	12	3	60	5
Brown, Carver C., El Paso, Tex. Railway-construction car	487,045	Nov. 29	3011	775	61	1242
Brown, Charles, Naples, Italy, and G. J. Melms, Chicago, Ill. Electric locomotive	474,984	May 17	1769	448	59	1005
Brown, Charles A., Troy, N. Y. Boot or shoe	468,187	Feb. 2	428	106	58	608
Brown, Charles A., Troy, N. Y. Dry-board	468,188	Feb. 2	429	106	58	608
Brown, Charles D., Minneapolis, Minn. Safety attachment for overhead electric wires	472,784	Apr. 12	1186	304	59	237
Brown, Charles D., assignor of two-thirds to H. L. Munn and J. L. Stevens, Ames, Iowa. Alarm-clock	478,950	July 12	1347	334	60	282

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Brown, Charles F., <i>et al.</i> (See Flint, Edward, Jr., assignor.)						
Brown, Charles F., trustee. (See Keith, Thomas K., assignor.)						
Brown, Charles F., assignor to Royal Machine Company, Yonkers, N. Y. Cash register, indicator, and recorder.	474,791	May 10	1450	{ 368 369 370 371 706 707 708 }	59	929
Brown, Charles F., assignor to Royal Machine Company, Yonkers, N. Y. Cash register, indicator, and recorder.	481,524	Aug. 23	2874	{ 384 385 303 304 }	60	1173
Brown, Charles H., and A. B. McCoy, Burlington, N. J., assignors to J. W. Brooks, trustee, Cambridge, Mass. Heel-nailing machine.	477,098	June 14	1363	332	59	1723
Brown, Charles M., Chicago, Ill. Mowing-machine.	480,706	Aug. 16	1543	385	60	902
Brown, Charles M., Chicago, Ill. Process of and machine for soldering.	485,906	Nov. 8	1143	303	61	822
Brown, Charles M., Chicago, Ill. Process of and machine for soldering.	485,907	Nov. 8	1146	304	61	823
Brown, Charles M., and E. P. Holden, Chicago, Ill. Method of and machine for treating the margins of sheet-metal vessels.	479,181	July 19	1722	432	60	362
Brown, Charles R., and W. B. Collins; said Collins assignor to S. J. Dice, Weatherby, Mo. Pump.	468,324	Feb. 9	654	162	58	659
Brown, Charles T. (See Jackson, Henry, assignor.)						
Brown, Charles T. (See Wilson, David H., assignor.)						
Brown, Charles T., <i>et al.</i> (See Hebron, Charles B., assignor.)						
Brown, Chester F., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Brown, Clyde B., London, county of Middlesex, England. Boot or shoe.	470,316	Mar. 8	1064	{ 270 271 323 324 }	58	1313
Brown, Cyrus E., Homestead, Pa. Multiple-punch and laying-out machine.	480,557	Aug. 9	1292	{ 464 465 }	60	840
Brown, Daniel. (See Deats and Brown.)						
Brown, Daniel V., New York, N. Y. Puzzle.	471,941	Mar. 29	3528	901	58	1815
Brown, Darwin L., Detroit City, Minn. Tool-rest for grinding-machines.	483,042	Sept. 20	1828	{ 464 465 }	60	1720
Brown, Francis R., assignor to Globe Manufacturing Company, Denver, Colo. Car-coupling.	472,103	Apr. 5	145	39	59	27
Brown, Francis R., assignor, by mesne assignments, to Globe Manufacturing Company, Denver, Colo. Car-coupling.	472,249	Apr. 5	350	100	59	71
Brown, Frank O., Dallas, Tex. Apparatus for boring Artesian wells.	472,493	Apr. 5	758	193	59	144
Brown, Fred. H., assignor of one-half to S. F. Andrews, Chicago, Ill. Pocket coin-receptacle.	481,523	Aug. 23	2873	706	60	1173
Brown, Frederick H., Chicago, Ill., assignor of one-half to S. F. Andrews. Telephone.	481,138	Aug. 16	2233	550	60	1037
Brown, Frederick S., Hartford, Conn. Inkstand.	469,325	Feb. 9	655	162	58	660
Brown, Frederick T., Colorado Springs, Colo., assignor of one-half to W. F. Stearns, Cambridge, Mass. Device for preserving dried flowers.	472,980	Apr. 19	1486	380	59	310
Brown, Fredric M., Warren, R. I. Steam-actuated valve.	467,274	Jan. 19	1588	405	58	318
Brown, Fredrick H., West Pittston, Pa. Car-coupling.	468,739	Feb. 9	1298	330	58	788
Brown, George A., Bristol, Tenn. Boot.	480,363	Aug. 9	992	249	60	782
Brown, George F., Philadelphia, Pa. Waste-trap.	477,499	June 21	2021	501	59	1863
Brown, George F., Philadelphia, Pa. Siphon water-closet.	479,182	July 19	1726	432	60	363
Brown, George H., assignor to J. H. Tibbits, Long Island City, N. Y. Ribbon-holder.	480,556	Aug. 9	1290	323	60	840
Brown, George S., Forrestville, Conn., assignor to Bristol Brass and Clock Company, New York, N. Y. Wick-raiser.	483,279	Sept. 27	2232	561	60	1810
Brown, George T., <i>et al.</i> (See Howard, Frank P., assignor.)						
Brown, George T., Sedalia, Mo. Signal and stand.	483,420	Sept. 27	2434	612	60	1849
Brown, George W., Galesburg, Ill. Corn-planter.	474,363	May 10	781	{ 203 204 }	59	798
Brown, George W., and O. A. Johnson, Galesburg, Ill. Cultivator.	476,976	June 14	1164	282	59	1682
Brown, Gust A., Manley, Neb. Trace-carrier.	486,846	Nov. 29	2667	697	61	1174
Brown, Harold A., Lawrence, Kans. Dress-waist form.	478,368	July 5	389	94	60	78
Brown, Harvey, Brandt, Ohio. Pneumatic tire.	468,721	Feb. 9	1271	323	58	783
Brown, Harvey S., <i>et al.</i> (See Cabell, Samuel G., assignor.)						
Brown, Henry R. (See Whittier, Samuel, assignor.)						
Brown, Horace F., assignor to M. C. Brown, Butte City, Mont. Ore-roasting furnace.	471,264	Mar. 22	2521	{ 640 641 284 285 }	58	1615
Brown, Horace F., assignor to M. C. Brown, Butte City, Mont. Ore-roasting furnace.	474,573	May 10	1113	{ 284 285 }	59	862
Brown, Irving A., assignor to Malin & Company, Cleveland, Ohio. Sash-fastener.	485,606	Nov. 8	694	183	61	731
Brown, Isaac T., Columbus, Ind. Napkin-holder.	481,161	Aug. 23	2282	562	60	1060
Brown, James A., Sublette, Ill. Automatic watering-trough.	478,397	July 5	523	128	60	103
Brown, James D., Philadelphia, Pa. Machinery bearing.	484,993	Oct. 25	2320	599	61	506
Brown, James L., Philadelphia, Pa., H. D. Walton, Moorestown, N. J., and G. Rich, Philadelphia, Pa., assignors to Follmer, Clogg & Co. Machine for slotting, boring, and cutting umbrella-sticks.	466,321	Jan. 5	10	3, 4, 5	58	5
Brown, James S., Eureka, Cal. Neck-yoke.	487,112	Nov. 29	3120	800	61	1265
Brown, James W., assignor of one-half to J. M. Tryon, A. L. Sweet, and H. W. Blachly Van Wert, Ohio. Drive-chain.	466,735	Jan. 5	682	175	58	130
Brown, Jesse M., Bethel, Me. Spool-ronghing machine.	477,832	June 28	2575	{ 644 645 }	59	1989
Brown, John E., Washington Court-House, Ohio. Seam-pressing device.	476,606	June 7	573	137	59	1550
Brown, John E., Washington Court-House, Ohio. Beading and turning machine.	476,869	June 14	987	239	59	1647
Brown, John F., assignor to A. R. Baker, Indianapolis, Ind. File-binder.	475,750	May 31	2967	753	59	1266
Brown, John H. (See Beery, Samuel M., assignor.)						
Brown, John H., New York, N. Y., assignor to American Fiber Association, of Georgia. Machine for removing the fleshy matter from vegetable leaves.	471,097	Mar. 22	2263	{ 581 582 }	58	1567
Brown, John H., New York, N. Y., assignor to American Fiber Association, of Georgia. Apparatus for pressing and disintegrating fibrous material.	485,837	Nov. 8	1028	276	61	799
Brown, John M., and N. G. Boggs, Hamilton, Canada. Cornice and eaves-trough brake machine.	471,599	Mar. 29	3008	{ 765 766 }	58	1716
Brown, John S., Jersey City, N. J. Locking-bar for chases.	482,160	Sept. 6	393	93	60	1412
Brown, John S., Jersey City, N. J. Printer's chase.	487,710	Dec. 13	768	197	61	1490
Brown, John W., and A. A. Gehrt, assignors to Collins Plow Company, Quincy, Ill. Baling-press.	468,638	Feb. 9	1138	290	58	755
Brown, Joseph A., assignor of one-half to C. B. Ackerly, Riverhead, N. Y. Flue-stopper.	478,044	June 28	2907	726	59	2053
Brown, Julius C., Kansas City, Mo., assignor of one-half to T. R. Dawe, Santa Barbara, Cal. Nut-lock.	484,731	Oct. 18	1865	474	61	401

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & E.	Vol.	Page.
Brown, Kirk, Philadelphia, Pa. Inflatable tire for vehicle-wheels	485,605	Nov. 8	692	182	61	730
Brown, Laurice L., Patmos, Kans. Automatic transporter and exploder for explosives for aiding rain-fall.	473,820	Apr. 26	2877	722	59	596
Brown, Lewis, Landing, N. J., assignor to American Forcite Powder Manufacturing Company, New York, N. Y. Absorbent of nitro-glycerine	466,900	Jan. 12	971	.....	58	194
Brown, Lewis, Landing, N. J., assignor to American Forcite Powder Manufacturing Company, New York, N. Y. Nitro-glycerine blasting-powder	478,844	July 12	1203	.....	60	254
Brown, Lincoln F., Xenia, Ohio. Bridle-bit	484,994	Oct. 25	2321	509	61	506
Brown, Linus W., New Orleans, La. System for protecting riparian lands from overflow	488,422	Dec. 20	1965	491	61	1745
Brown, Linus W., New Orleans, La. Bagasse-carrier	488,423	Dec. 20	1967	491	61	1745
Brown, Martin A., Seattle, Wash. Toilet-paper holder	481,612	Aug. 30	3026	740	60	1217
Brown, Martin L. (See Gilstrap and Brown.)						
Brown, Mary. (See Toney, Squire, assignor.)						
Brown, Mary C. (See Brown, Horace F., assignor.)						
Brown, Millard F., Louisville, Ky. Combined spice-receptacle and flour-bin	466,394	Jan. 5	128	36	58	27
Brown, Millard F., and L. A. Berger, East Ringgold, Ohio. Means for operating pumps	471,942	Mar. 29	3529	{ 901 902 }	58	1815
Brown & Miller. (See Miller, Alexander, assignor.)						
Brown, N. Howland, et al. (See Bellati, Anthony J., assignor.)						
Brown, Nat E., Anoka, Minn. Sled-starter	473,905	May 3	11	3	59	639
Brown, Nehemiah H., Norwich, N. Y. Chimney-rack	487,601	Dec. 6	586	150	61	1438
Brown, Orlando, trustee. (See Molloy, Frank, assignor.)						
Brown, Oscar E., Buffalo, N. Y. Horseshoe	481,271	Aug. 23	2407	608	60	1096
Brown, Otis E., and P. Stetson, Brockton, Mass. Cut-off valve for engines	482,516	Sept. 13	1001	242	60	1545
Brown, Patrick, Buffalo, N. Y. Locomotive	486,555	Nov. 22	2170	573	61	1059
Brown, Percy H., Vesuvius Bay, British Columbia, Canada. Device for felling trees	468,384	Feb. 9	749	186	58	678
Brown, Perry, Sharonville, Ohio. Draw-bar attachment for cars	486,427	Nov. 22	1995	{ 529 530 }	61	1025
Brown, Philip C., Washington, D. C. House letter-box	482,292	Sept. 6	609	144	60	1454
Brown, Reuben H., New Haven, Conn. Rolling-machine	470,908	Mar. 15	1970	504	58	1498
Brown, Robert G., Kansas City, Kans. Coffee-pot	480,066	Aug. 2	492	125	60	676
Brown, Robert H., Jr., Rising Sun, Ind. Bottle	469,677	Mar. 1	11	5	58	1101
Brown, Robert P., assignor to Brown & Bailey, Philadelphia, Pa. Paper box	468,593	Feb. 9	1075	275	58	742
Brown, Robert S., assignor of one-half to F. G. Platt, New Britain, Conn. Universal coupling	481,780	Aug. 30	3311	809	60	1273
Brown, Sabin F., Denver, Colo. Gage	473,290	Apr. 19	2011	505	59	408
Brown, Sampson H., Lockhart, Tex. Device for marking goods	474,079	May 3	310	75	59	697
Brown, Samuel, Quincy, Ohio. Snap-hook	487,980	Dec. 13	1208	302	61	1578
Brown, Samuel H., assignor of one-half to M. McBarron, Boston, Mass. Annealing process	468,740	Feb. 9	1300	.....	58	789
Brown, Samuel S. (See Keil and Westerdahl, assignors.)						
Brown & Sharpe Manufacturing Company. (See Beale, Oscar J., assignor.)						
Brown & Sharpe Manufacturing Company. (See Carleton, Cyrus, assignor.)						
Brown & Sharpe Manufacturing Company. (See Phillips, Charles H., assignor.)						
Brown & Sharpe Manufacturing Company. (See Sylvia, George, assignor.)						
Brown, Stephen J., et al. (See Gibbons, John, assignor.)						
Brown, Theodore H., assignor of one-half to E. S. Goodell, Viroqua, Wis. Gang band-saw	487,658	Dec. 6	678	174	61	1456
Brown, Theodore P., Worcester, Mass. Music-desk for pianos	468,077	Feb. 2	253	62	58	573
Brown, Thomas E., Jr., New York, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Hydraulic elevator	487,709	Dec. 13	766	196	61	1490
Brown, Thomas S., Philadelphia, Pa., assignor to Fairmount Machine Company, of Pennsylvania. Friction let-off motion for looms	478,045	June 28	2908	726	59	2053
Brown, Thomas S., assignor to Adrians, Platt & Company, Poughkeepsie, N. Y. Mowing-machine	488,495	Dec. 20	2077	516	61	1769
Brown, Thomas W., Sardinia, S. C. Cotton-cultivator	468,300	Feb. 2	610	153	58	641
Brown, Tristram D. (See Lisk and Brown.)						
Brown, Tristram D., Clifton Springs, N. Y. Anti-rust vessel	469,991	Mar. 1	525	131	58	1200
Brown, Tristram D., Clifton Springs, N. Y. Pail, pan, wash-boiler, &c	480,555	Aug. 9	1290	323	60	840
Brown, Vories P., San Antonio, Tex. Padlock	482,070	Sept. 6	239	58	60	1382
Brown, Walter E. (See Frazer and Brown.)						
Brown, Willard F., Chicago, Ill. Combined cash drawer and recorder	470,742	Mar. 15	1715	442	58	1449
Brown, William. (See Hunt, Roland, assignor.)						
Brown, William, Reily Springs, Tex. Gate-latch	474,362	May 10	780	203	59	798
Brown, William E., Wilawana, Pa., and L. H. Smith, assignors of one-third to A. G. Miller, Elmira, N. Y. Railway-switch	488,263	Dec. 20	1701	425	61	1694
Brown, William H., Worcester, Mass. Instrument for drawing chords	488,327	Dec. 20	1807	453	61	1714
Brown, William J., Philadelphia, Pa. Hand nailing implement	482,540	Sept. 13	1044	252	60	1553
Brown, William J., Philadelphia, Pa. Device for holding metallic staples	483,374	Sept. 27	2368	593	60	1836
Brown, William J., Philadelphia, Pa. Staple-inserting device	488,308	Dec. 20	1773	{ 446 447 }	61	1707
Brown, William K., et al., executors. (See Buehler, Rudolph R., assignor.)						
Brown, William M., assignor to Johnson Company, Johnstown, Pa. Brace-chair for railway-rails	477,641	June 28	2272	569	59	1929
Brown, William N., Quincy, Ill. Account-file	474,287	May 3	618	153	59	757
Brown, William T., assignor of three-fourths to B. B. Fannin, R. T. Parsons, and J. M. Duvall, Sandy Hook, Ky. Churn-power	483,134	Sept. 27	1970	499	60	1760
Brown, William W., et al. (See Snyder, Charles A., assignor.)						
Brown, William Z., Hannibal, Mo. Window-blind	478,563	July 12	776	190	60	169
Brown, William Z., Atlas, Ill., assignor of one-half to G. Manewal, Bucklin, Mo. Post-hole digger	481,688	Aug. 30	3140	766	60	1239
Brown, Willis S., Belvidere, Ill. Feeding mechanism for sewing-machines	469,199	Feb. 16	2008	512	58	937
Browne, Arthur W. (See Johnston and Browne.)						
Browne, Benjamin F., assignor of one-half to A. C. Strickland, Anderson, S. C. Saw-gin	484,906	Oct. 25	2175	559	61	479
Browne, James E. (See Browne and Tidnam, assignors.)						
Browne, James E., and F. H. Tidnam, assignors to J. E. Browne, Elizabeth, N. J. Light-ning-arrester	475,482	May 24	2545	648	59	1172
Browne, James R., assignor to R. R. Hunt, J. M. Upfill, London, England, and W. J. Hunt, Wellington, New Zealand. Bottle or similar vessel	473,379	Apr. 19	2169	545	59	438
Browne, Josiah H., Salem, Mass. Car-coupling	480,803	Aug. 16	1687	{ 420 421 }	60	932
Browne, William G., and J. L. Benton, Meriden, Conn. Can-opener	475,222	May 17	2128	538	59	1076
Browne, William L., Worcester, Mass. Trolley-catcher	488,706	Dec. 27	2417	599	61	1850
Brownell Car Company. (See Baier, Frederick, assignor.)						
Brownell, Frank A., assignor to Eastman Company, Rochester, N. Y. Photographic-roll holder	477,243	June 21	1617	{ 395 396 }	59	1785

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Brownell, Frederick B., St. Louis, Mo. Street-car	481,467	Aug. 23	2793	687	60	1156
Brownell, Frederick B., St. Louis, Mo. Street-car	481,468	Aug. 23	2794	687	60	1156
Brownell, Frederick B., St. Louis, Mo. Street-car. (Reissue)	11,289	Nov. 29	3348	852	61	1306
Brownen, George. (See Welch and Brownen.)						
Brownfield, William H. (See Martin and Brownfield.)						
Browning, Charles E., Toledo, Ohio. Fountain-pen	477,854	June 28	2612	654	59	1995
Browning, John A., Iowa City, Iowa. Barrel-rack	469,119	Feb. 16	1890	483	58	914
Browning, John M., Ogden, Utah Ter., assignor to Winchester Repeating Arms Company, New Haven, Conn. Magazine-gun	486,274	Nov. 15	1759	463	61	965
Browning, John M. and M. S., Ogden, Utah Ter. Automatic magazine-gun	471,782	Mar. 29	3302	842	58	1770
Browning, John M. and M. S., Ogden, Utah Ter. Machine-gun	471,783	Mar. 29	3304	843	58	1770
Browning, John M. and M. S., Ogden, Utah Ter. Machine-gun	471,784	Mar. 29	3309	843	58	1772
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading firearm	486,272	Nov. 15	1750	461	61	963
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Breech-loading firearm	486,273	Nov. 15	1754	462	61	964
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Magazine-firearm	487,659	Dec. 6	679	175	61	1456
Browning, John M. and M. S., Ogden, Utah Ter., assignors to Winchester Repeating Arms Company, New Haven, Conn. Holder for cartridge-packs	487,660	Dec. 6	685	175	61	1457
Browning, Lewis S., Montreal, Canada. Fifth-wheel	474,332	May 3	717	187	59	775
Browning, Matthew S. (See Browning, John M. and M. S.)						
Browning, Robert S., Jr., and B. F. Battersby, Philadelphia, Pa. Combined tamper and shovel	474,495	May 10	981	253	59	837
Brownold, Maximilian, New York, N. Y. Keyboard attachment	469,647	Feb. 23	2696	693	58	1078
Broyer, Francois, and P. Petit, Tournus, assignors to Compagnie Francaise des Eaux-de-Vie L. Teillard, Paris, France. Apparatus for aging and rectifying alcoholic liquids by ozono	468,326	Feb. 9	656	162	58	660
Brubaker, Henry, et al. (See Lish, William H., assignor.)						
Bruce, Fred W., Mayport, Fla. Valve for engines	470,978	Mar. 15	2081	532	58	1519
Bruce, Robert. (See Foster, Joseph M., assignor.)						
Bruce, William B., Staunton, Va. Car-coupling	471,463	Mar. 22	2819	719	58	1672
Bruchmann, Frederick W. (See Prickett, Frank C., assignor.)						
Bruening, William, East Orange, N. J. Telephony	485,859	Nov. 8	1064	283	61	806
Bruening, William, East Orange, N. J. Apparatus for recording speech or other sounds	486,394	Nov. 15	1936	513	61	1000
Bruening, William, East Orange, N. J. Apparatus for recording speech or other sounds	486,608	Nov. 22	2270	592	61	1077
Brueninghausen, Edward W. (See Mahoney, James T., assignor.)						
Bruggeman, Herman. (See Bruggeman, John G. and H.)						
Bruggeman, John G. and H., Clyde, Ohio. Harness-saddle	480,996	Aug. 16	1985	497	60	991
Brühl, Christopher, Brooklyn, N. Y. Vessel-transporting apparatus	467,079	Jan. 12	1257	318	58	247
Bruhni, Friedrich W. G., Hamburg, Germany. Fare-registering apparatus for vehicles	485,529	Nov. 1	570	152	61	690
Brumbaugh, Joseph, Gold Hill, Oreg. Ore-crusher	469,120	Feb. 16	1891	484	58	914
Brunfield, Alonzo L., Paterson, N. J. Sign	484,174	Oct. 11	979	251	61	214
Brundage, Elias B., Brewster, N. Y. Window	469,463	Feb. 23	2429	623	58	1025
Bruner, Absalom, Arkoe, Mo. Spoke-tenon cutter	481,469	Aug. 23	2795	687	60	1156
Bruner, Andrew J., Madison, Mo. Garden-cultivator	467,149	Jan. 19	1401	356	58	283
Bruner, Andrew J., Madison, Mo. Garden-cultivator	487,113	Nov. 29	3122	801	61	1265
Bruner, Augustus, Indianapolis, Ind. Electric conduit	474,468	May 10	943	243	59	829
Bruner, Preston M., St. Louis, Mo. Fire-proof ceiling	469,121	Feb. 16	1292	484	58	914
Bruner, Preston M., St. Louis, Mo. Fireproof floor-arch	478,914	July 12	1295	322	60	272
Brünger, Hermann, Cunnersdorf, assignor to F. Salomon, Berlin, Germany. Lining digesters	483,826	Oct. 4	459	114	61	95
Brünger, Hermann, Cunnersdorf, assignor to F. Salomon, Berlin, Germany. Lining digesters	483,827	Oct. 4	461	115	61	95
Brünger, Hermann, Cunnersdorf, assignor to F. Salomon, Berlin, Germany. Digester	483,828	Oct. 4	463	116	61	95
Brunkhorst, August, A. Wieden, and C. T. Richards, assignors to Mesker & Bro., St. Louis, Mo. Building-front	478,974	July 12	1392	343	60	289
Brünler, Oscar, Eilenburg, assignor to I. M. Grob & Co., Entritzsch-Leipzig, Germany. Pump				344		
Brunnell, Arthur B., Worcester, Mass. Combined corer, parer, and slicer	480,707	Aug. 16	1546	385	60	903
Brunner, Andrew, New York, N. Y. Clothes-line supporting-link	475,031	May 17	1839	466	59	1018
Brunner, August, et al. (See Auchman, Ferdinand, assignor.)	488,868	Dec. 27	2666	660	61	1902
Bruno Nordberg Company. (See Nordberg, Bruno V., assignor.)						
Bruns, Henry H. (See Droste and Bruns.)						
Bruns, Heinrich, Bremerhaven, Germany. Lock	483,298	Sept. 27	2261	569	60	1815
Brunsmann, Anthony G., and H. H. Uckotter, Cincinnati, Ohio. Lazy-back for vehicle-seats	481,745	Aug. 30	3247	790	60	1260
Brunson, Courtland W., Hamilton, Ohio. Purifying liquids	479,781	Aug. 2	11	3	60	584
Brunson, Horace, Chicago, Ill. Paving-block	469,229	Feb. 23	2069	532	58	956
Brunswick-Balke-Collender Company. (See Bensinger, Moses, assignor.)						
Brunthaver, Charles E., Washington, D. C. Ball-bearing for screw-nuts	477,642	June 28	2273	569	59	1929
Brush, Charles F., Cleveland, Ohio. Ammeter	466,953	Jan. 12	1051	267	58	208
Brush Electric Company. (See Adams, Thomas E., assignor.)						
Brush Electric Company. (See Pfannkucho, Gustav, assignor.)						
Brush Electric Company. (See Pfannkucho, Gustav and A., assignors.)						
Brush, George E., Danbury, Conn. Machine for blocking and banding hats	475,662	May 24	2822	715	59	1226
Brusie, James. (See Jennings, Byron, assignor.)						
Brusie, James, Oakland, Cal. Pneumatic clutch	473,380	Apr. 19	2171	545	59	439
Bruso, Charles, Worcester, Mass. Sweeping-machine	480,231	Aug. 2	763	193	60	727
Bruso, John E., Worcester, Mass. Oven screen or mat	474,364	May 10	783	204	59	799
Bruzon, Richard, London, England. Boot or shoe	474,574	May 10	1116	285	59	863
Bryan, Anthony H., Evansville, Ind. Water-distributing apparatus	471,347	Mar. 22	2638	670	58	1639
Bryan, Henry, Modesto, Cal. Grain-cleaner attachment	468,069	Feb. 2	244	59	58	571
Bryan, William J. (See Smith and Bryan.)						
Bryant, Charles A., Wakefield, Mass. Button	482,959	Sept. 20	1696	426	60	1692
Bryant, Charles A., Wakefield, Mass., assignor to A. A. Wright, New York, N. Y. Hook and eye	487,209	Nov. 29	3267	835	61	1292
Bryant, Charles K. (See Doebler and Bryant.)						
Bryant, David N., Hoffman, Minn. Handle for brooms, umbrellas, dippers, &c	468,639	Feb. 9	1140	291	58	755

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'gt.	Vol.	Page.
Bryant, Ed. E., <i>et al.</i> (See Hoff, Peter, assignor.)						
Bryant, Emory A., Aspen, Colo. Dental-flask holder	476,125	May 31	3572	898	59	1386
Bryant, Emory A., assignor of one-half to E. P. Rose, Aspen, Col. Artificial denture	468,761	Feb. 9	1327	336	58	794
Bryant, Fred L. (See Briggs and Bryant.)						
Bryant, Fred L., Chicago, Ill. Machine for making coiled-wire fabric for bed-bottoms	482,071	Sept. 6	240	58, 59	60	1382
Bryant, George, San Francisco, Cal. Machine for grooving shoe-soles	483,319	Sept. 27	2292	576	60	1821
Bryant, George H., Newton, and V. Beauregard, Boston, Mass. Lifting-jack	486,528	Nov. 22	2136	564	61	1053
Bryant, Sallie P., Baltimore, Md. Cigarette-holder	486,429	Nov. 22	1999	530	61	1026
Bryant, Stanley A., <i>et al.</i> , administrators. (See Massey, Gideon B.)						
Bryant, Thomas W., Torrington, Conn. Skate. (Reissue)	11,217	Jan. 19	1914	489	58	381
Bryant, Thomas W., Torrington, Conn. Skate	475,926	May 31	3263	823	59	1324
Bryant, Thomas W., Torrington, Conn. Roller-skate	475,927	May 31	3264	823	59	1324
Bryant, William H., Brooklyn, N. Y. Bottle-filling apparatus	467,150	Jan. 19	1402	358	58	283
Bryant, William H., North Amherst, Ohio. Stone-channeling machine	471,265	Mar. 22	2524	641	58	1616
Bryant, William H., North Amherst, Ohio. Stone-channeling machine	486,847	Nov. 29	2668	698	61	1174
Bryce, John, and A. Knox, assignors to Glass and Metal Engraving Company, Limited, Glasgow, Scotland. Pantograph tracing and engraving machine	481,893	Aug. 30	3487	854 } 855	60	1307
Bryner, Isaac, Callaway, Nebr. Photographic dark-chamber	484,699	Oct. 18	1815	461	61	392
Bryon, William J. O., Jr., New York, N. Y. Air-cylinder	483,529	Oct. 4	18	4	61	7
Bryon, William J. O., Jr., New York, N. Y. Air-cylinder	483,529	Oct. 4	465	116	61	96
Bryon, William J. O., Jr., New York, N. Y. Combined pressure gage and register	487,515	Dec. 6	465	122	61	1413
Bryson, Andrew. (See Pendleton and Bryson.)						
Bryson, Andrew, Jr., New York, N. Y. Electric dispatch system	480,804	Aug. 16	1689	421	60	933
Bryson, Andrew, Jr., New York, N. Y. Automatic receiver for pneumatic or other dispatch systems	480,805	Aug. 16	1690	422	60	933
Bryson, Andrew, Jr., New York, J. H. Pendleton and A. R. Benn, Brooklyn, assignors to Rapid Transit Cable Company, New York, N. Y. Grip mechanism for duplex cables.	475,846	May 31	3135	795 } 796	59	1998
Bryson, John A. (See Leavitt and Bryson.)						
Buchanan, Alexander D., Long Island City, N. Y. Process of and apparatus for electroplating the hulls of vessels	469,538	Feb. 23	2547	655	58	1047
Buchanan, James, Indianapolis, Ind. Straw-elevator	467,476	Jan. 19	1895	484 } 485	58	377
Buchanan, James, Indianapolis, Ind. Thrashing-machine	467,477	Jan. 19	1897	485	58	378
Buchanan, John, <i>et al.</i> (See Stuart, James A., assignor.)						
Buchanan, John H., Ilkeston, England. Hymn-indicator	485,122	Oct. 25	2507	644	61	545
Buchanan, John W., Smithville, Ohio. Wire-reel	483,830	Oct. 4	467	116	61	96
Buchanan, John W., Smithville, Ohio. Wire fence	483,831	Oct. 4	467	116	61	96
Buchanan, Lawrence J. (See Page and Buchanan.)						
Buchanan, Louis A., St. Louis, assignor to H. A. Hyatt, Kirkwood, Mo. Burnisher	467,600	Jan. 26	2120	538	58	426
Buchbinder, Adolph W., Jr., Detroit, Mich. Opera-glass holder	477,643	June 28	2274	570	59	1930
Bucher, Clyde W., assignor of one-half to W. Rider, Independence, Mo. Trace-carrier	466,843	Jan. 12	866	221	58	175
Buchnau, William M., Columbia, Tenn. Thill-support	488,180	Dec. 20	1567	393	61	1668
Buchterkirchen, Henry C. W., Staunton, Ill. Car-loader	486,079	Nov. 15	1428	377	61	899
Buchwald, Elmer E., Erie, Pa. Railway-track gage	479,552	July 26	2345	585	60	498
Buchwalter, Calvin H., Philadelphia, Pa. Sponge-holder for washing negatives, &c	468,447	Feb. 9	839	212	58	697
Buck, Elijah. (See Wadsworth, Lester J., assignor.)						
Buck, Elijah, Marshall, Mich. Printer's rule-bender	478,085	July 5	17	6	60	6
Buck, Frederick A., Urbana, Ohio. Hollow-mandrel chuck	482,616	Sept. 13	1159	280	60	1574
Buck, Henry C., Somerville, Mass. Coil for electrical apparatus	486,926	Nov. 29	2831	733	61	1204
Buck, Julius W., assignor of one-half to W. R. Field, Greenville, Pa. Game apparatus	481,548	Aug. 30	2922	719	60	1198
Buck, R. M. (See Johnson, Ira H., assignor.)						
Buck, Taylor S., Brooklyn, N. Y. Hand-stamp	483,343	Sept. 27	2323	584	60	1827
Buckelew, Albert H., Jenkintown, assignor to Onderdonk Heating and Ventilating Company, Philadelphia, Pa. Adjustable miter-gage	467,852	Jan. 26	2512	636	58	500
Buckeye Car Seal and Manufacturing Company. (See Foote, Lewis A., assignor.)						
Buckhalter, Frederick, <i>et al.</i> (See Diebel, William, assignor.)						
Buckingham, Charles L., New York, N. Y. Printing-telegraph	487,981	Dec. 13	1209	302 } 303 } 304 } 305	61	1578
Buckingham, Charles L., New York, N. Y. Printing-telegraph	487,982	Dec. 13	1216	306 } 307 } 308 } 309	61	1579
Buckingham, Charles L., New York, N. Y. Printing-telegraph	487,983	Dec. 13	1222	305	61	1580
Buckingham, Charles L., New York, N. Y. Synchronous multiple telegraph	487,984	Dec. 13	1225	306	61	1581
Buckingham, Charles L., New York, N. Y. Printing-telegraph	487,985	Dec. 13	1228	306 } 307 } 308 } 309	61	1582
Buckingham, Charles L., New York, N. Y. Printing-telegraph	487,986	Dec. 13	1233	307	61	1582
Buckingham, James R., Mount Vernon, Ohio. Check-controlled lock	471,464	Mar. 22	2821	719	58	1673
Buckingham, John L., Hermosa, S. D. Wire-tightener	468,189	Feb. 2	430	106	58	608
Buckingham, John L., Hermosa, S. D. Wire-tightener	482,035	Sept. 6	184	44	60	1371
Buckland, Harry W., assignor of one-half to A. Baird, Waterbury, Conn. Drill and eccentric chuck	488,382	Dec. 20	1901	476	61	1732
Buckley, Alfred P., Philadelphia, Pa. Game apparatus	483,895	Oct. 4	552	139	61	114
Buckley, Benjamin F., Elgin, Ill. Can-tester	469,396	Feb. 23	2321	597 } 598	58	1004
Buckley, Fred L., Annin Creek, Pa. Washing-machine	482,036	Sept. 6	185	44	60	1371
Buckley, John, Eureka, Cal. Cable logging-machine	481,927	Sept. 6	9	3	60	1336
Buckley, John W., <i>et al.</i> (See Whitworth, Charles E., assignor.)						
Buckley, Robert C., Peoria, Ill. Straddle-row cultivator	486,027	Nov. 8	1341	356	61	864
Buckley, Timothy. (See Doyle, William J. C., assignor.)						
Buckley, William H., Jr., Philadelphia, Pa. Milk-can	468,594	Feb. 9	1076	275	58	743
Buckner, Charles, assignor of one-fourth to M. Stein, San Francisco, Cal. Zither	466,878	Jan. 12	936	240	58	187
Buckner, James, Boston, Mass. Apparatus for covering wire with fibrous material	483,043	Sept. 20	1830	465	60	1721
Buckner, James, assignor of one-half to G. W. Hollis, Boston, Mass. Apparatus for manufacturing ice	485,149	Oct. 25	2552	655 } 656	61	554
Buckner, Thomas B. (See Hall, James F., assignor.)						
Buckwell, William, Brighton, England. Apparatus for the transference of hydrocarbon oils	476,977	June 14	1166	282	59	1683
Bucyrus Steam Shovel and Dredge Company. (See Douglas, William M., assignor.)						
Buda Foundry and Manufacturing Company. (See Smyser, Louis B., assignor.)						
Budde, Otto. (See Gerstenkorn, Paul, assignor.)						
Buddenberg, Henry C., Cincinnati, Ohio. Catch-basin water-closet	486,428	Nov. 22	1997	530	61	1025
Budington, Albert G., Austin, Tex. Railway-tie	479,625	July 26	2445	610	60	516
Budlong, Simeon, Cumberland Hill, R. I. Removable horseshoe-calk	466,884	Jan. 12	945	241	58	189
Budlong, Simeon, Cumberland, R. I. Belt-fastener	471,518	Mar. 22	2891	736	58	1687
Buechle, Theodore, Dubuque, Iowa. Wardrobe	470,152	Mar. 1	756	188	58	1246

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Buehl, Hermann, Philadelphia, Pa. Confectionery or other box	487,085	Nov. 29	3979	791	61	1256
Buehler, Rudolph R., Philadelphia, Pa., assignor to T. Devlin, L. J. McGrath; and W. K. Brown and C. A. McGrath, executors of W. V. McGrath, deceased. Transom-lifter	466,486	Jan. 5	280	71	58	54
Buel, Ed. M. (See Fish, Perry J., assignor.)						
Buell, Lillian H., Boston, Mass. Clasp	474,156	May 3	416	100	59	719
Buell, Samuel K., Worcester, Mass. Brake-shoe	484,404	Oct. 18	1349	344	61	298
Buence, Samuel W., Argentine, and A. Bash, Turner; said Buence assignor to G. A. Taylor, Argentine, Kans. Saw-set	481,221	Aug. 23	2377	585	60	1080
Buesching, Fredrick. (See Nye, Herman M., assignor.)						
Buese, Louis, and J. Cowling, Republic, Mich. Rod-coupling	483,896	Oct. 4	553	140	61	115
Buesing, Herman F. (See Buesing, Louis and H. F.)						
Buesing, Louis and H. F., Waverly, Iowa. Wagon end-gate	466,885	Jan. 12	947	242	58	189
Buesing, Louis and H. F., Waverly, Iowa. End-gate for wagon-bodies	466,886	Jan. 12	950	242	58	190
Buff, Joseph, Columbus, Ohio. Hand-stamp	466,080	Nov. 15	1429	378	61	899
Buffalo Automatic Machine Company. (See Dutton, William H., assignor.)						
Buffham, Louis L., Racine, Wis. Vehicle-pole	483,531	Oct. 4	22	5	61	7
Buffinton, Elisha W., assignor of one-half to A. F. Dow, Fall River, Mass. Rosette for electric lighting	480,915	Aug. 16	1853	462	60	967
Buford, Jefferson L., Birmingham, Ala. Roundabout	483,530	Oct. 4	20	5	61	7
Buford, Paschal, Bryan, Tex. Tea-chest	469,122	Feb. 16	1894	484	58	915
Bugbee, Fred A., Auburn, N. Y. Sole-machine	480,317	Aug. 9	920	232 233	60	769
Bugbee, George C., North Attleborough, Mass. Manufacturing articles of jewelry	469,496	Feb. 23	2483	637	58	1035
Bugbee, George W., and F. Danner, assignors to Egan Company, Cincinnati, Ohio. Rip-saw machine	470,357	Mar. 8	1140	292	58	1326
Bugbee, George W., and F. Danner, assignors to Egan Company, Cincinnati, Ohio. Planing-machine table	470,358	Mar. 8	1142	292	58	1326
Bugbee, George W., and F. Danner, assignors to Egan Company, Cincinnati, Ohio. Planing-machine	470,359	Mar. 8	1143	292 293	58	1327
Bugbee, George W., Delhi, and F. Danner, Home City, assignors to Egan Company, Cincinnati, Ohio. Tenoning-machine	479,389	July 19	2059	514 515	60	429
Bugbee, George W., Delhi, and F. Danner, Home City, assignors to Egan Company, Cincinnati, Ohio. Fence for wood-working machines	480,902	Aug. 16	1839	457	60	961
Buhl & Co., Walter. (See Ashbaugh, Charles C., assignor.)						
Buhlmann, Georg, Berlin, Germany. Warp-knitting machine	484,844	Oct. 25	2077	534	61	458
Buhmeier, Henry T., Elgin, Ill. Window-blind	479,398	July 26	2080	521 522	60	447
Buhoup, Harry C., Chicago, Ill. Railway-car	466,975	Jan. 12	1085	274 275	58	214
Buhoup, Harry C., Chicago, Ill. Car-coupling	467,680	Jan. 26	2232	568 569	58	447
Buhoup, Harry C., Chicago, Ill. Car-coupling	480,839	Aug. 16	1737	434	60	943
Buhoup, Henry C., Chicago, Ill., assignor to W. McConway, Pittsburg, Pa. Car coupling and buffing mechanism	488,496	Dec. 20	2079	516 517	61	1770
Buhoup, John J., assignor of three-fourths to M. A. and W. J. Sheppard, Cleveland, Ohio, and R. B. Tate, Pittsburg, Pa. Oil-burner	477,193	June 14	1509	370	59	1753
Buhrman, Edward R., Cincinnati, Ohio. Automatic air-vent for casks	488,160	Dec. 13	1550	384	61	1644
Buisson, Ignace, New York, N. Y. Latch and lock combined	488,750	Dec. 27	2480	616	61	1863
Baker, Alpha, Hueneme, Cal. Carriage-curtain fastener	480,067	Aug. 2	493	125	60	676
Bulasky, Louis, New York, N. Y. Hat-trimming machine	482,541	Sept. 13	1045	252	60	1583
Bulford, John H., et al. (See Griffin, Thomas W., assignor.)						
Bull, Daniel H., Greenville, S. C. Cultivator	470,979	Mar. 15	2083	533	58	1520
Bull, Horace N., D. Dickey, and H. F. Hutton, Ennis, Mont. Snap-hook	470,980	Mar. 15	2084	533	58	1520
Bull, James E., Tracy City, Tenn. Horseshoe	472,520	Apr. 12	806	207	59	166
Bullard, Edgar R., Wheeling, W. Va. Diaphragm for photographic lenses	483,135	Sept. 27	1971	499	60	1760
Bullard, Frederick H., Chicopee, Mass., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Safe-bolt work	488,817	Nov. 22	2610	679 680	61	1148
Bullard, Frederick H., and F. Harrington, Chicopee, Mass. Elastic tire for vehicle-wheels	478,564	July 12	777	190	60	169
Bullard, James H., Springfield, Mass. Combined liquid receptacle and pump	480,068	Aug. 2	494	126	60	676
Bullard, James H., Springfield, Mass. Pneumatic tire	483,344	Sept. 27	2324	584	60	1827
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Apparatus for burning hydrocarbon. (Reissue.)	11,236	Apr. 26	3016	760	59	623
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon-burning apparatus	483,099	Sept. 20	1913	484	60	1738
Bullard, James H., assignor to Aerated Fuel Company, Springfield, Mass. Hydrocarbon-burning apparatus	483,100	Sept. 20	1914	484	60	1738
Bullard, Otis B., Washington, D. C. Violin attachment	467,768	Jan. 26	2378	605	58	475
Bullivant, William P., London, England. Torpedo-defense	466,976	Jan. 12	1087	275	58	215
Bullock, Edward A., Bellefonte, Pa. Floor-jack	481,470	Aug. 23	2796	688	60	1157
Bullock, Edwin B. (See Blaney, William H., assignor.)						
Bullock, Edwin B., Attleborough, Mass. Ornamental chain link or tip	474,792	May 10	1459	371	59	931
Bullock, Harrison W. (See Bradley, James, assignor.)						
Bullock, Lothrop L. (See Mullaly and Bullock.)						
Bullock, Milan C. (See Douglass, Samuel W., assignor.)						
Bullock, Milan C., Chicago, Ill. Valve-gear for steam-engines	473,906	May 3	13	4	59	639
Bullock, Milan C., Chicago, Ill. Rock-core drill	473,908	May 3	20	4, 5	59	640
Bullock, Milan C., Chicago, Ill. Rock-drilling apparatus	473,909	May 3	25	5	59	641
Bullock, Milan C., Chicago, Ill. Rock-core drilling	473,910	May 3	28	6	59	642
Bullock, Milan C., and S. W. Douglass, Chicago, Ill.; said Douglass assignor to said Bullock. Drilling apparatus	473,907	May 3	16	4	59	640
Bullock, Milan C., and S. W. Douglass, Chicago, Ill.; said Douglass assignor to said Bullock. Rock-drilling apparatus	474,080	May 3	311	75	59	697
Bulmer, George D., assignor of one-half to F. Norris, Duquesne, Pa. Hydraulic-crane mechanism	477,621	June 21	2234	558 559	59	1905
Bültzingslöwen, Bruno von, assignor of one-half to M. Rodding, New York, N. Y. Pocket-knife	472,104	Apr. 5	147	40	59	28
Bültzingslöwen, Bruno von, assignor of one-half to A. Weck, New York, N. Y. Pocket-knife	476,245	June 7	19	4	59	1442
Bumant, Theodore, Bunker Hill, Ill. Oil-can and siphon-pump	486,760	Nov. 22	2511	655	61	1127
Bunce, Levi P., assignor of one-eighth to W. Heggan, Minneapolis, Minn. Closed conduit for electric railways	482,993	Sept. 20	1750	442	60	1703
Bunch, Henry G., New York, assignor to D. L. Dresser, Flushing, N. Y., and E. R. Goodridge, Newport, R. I. Decorating fabrics	476,033	May 31	3422	864	59	1356
Bunch, Nazareth, Washington, D. C. Printer's combination-tool	468,595	Feb. 9	1078	276	58	743

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Bundy Manufacturing Company. (See Bundy, Willard L., assignor.)						
Bundy, Willard L., assignor to Bundy Manufacturing Company, Binghamton, N. Y. Workmen's time-recorder	482,293	Sept. 6	611	{ 144 145 146 }	60	1454
Bundy, Willard L., assignor to Bundy Manufacturing Company, Binghamton, N. Y. Workman's time-recorder	486,028	Nov. 8	1342	{ 356 357 358 }	61	864
Bundy, Willard L., assignor to Bundy Manufacturing Company, Binghamton, N. Y. Watchman's time-recorder	488,687	Dec. 27	2390	{ 592 593 }	61	1845
Bunger, John. (See Bauer, Harry, and Bunger.)						
Bunker, Harman, assignor of one-half to J. H. McKeggie, Barrie, Canada. Clutch	488,383	Dec. 20	1903	476	61	1733
Bunker, Harman, Barrie, Canada, assignor to M. J. Althouse, Waupun, Wis. G. T. Blackstock and J. C. McKeggie, Toronto, and J. H. McKeggie, Barrie, Canada. Door-closer	483,989	Oct. 11	706	178	61	160
Bunker, William I., La Grange, Ill. Wheel	466,598	Jan. 5	459	118	58	89
Bunker, William I., La Grange, Ill. Velocipede	469,024	Feb. 23	2667	686	58	1072
Bunker, William I., La Grange, Ill. Saddle for bicycles	471,417	Mar. 22	2753	703	58	1660
Bunker, William I., La Grange, Ill. Rocking-chair attachment	477,501	June 21	2025	502	59	1864
Bunker, William I., La Grange, Ill. Wheel	477,502	June 21	2026	502	59	1864
Bunker, William I., La Grange, Ill. Flexible tube	477,503	June 21	2027	502	59	1864
Bunker, William I., La Grange, Ill. Wheel-guard	477,504	June 21	2028	503	59	1864
Bunker, William I., La Grange, Ill. Wheel	477,505	June 21	2029	503	59	1865
Bunker, William I., La Grange, Ill. Wheel	477,506	June 21	2030	503	59	1865
Bunker, William I., La Grange, Ill. Spring	488,060	Dec. 13	1371	340	61	1612
Bunker, William I., La Grange, Ill. Vehicle-tire	488,061	Dec. 13	1372	341	61	1612
Bunker, William O., Nevada, Mo. Swing	487,246	Dec. 6	15	5	61	1324
Bunn, Simeon, Belleville, Ill. Furnace	472,697	Apr. 12	1066	275	59	215
Bunnell, Francis A., assignor to C. C. Bradley and M. E. Bunnell, Syracuse, N. Y. Apparatus for purifying water	469,770	Mar. 1	160	42	58	1131
Bunnell, Mary E., et al. (See Bunnell, Francis A., assignor.)						
Bunnell, Morton G. (See Himman and Bunnell.)						
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Machine for making and repairing roads	469,771	Mar. 1	161	43	58	1132
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Road-working machine	479,700	July 26	2569	{ 639 640 }	60	539
Bunnell, Morton G., assignor to F. C. Austin, Chicago, Ill. Machine for making and repairing roads	488,112	Dec. 13	1448	364	61	1628
Bunnell, Sadie A. (See Vanderbilt, Henry V., assignor.)						
Bunsen, William M., Galesville, assignor of one-half to J. W. Skinner, La Crosse, Wis. Blow-gun	477,322	June 21	1745	427	59	1809
Bunt, Ocran D., Bowdon, Ga. Plow	467,853	Jan. 26	2513	636	58	501
Bunting, William, Jr., Flushing, assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Water-closet apparatus	474,985	May 17	1773	448	59	1005
Buob, Frederick. (See Reed and Buob.)						
Burbank, Arthur, et al. (See Wilson, Robert R., assignor.)						
Burbank, John C., Jonesborough, Ark., assignor of one-half to N. T. Shotwell, West Plains, Mo. Car-coupling	468,327	Feb. 9	658	163	58	660
Burbridge, William R., Danbury, Nebr. Weed-cutting cultivator	484,405	Oct. 18	1351	345	61	299
Burch, Samuel H., Russellville, Ark. Animal-trap	472,832	Apr. 12	1276	327	59	255
Burch, Theodore W. (See Tanner and Burch.)						
Burchell, Robert T., Trenton, N. J. Stove-lid	466,999	Jan. 12	1122	284	58	221
Burchinal, Thomas L., Morgantown, W. Va. Spirit-level	478,309	July 5	390	94	60	78
Burden, William H., Cleveland, Ohio. Smoke-consumer	472,981	Apr. 19	1487	380	59	310
Burdett, George. (See Lambur and Burdett.)						
Burdett, J. B. (See Rowntree, Harold, assignor.)						
Burdge, Robert H., Kansas City, Mo. Clothes-drier	472,188	Apr. 5	279	73	59	53
Burdick, Charles L., Chicago, Ill. Air-brush	474,157	May 3	417	101	59	719
Burdick, Charles L., Chicago, Ill. Air-brush	474,158	May 3	420	101	59	720
Burdick, Hiram M. (See Ward and Burdick.)						
Burdick, Justin H., Milton, assignor to Elastic Nut Company, Milwaukee, Wis. Nut	469,678	Mar. 1	13	5	58	1101
Burdick, Lindon P., Minneapolis, Minn. Ice-cream freezer	477,184	June 14	1495	366	59	1750
Burdin, Scott K., Toledo, Ohio. Trial-balance book	470,470	Mar. 8	1325	{ 344 345 }	58	1360
Burdon, David P., assignor of one-half to P. Sattelkan, Jacksonville, Fla. Steam vacuum-pump	482,072	Sept. 6	244	59, 60	60	1383
Burdon, David P., and S. Honston, Jacksonville, Fla. Air-compressor motor	471,766	Mar. 29	3266	843	58	1764
Burg, Lewis, Dallas City, Ill. Wagon-bolster	475,292	May 24	2237	576	59	1113
Burger, Celia, Wichita, Kans. Dress-stay	470,660	Mar. 15	1590	414	58	1424
Burger, Franz, Sterling, Ill., assignor of one-half to H. M. Williams, Fort Wayne, Ind. Application of differential power	477,736	June 28	2412	603	59	1959
Burgess, Alfred C., assignor of one-half to H. V. Burgess, Greensborough, N. C. Bail	470,391	Mar. 8	1198	306	58	1336
Burgess, Andrew, Owego, N. Y. Breech-loading magazine-gun	476,246	June 7	21	5	59	1443
Burgess, Andrew, Owego, N. Y. Magazine-firearm	478,220	July 5	238	59	60	49
Burgess, Andrew, Owego, N. Y. Magazine-firearm	478,221	July 5	243	59, 60	60	50
Burgess, Andrew, Owego, N. Y. Magazine-firearm	478,222	July 5	245	60	60	50
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob attachment	472,725	Apr. 12	1102	284	59	221
Burgess, Charles M., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sash-cord guide	487,712	Dec. 13	772	198	61	1491
Burgess, Edward A., New Haven, Conn. Pin-sticking machine	481,746	Aug. 30	3250	791	60	1261
Burgess, George, Jr., Sheffield, England. Bottle-washing machine	476,126	May 31	3573	{ 898 899 900 }	59	1386
Burgess, Henrietta V. (See Burgess, Alfred C., assignor.)						
Burgess, James S., Marathon, N. Y. Extension-ladder	487,469	Dec. 6	398	102	61	1399
Burgess, Joseph E. (See Russell, Irvin A., assignor.)						
Burgess, Melancthon, St. George, Utah Ter. Washing-machine	481,102	Aug. 16	2167	537	60	1025
Burgess, Neilson. (See Knell, James W.)						
Burgher, Charles, Newton, Mass. Automatic fire-alarm system	475,925	May 31	3260	823	59	1323
Burgis, Charles C., and R. T. Garrett, Leamington, England. Cash-carrier	467,396	Jan. 19	1770	{ 451 452 }	58	352
Burgnor, Daniel F., Horse Creek, Tenn. Violin	483,897	Oct. 4	555	140	61	115
Burgon, Charles, Malin Bridge, near Sheffield, England. Animal-shears	466,860	Jan. 12	896	229	58	179
Burgon, Charles and H., Malin Bridge, near Sheffield, England. Animal-shears	468,217	Feb. 2	464	115	58	616
Burgon, Charles and H., Malin Bridge, near Sheffield, England. Animal-shears	480,997	Aug. 16	1986	497	60	991
Burgon, Charles and H., Malin Bridge, England. Animal-shears	481,844	Aug. 30	3411	837	60	1292

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Burgon, Harry. (See Burgon, Charles and H.)						
Burke, Ashbel C., Gypsum, assignor to D. A. Scott, Catawba Island, Ohio. Fruit-sizer.	482,294	Sept. 6	614	146	60	1455
Burke, Edward R. (See Burke, Melancthon T., assignor.)						
Burke, Frank S. (See Griggs, George B., assignor.)						
Burke, Ira N. (See Burke, Jabez N. and I. N.)						
Burke, Jabez N. and I. N., Forest Hill, Cal. Elastic trace connection.	472,783	Apr. 12	1185	303	59	237
Burke, James E., assignor to J. W. Sefton Manufacturing Company, Anderson, Ind. Paper box.	488,059	Dec. 13	1370	340	61	1612
Burke, James V., Chicago, Ill. Steam-boiler furnace.	487,602	Dec. 6	586	150 151	61	1438
Burke, Mary C., Montpelier, Idaho. Washboard.	475,663	May 24	2825	715	59	1927
Burke, Melancthon T., assignor of one-half to E. R. Burke, La Crosse, Wis. Horse-collar.	471,600	Mar. 29	3009	766	58	1716
Burke, Ricard O., et al. (See Dyer, Isaac T., assignor.)						
Burke, Stephen E., Edon, Ohio. Whiffletree.	472,853	Apr. 12	1277	327	59	255
Burke, Thomas H., and R. D. Fassett, Chillicothe, Mo. Nut-lock.	467,027	Jan. 12	1166	296	58	230
Burke, William P., Edina, Mo. Band-cutter and feeder.	487,987	Dec. 13	1237	308	61	1583
Burkhard, Theodore F., San Francisco, Cal. Whip-socket and rein-holder.	478,310	July 5	391	94	60	79
Burkhardt, Thomas, Brooklyn, N. Y. Confectioner's kettle.	476,917	June 14	1068	257	59	1663
Burkhardt, Frank P., Spokane Falls, Wash. Mechanical movement.	470,176	Mar. 8	819	202	58	1267
Burkhardt, John, assignor to W. H. Jackson & Co., New York, N. Y. Forming hollow balls, &c., from sheet metal.	480,708	Aug. 16	1547	385	60	903
Burkhardt, Richard P., Dayton, Ohio. Process of and machine for bending and drying wood.	482,782	Sept. 20	1425	353	60	1639
Burkhead, Henry C., Summit, assignor of one-half to M. S. Van Meter, Meeting Creek, Ky. Crate.	483,101	Sept. 20	1916	485	60	1738
Burkholder, John, assignor of one-half to D. Jennings, Centreburg, Ohio. Pump.	475,847	May 31	3141	796 797	59	1300
Burkman, Walfrid, San Francisco, Cal. Clay-reducer.	475,483	May 24	2547	648 649	59	1172
Burkman, Walfrid, San Francisco, Cal. Brick-machine.	478,915	July 12	1297	322 323	60	272
Burks, Thomas J. (See Elkins, William F., assignor.)						
Burleigh, Charles B. (See Lean and Burleigh.)						
Burleigh, Joseph A., Gilford, N. H. Making stockings.	475,263	May 17	2192	559	59	1088
Burley, George H., assignor of one-half to J. Burley, Tyrope, Pa. Radiator-loop.	468,640	Feb. 9	1142	291	58	755
Burley, Joshua. (See Burley, George H., assignor.)						
Burley, Thomas W. (See Bezer and Burley.)						
Burling, William S., and H. G. Bird, Chicago, Ill. Side bearing for cars.	473,610	Apr. 26	2564	646	59	536
Burlingame, Isaac, Fremont, Wash. Indicator for sawmill-carriages.	471,943	Mar. 29	3531	902	58	1816
Burlingham, Samuel. (See Lee, Joseph W., assignor.)						
Burmeister, Paul, assignor to A. Rocholl, Berlin, Germany. Calendar.	466,395	Jan. 5	130	37	58	27
Burnam, Felder A., Medina, N. Y. Umbrella.	484,773	Oct. 25	1949	497	61	432
Burnap, Charles F., Warren, Ohio. Steam cooking utensil.	475,435	May 24	2467	629	59	1156
Burnet Machine Company. (See Burnet, Robert, assignor.)						
Burnet, Robert, East Orange, N. J. Machine for stitching with staples.	481,747	Aug. 30	3252	792	60	1261
Burnet, Robert, assignor, by mesne assignments, to Burnet Machine Company, East Orange, N. J. Bookbinding-machine.	481,894	Aug. 30	3491	855 856	60	1307
Burnet, Robert, and T. S. Crane; said Burnet assignor, by mesne assignments, to S. Burnet, East Orange, N. J. Automatic paper-feeder.	467,128	Jan. 12	1353	345	58	266
Burnet, Sarah. (See Burnet and Crane, assignors.)						
Burnett, George S., and T. Sweeney, San Francisco, Cal. Currycomb.	472,521	Apr. 12	807	208	59	166
Burnett, Henry D., Lynn, and S. E. Doane, Swampscott, Mass., assignors to Thomson-Houston Electric Company, of Connecticut. Seal for leading-in wires.	475,998	May 31	3373	850	59	1345
Burnotti, William, et al. (See Sleno, Leonard, assignor.)						
Burnett, William H., Danbury, Conn. Puzzle.	474,627	May 10	1193	303	59	877
Burnett, William P., assignor of one-half to H. E. Twitchell, Hamilton, Ohio. Napkin-adjuster.	488,140	Dec. 13	1490	375	61	1636
Burnette, Eugene T., Haywards, Cal. Preserving eggs.	479,970	Aug. 2	312		60	641
Burnham, Frank A., assignor to Battle Creek Machinery Company, Battle Creek, Mich. Steam, water, or fluid valve.	469,230	Feb. 23	2070	532	58	956
Burnham, Ozro H., Oakland, and J. J. Meyers, San Francisco, Cal. Refrigerator.	471,944	Mar. 29	3532	903	58	1816
Burnham, Walter, Chicago, Ill. Steam-loop connection for steam-engines.	474,437	May 10	892	232	59	821
Burnham, Walter, Chicago, Ill. Steam-loop connection for engines.	474,438	May 10	894	232	59	821
Burnham, Walter, Chicago, Ill. Steam-loop system.	474,439	May 10	895	232 233	59	821
Burnham, Walter, Chicago, Ill. Combined steam-loop.	474,440	May 10	898	233 234	59	822
Burnham, Walter, Chicago, Ill. Steam-radiator governor.	474,441	May 10	905	234	59	822
Burnley, William, North East, Pa. Galvanic battery.	471,945	Mar. 29	3533	903	58	1816
Burns & Barclay Company. (See Loch, Joseph, assignor.)						
Burns, Charles F., et al. (See Kirby, James A., assignor.)						
Burns, David, Muskegon, Mich. Roller-case for sawmills, &c.	484,490	Oct. 18	1490	379	61	325
Burns, James A., Homestead, Pa. Housing for rolls.	469,397	Feb. 23	2323	598	58	1005
Burns, James A., Homestead, Pa. Lock-strike.	469,398	Feb. 23	2324	598	58	1005
Burns, James A., Homestead, Pa. Mill appliance.	482,861	Sept. 20	1530	380 381	60	1661
Burns, James H., Spokane, Wash. Device for preventing railway-rails from spreading.	480,998	Aug. 16	1987	497	60	992
Burns, John. (See Bigland and Burns.)						
Burns, John, Los Angeles, Cal. Fruit-cutting machine.	466,453	Jan. 5	232	59	58	44
Burns, John, Los Angeles, Cal. Fruit-cutting machine.	484,995	Oct. 25	2322	599	61	506
Burns, Priscilla M., and N. C. Bartholomew, St. Louis, Mo. Corset-fastening.	470,541	Mar. 8	1421	371	58	1380
Burns & Sons, Jabez. (See Seip, Thomas A., assignor.)						
Burns, Robert. (See Anderson, William A., assignor.)						
Burns, Thomas. (See Pavver and Burns.)						
Burns, Thomas, Edinburgh, Scotland. Apparatus for scouring and washing skins, &c.	478,499	July 5	667	163	60	132
Burr, Augustus W. (See Richards and Burr.)						
Burr, George S., and J. M. Cummings, Schochoh, Ky. Land-roller attachment.	475,291	May 24	2236	576	59	1113
Burr, George W., and M. Malony, Webster, Mass. Machine for napping cloth.	484,700	Oct. 18	1817	462	61	392
Burr, Theodore. (See Heath and Burr.)						
Burr, William, et al. (See Murray, Stephen D., assignor.)						
Burrell & Co., D. H. (See Hart, Frederick, assignor.)						
Burrell & Co., D. H. (See Wormsley, William, assignor.)						
Burrell, David H. (See Frederiksen, Johan D., assignor.)						
Burrell, David H., Little Falls, N. Y. System of heating.	480,903	Aug. 16	1840	457 458	60	964

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	De'g.	Vol.	Page.
Burrell, Presto, Blackfoot, Idaho. Hay-elevator	486,848	Nov. 29	2669	698	61	1175
Burris, Edward, <i>et al.</i> (See Ford, Charles S., Jr., assignor.)						
Burris, James W., Uvalde, Tex. Blank book	473,291	Apr. 19	2012	506	59	408
Burris, James W., Uvalde, Tex. Blank book	477,166	June 14	1468	360	59	1744
Burritt, Harvey, Elk Point, S. D. Hoe	470,981	Mar. 15	2084	533	58	1520
Burritt, Harvey H., Belleville, N. J. Method of and apparatus for tapping water-mains	473,997	May 3	175	41, 42	59	672
Burron, Paterick. (See Rees, David, assignor.)						
Burroughs, James W., Champaign, Ill. Platform-scale frame	470,177	Mar. 8	821	203	58	1267
Burroughs, Silas M., <i>et al.</i> (See Slater, Stanley R., assignor.)						
Burroughs, William S., St. Louis, Mo. Electric alarm-clock	468,414	Feb. 9	794	{ 197 198 }	{ 58 }	688
Burrowes, E. T. (See Hall, Horace L., assignor.)						
Burrowes, Edward T., Portland, Me. Shade attachment	476,783	June 14	842	208	59	1618
Burrowes, Edward T., Portland, Me. Electroplating with alloys	477,350	June 21	1783		59	1817
Burrows, Arba G., assignor of one-half to L. Gay, Dunmore, W. Va. Vehicle-hub	480,690	Aug. 9	1513	376	60	883
Burrows, Taylor. (See Donisthorpe and Burrows.)						
Burrows, John C., Shreveport, La. Combined harrow and cultivator	469,123	Feb. 16	1895	485	58	915
Burt, Austin, assignor of one-half to H. E. Burt, Black River Falls, Wis. Temporary binder	476,363	June 7	216	53	59	1478
Burt, Carl A., Rochester, N. Y., assignor to Magic Freezer Company, Chicago, Ill. Freezing apparatus	477,626	June 21	2240	561	59	1907
Burt, Charles A., assignor to Burt Manufacturing Company, Rochester, N. Y. Can-wiping machine	467,397	Jan. 19	1771	452	58	352
Burt, Charles H. (See Shuttleworth and Burt.)						
Burt, Channey I., Jefferson, Iowa. Automatic stock-fountain	474,986	May 17	1775	449	59	1005
Burt, George. (See Dawson, Edward, assignor.)						
Burt, George R., Dalton, N. Y. Cash indicator and recorder	485,086	Oct. 25	2457	{ 632 633 }	{ 61 }	535
Burt, Helen A., London, assignor to A. Harris, Middlesbrough, England. Coin freed or actuated machine	471,808	Mar. 29	3346	852	58	1778
Burt, Horace E. (See Burt, Austin, assignor.)						
Burt, John. (See Shuttleworth and Burt.)						
Burt Manufacturing Company. (See Burt, Charles A., assignor.)						
Burt, Merritt, and J. W. Skilton, Jacksonville, Fla. Tank-feeder	470,982	Mar. 15	2085	{ 533 534 535 }	{ 58 }	1520
Burt, Merritt, and J. W. Skilton, Jacksonville, Fla. Tank-feeder	482,617	Sept. 13	1160	{ 280 281 146 }	{ 60 }	1575
Burt, Ransom K., Haddam, Kans. Washing-machine	482,295	Sept. 6	616		60	1455
Burt & Tobey. (See Tobey, Charles W., assignor.)						
Burtis, William. (See Marshall, Herbert E., assignor.)						
Burton, Augustus G., assignor to C. R. Hadley and W. A. Vawler, Chicago, Ill. Temporary binder	472,665	Apr. 12	1006	261	59	204
Burton, Augustus G., assignor of one-half to G. A. Marshall and F. H. Lewis, Chicago, Ill. Leather-gage	473,892	Apr. 26	3006	758	59	620
Burton, Charles C., Utica, N. Y., assignor of one-half to L. E. Holden, Beloit, Wis. Railway-carriage	470,617	Mar. 8	1528	399	58	1403
Burton, Charles F., <i>et al.</i> (See Osborn, Francis C., assignor.)						
Burton, Charles H., Cleveland, Ohio. Pressure-regulator	469,231	Feb. 23	2072	533	58	956
Burton, Charles M., and J. C. Gould, New Haven, Conn. Device for operating clocks	472,028	Apr. 5	13	4	59	5
Burton, Clarence A., assignor of two-thirds to L. G. Rowell, Kansas City, Kans., and A. R. Klebba, St. Louis, Mo. Journal-bearing	487,236	Nov. 29	3344	851	61	1305
Burton, George D. (See Burton, John M., assignor.)						
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. System of distribution of electrical heating currents	468,338	Feb. 16	1611	407	58	858
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Bracket for electric heaters	472,634	Apr. 12	966	251	59	197
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electrical forge	475,178	May 17	2065	{ 519 520 }	{ 59 }	1062
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Distributing apparatus for heating-currents	475,179	May 17	2067	520	59	1062
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electric connector for converters	475,180	May 17	2068	521	59	1063
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electrical metal-heater	475,181	May 17	2068	521	59	1063
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electrical metal-working	475,182	May 17	2070	{ 521 522 }	{ 59 }	1063
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electric metal-working	475,183	May 17	2071	522	59	1064
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electrical converter	475,184	May 17	2072	{ 522 523 }	{ 59 }	1064
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electrical metal-heater	475,264	May 17	2194	559	59	1089
Burton, George D., Boston, Mass., assignor to Electrical Forging Company, of Maine. Electric metal-heating apparatus	486,625	Nov. 22	2238	{ 599 600 601 }	{ 61 }	1084
Burton, George D., assignor to Electrical Forging Company, Boston, Mass. Electrical metal-working apparatus	486,818	Nov. 22	2612	{ 680 681 524 525 }	{ 61 }	1148
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-heater	475,185	May 17	2075	{ 524 525 }	{ 59 }	1064
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	475,186	May 17	2078	525	59	1065
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Apparatus for cooking by electricity	475,187	May 17	2080	526	59	1066
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Metal-heating apparatus	475,188	May 17	2081	526	59	1066
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric heater	475,189	May 17	2082	527	59	1066
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric cooking apparatus	475,190	May 17	2084	527	59	1067
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Flexible electrode	475,191	May 17	2085	527	59	1067
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-heater	475,192	May 17	2087	528	59	1067
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric wire-twister	475,193	May 17	2088	528	59	1068

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-bending apparatus	475,194	May 17	2089	528	59	1068
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	475,195	May 17	2091	529	59	1068
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Automatic electric forge	475,196	May 17	2092	529	59	1068
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	486,029	Nov. 8	1345	357	61	865
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	486,176	Nov. 15	1596	{ 422 423 }	61	931
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electrical method of and apparatus for forming tubes	486,624	Nov. 22	2297	599	61	1083
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forging apparatus	486,626	Nov. 22	2300	{ 600 601 }	61	1084
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	486,627	Nov. 22	2302	601	61	1085
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric forge	488,466	Dec. 20	2029	506	61	1759
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-heating apparatus	488,467	Dec. 20	2030	507	61	1759
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-working apparatus	488,468	Dec. 20	2032	507	61	1760
Burton, George D., Boston, and E. E. Angell, Somerville, Mass., assignors to Electrical Forging Company, of Maine. Electric metal-heating apparatus	488,469	Dec. 20	2034	507	61	1760
Burton, George D., Boston, Mass., A. H. Eddy, Hartford, and G. T. Briggs, Windsor, Conn., assignors to Electrical Forging Company, of Maine. Converting system for electric metal-heating	475,232	May 17	2145	{ 544 545 }	59	1079
Burton, John M., Wichita, Kans. Railway-car	470,326	Mar. 8	1086	{ 277 278 }	58	1316
Burton, John M., Wichita, Kans. Freight-car	472,158	Apr. 5	229	61, 62	59	43
Burton, John M., Wichita, Kans. Stock-car	473,998	May 3	177	42	59	672
Burton, John M., Wichita, Kans. Railway-car. (Reissue)	11,254	July 19	2063	{ 516 517 }	60	430
Burton, John M., Wichita, Kans., assignor, by mesne assignments, to himself, and G. D. Burton, Boston, Mass. Car-coupling	476,784	June 14	843	208	59	1618
Burton, Robert T. (See Boswell, Henry L., assignor.)						
Burton, Thomas, Cloughfold, Rawtestall, England. Velocipede-frame	470,317	Mar. 8	1065	271	58	1313
Burton, Wingfield, assignor of one-half to F. E. Sankey, Bilston, England. Press for drawing through and forming up sheet metal	486,065	Nov. 8	1401	371	61	875
Burwell, George A., Highlandville, Mass. Bicycle	467,914	Feb. 2	12	4	58	529
Burwell, George A., Highlandville, Mass. Tire for bicycle-wheels	483,990	Oct. 11	708	178	61	160
Burwell, George A., Toledo, Ohio. Pneumatic-tired wheel	486,556	Nov. 22	2171	573	61	1060
Burwell, Stephen B., Cincinnati, Ohio. Hitching-buckle	487,415	Dec. 6	308	79	61	1382
Busacker, Carl J. J., Goslar, Germany. Toy	474,543	May 10	1062	271	59	851
Busch, Frederick, Hoboken, N. J. Combined heater and shade	471,742	Mar. 29	3236	624	58	1757
Buscher, Franz, Dunkirk, N. Y. Hose	471,266	Mar. 22	2526	641	58	1616
Buschick, Gustavus E. (See Metzner and Buschick.)						
Buschner, Carl F., New York, N. Y. Antifriction-bearing for cars	475,007	May 17	1806	458	59	1011
Buse, Fred. A., New Castle, Wyo. Sash-holder	466,533	Jan. 5	357	90	58	69
Busell, James H., Boston, and E. H. Taylor, Lynn, Mass., assignors to J. H. Busell Manufacturing Company, Nashua, N. H. Burnishing-machine	475,032	May 17	1841	467	59	1018
Busfield, James, Haverhill, Mass. Buffing-roll	485,170	Nov. 1	17	5	61	576
Busfield, James and W., Haverhill, Mass. Nailing-jack	474,081	May 3	318	76	59	698
Busfield, James P. (See Langley, Thomas F., assignor.)						
Busfield, Walter. (See Busfield, James and W.)						
Bush, Augustus L. (See Howe and Bush.)						
Bush, Aymer, assignor of one-half to S. S. Tatum, Summerfield, La. Planter and fertilizer-distributor	482,783	Sept. 20	1426	{ 353 354 }	60	1639
Bush, Frank E., Weedsport, assignor of one-half to W. W. Bush, Syracuse, N. Y. Merchandise-exhibitor	471,989	Mar. 29	3593	917	58	1827
Bush, Henry, Holgate, Ohio. Fanning-mill	479,241	July 19	1814	455	60	380
Bush, John E. (See Weeks and Bush.)						
Bush, Martin L., assignor of one-half to A. S. Lang, Lawrence, Mass. Die-sharpening machine	473,249	Apr. 19	1943	488	59	394
Bush, Wallace W. (See Bush, Frank E., assignor.)						
Bush, William C., Wilmington, Del. Cartridge	475,008	May 17	1807	458	59	1011
Bushaw, George W., Long Lake, assignor of one-half to H. M. Curtis, Minneapolis, Minn. Churn	468,762	Feb. 9	1329	336	58	794
Bushee, Adolphus C., Clearport, assignor of one-half to C. M. Strickler, Lancaster, Ohio. Spoke-socket	488,113	Dec. 13	1450	365	61	1628
Bushnell, Cyrus P., Providence, R. I. Combination extension-ladder	489,655	Aug. 9	1458	363	60	873
Bushnell, Edwin L., assignor to E. L. Bushnell Spring Company, Limited, Poughkeepsie, N. Y. Car-seat	468,235	Feb. 2	492	121	58	621
Bushnell, Edwin L., and G. W. Dryer, assignors to E. L. Bushnell Spring Company, Limited, Poughkeepsie, N. Y. Car-seat	476,728	June 7	751	185	59	1586
Bushnell, Edwin L., and G. W. Dryer, assignors to E. L. Bushnell Spring Company, Limited, Poughkeepsie, N. Y. Car-seat	476,729	June 7	752	186	59	1587
Bushnell, John S., et al. (See Baldwin, Franklin T., assignor.)						
Busiel, Charles A., et al. (See Esty, William, assignor.) (Reissue.)						
Busiel, Frank E., et al. (See Esty, William, assignor.) (Reissue.)						
Busiel, John T., et al. (See Esty, William, assignor.) (Reissue.)						
Business Men's Manufacturing Company. (See Miller, Edward L., assignor.)						
Busking, Henry F., assignor of one-half to G. D. Mitten, Indianapolis, Ind. Shaft-straightener	485,735	Nov. 8	901	241	61	774
Bussard, William, Port Jefferson, Ohio. Combined collection and delivery letter-box	472,105	Apr. 5	148	40	59	38
Busse, Leopold, San Francisco, Cal. Dumping-wagon	484,732	Oct. 18	1866	475	61	401
Busse, William J., assignor of one-half to J. R. Brandt, Chicago, Ill. Printer's quoin	470,650	Mar. 8	1573	408	58	1412
Bussey, John M., Edgefield, S. C. Sawmill-carriage	473,726	Apr. 26	2739	{ 689 690 643 }	59	569
Buswell, William F., San Francisco, Cal. Pulley	469,512	Feb. 23	2508	643	58	1039
Butcher, George J., et al. (See Butcher, John F., assignor.)						
Butcher, John F., Fenton, assignor of two-thirds to G. J. Butcher and B. K. Boyd, Mount Pleasant, Mich. Window-screen frame	484,293	Oct. 11	1169	298	61	251
Butcher, Joseph, Melrose, Mass. Electric cyclomotor for velocipedes	478,086	July 5	18	6	60	6

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Butler, Benjamin F., Rockford, Ill. Riding-cultivator.....	477,194	June 14	1510	370	59	1753
Butler, Benjamin F., Logansport, Ind. Mechanical telegraph instrument.....	479,782	Aug. 2	13	3	60	585
Butler, Calvin L., Greenfield, Mass. Screw-cutting die.....	477,293	June 21	1696	416	59	1800
Butler, Eduard R., Ueberlingen, Germany. Folding stretcher for pictures.....	483,280	Sept. 27	223	561	60	1810
Butler, Edwin M., Virden, Ill. Car-coupling.....	478,087	July 5	20	7	60	7
Butler, Fred H., <i>et al.</i> (See Tangenberg, Christiaan, assignor.)						
Butler, Henry G. and W., assignors to Davy Clay Ballast Company, Kenosha, Wis. Burn- ing clay to make ballast.....	486,761	Nov. 22	2513	656	61	1127
Butler, Henry S., Des Moines, Iowa. Race-course for horses.....	483,600	Oct. 4	125	31	61	26
Butler, James, Greenwich, N. J. Wagon end-gate.....	477,988	June 28	2813	704	59	2037
Butler, Janet N., Asbury Park, N. J. Back-rest.....	486,275	Nov. 15	1761	463	61	965
Butler, John F. (See Stephenson, George A., assignor.)						
Butler, Josiah, executor. (See Shaw, Benjamin F.)						
Butler, Lafayette W., Williamsburg, Iowa. Tool or reaper-knife holder.....	473,058	Apr. 19	1613	412	59	333
Butler, Lewis C., West Bay City, Mich. Desk attachment for telephones.....	478,565	July 12	778	190	60	169
Butler, Lewis C., West Bay City, and H. R. Chope, Saginaw, Mich.; said Chope assignor to said Butler. Pocket check and bank book.....	482,543	Sept. 13	1054	256	60	1555
Butler, Louis W., Brooklyn, N. Y. Safety attachment for elevators.....	488,424	Dec. 20	1968	492	61	1746
Butler, Mary L., <i>et al.</i> (See Willcox, Alfred B., assignor.)						
Butler, Samuel B., New York, N. Y. Davit-hook.....	483,421	Sept. 27	2435	613	60	1849
Butler, Thomas L., Worcester, Mass. Spindle-bearing for jacks and mules.....	468,939	Feb. 16	1611	408	58	858
Butler, Wesley, Litchfield, Ill. Thrashing-machine.....	477,507	June 21	2031	503	59	1875
Butler, Wesley, Litchfield, Ill. Automatic grain-weigher.....	477,508	June 21	2033	504	59	1865
Butler, William. (See Butler, Henry G. and W.)						
Butler, William A., assignor to J. H. Haar and J. A. Cassidy, New York, N. Y. Mech- anism for cable traction.....	478,046	June 28	2909	726 727	59	2053
Butler, William A., assignor to J. H. Haar and J. A. Cassidy, New York, N. Y. Cable- gripper.....	480,459	Aug. 9	1192	299	60	820
Butler, William H. (See Westwood and Butler.)						
Butler, William H., and W. R. Landfear, Brooklyn, N. Y.; said Landfear assignor to said Butler. Box-filling machine.....	482,542	Sept. 13	1047	253 254 255	60	1553
Butman Furnace Company. (See Butman, Thomas R., assignor.)						
Butman, Thomas R., Chicago, Ill. Steam-boiler.....	469,124	Feb. 16	1896	485	58	915
Butman, Thomas R., assignor to Butman Furnace Company, Chicago, Ill. Gage-cock.....	479,732	July 26	2637	654	60	551
Butman, Thomas R., assignor to Butman Furnace Company, Chicago, Ill. Steam-boiler furnace.....	479,733	July 26	2638	654 655	60	552
Butt, Moses E. (See Cadenhead and Butt.)						
Büttel, Johann, Newark, N. J. Apparatus for making ultramarine-blue.....	476,447	June 7	343	78	59	1504
Büttel, Johann, Newark, N. J. Making ultramarine-blue.....	484,388	Oct. 18	1322	337	61	293
Butterfield, Abraham, assignor of one-half to W. C. Alpaugh, Trenton, N. J. Apparatus for marbleizing glass, paper, and the like.....	471,288	Mar. 22	2553	649	58	1622
Butterfield, John C., and T. C. Batchelor, London, England. Explosive cartridge.....	471,946	Mar. 29	3536	.....	58	1816
Butterfield-Mitchell Electric Heating Company. (See Mitchell, Willis, assignor.)						
Butterworth, Willoughby K., <i>et al.</i> (See Spielman, William, assignor.)						
Button, Charles P., Milwaukee, Wis. Thill-coupling.....	469,933	Mar. 1	427	107	58	1183
Button, Eugene L., Brooklyn, N. Y. Foot-rest.....	472,205	Apr. 5	313	61	59	59
Butts, Frank E., assignor of one-half to I. P. Watts, Winchester, Ind. Measuring-funnel.....	474,575	May 10	1117	286	59	863
Butz, John F., Fort Worth, Tex. Freight and grain car.....	481,928	Sept. 6	11	4	60	1337
Buxbaum, Asher I. F., Walnut Hills, Ohio. Rubber-dam clamp.....	482,618	Sept. 13	1161	281	60	1375
Buyer, Edward, New York, N. Y. Box attachment.....	480,999	Aug. 16	1988	498	60	992
Byck, Moses S. (See Renter, John C., assignor.)						
Byerly, Frank E., Philadelphia, Pa. Molding-cutter and head therefor.....	487,402	Dec. 6	283	73	61	1377
Byers, Andrew C. and J. L. Forreston, Ill. Eaves-trough.....	474,442	May 10	908	234	59	823
Byers, Jesse S., Knoxville, Ill. Steam-engine.....	466,454	Jan. 5	234	60	58	45
Byers, Joseph L. (See Byers, Andrew C. and J. L.)						
Byers, William. (See Fincher and Byers.)						
Byfield Manufacturing Company. (See Bradley, John, assignor.)						
Byllesby, Henry M., St. Paul, Minn. Electric-railway motor.....	467,969	Feb. 2	89	22	58	542
Byllesby, Henry M., St. Paul, Minn. Dynamo-electric machine or motor.....	469,193	Feb. 16	2000	510	58	935
Byllesby, Henry M., St. Paul, Minn. Fishing-reel.....	470,178	Mar. 8	822	203	58	1268
Bynoe, Frederick O., London, England. Photographic-printing frame.....	484,175	Oct. 11	980	251	61	214
Bynum, Green H., Murray, Ky. Beehive.....	472,726	Apr. 12	1103	284	59	221
Byor, Gustav A., Edgar, Nebr. Straw-burner.....	482,862	Sept. 20	1532	381 382	60	1662
Byor, Gustav A., Edgar, Nebr. Corn-busker.....	488,538	Dec. 27	2151	531	61	1798
Byram, Frank A., Philadelphia, Pa. Railway cross-tie.....	475,999	May 31	3374	850	59	1346
Byrkit, George E. (See Milhurn, Byrkit, and Crabbs.)						
Byrne, John T., and W. J. Lafferty, Philadelphia, Pa. Picker-spindle stand.....	475,484	May 24	2549	649	59	1172
Byrnes, Anthony. (See Byrnes, William, assignor.)						
Byrnes, Daniel J. (See Enos, John A., assignor.)						
Byrnes, William, assignor of one-half to A. Byrnes, Chicago, Ill. Grip-car brake.....	474,900	May 17	1631	416	59	978
Byrnside, Benjamin B., Clifty, W. Va. Tobacco-hanger.....	478,153	July 5	122	31	60	27
C. A. Treat Manufacturing Company. (See Treat, Cornelius A., assignor.)						
C. F. Gessert Company. (See Gessert, Charles F., assignor.)						
C. G. Hutchinson Shoe Blacking Machine Company. (See Hutchinson, Charles G., assignor.)						
Cabana, Leon M., Buffalo, N. Y. Leather-washer.....	475,053	May 17	1874	475	59	1025
Cabannis, G. A., <i>et al.</i> (See Jones and Ashley, assignors.)						
Cabell, Flora B., <i>et al.</i> (See Cabell, Samuel G., assignor.)						
Cabell, Milton S. (See Faunce and Cabell.)						
Cabell, Milton S., <i>et al.</i> (See Cabell, Samuel G., assignor.)						
Cabell, Samuel G., Washington, D. C., assignor, by mesne assignments, to Quincy Gas Economizer Company, Quincy, Ill. Gas-governor.....	479,553	July 26	2346	585	60	498
Cabell, Samuel G., assignor to F. B. Cabell, Washington, D. C., H. S. Brown, San Fran- cisco, Cal., and M. S. Cabell, Quincy, Ill. Means for preventing the attachment of bar- nacles to vessels.....	468,741	Feb. 9	1301	330	58	789
Cable, Austin D., Montreal, Canada. Sign or guide board.....	487,603	Dec. 6	589	151	61	1438
Cable, Frank D. (See Kenney and Cable.)						
Cable, Frank D. (See Tuttle and Cable.)						
Cabot, George E. (See Holtzer and Cabot.)						
Cabot, Godfrey L., Cambridge, Mass. Apparatus for the manufacture of lamp-black.....	468,510	Feb. 9	948	241	58	718
Cabot, Samuel, Boston, Mass. Packing for builders' use.....	488,869	Dec. 27	2667	660	61	1902
Cabus, Alexander G. (See Napier, Alfred M., assignor.)						
Cabus, Joseph, New York, N. Y. Shutter-fastener.....	476,978	June 14	1169	283	59	1683

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Cade, James R., <i>et al.</i> (See Sneddon, William, assignor.)						
Cadell, John F., Baltimore, Md. Drilling-machine	468,328	Feb. 9	659	163	58	661
Cadenhead, Benjamin F., and M. E. Buff, Blountville, Ala. Plow	478,273	July 5	340	82	60	68
Cadman, George. (See Kieckhefer and Cadman.)						
Cadwalader, Howard, Richmond, Ind. Carpet-sweeper	480,451	Aug. 9	1139	285	60	809
Cadwell, Jonathan W. (See Elton and Cadwell.)						
Cadwell, Jonathan W., Meriden, Conn. Clothes-line	483,299	Sept. 27	2263	569	60	1815
Cadwell, Marvin S., Lansing, Mich. Slat-and-wire-fabric-weaving machine	479,487	July 26	2252	565	60	481
Cadwgan, Thomas C., Anderson, Ind. Cotton-planter	466,487	Jan. 5	281	71, 72	58	54
Cady, David, Indianapolis, Ind. Shoe-horn	481,253	Aug. 23	2443	602	60	1092
Cady, David D., Munson, Ill. Clothes-pounder	480,069	Aug. 2	496	126	60	677
Cady, Francis D., Waterbury, Conn. Writing-tablet	484,406	Oct. 18	1352	345	61	299
Cady, Henry G., Pine Bluff, Ark. Fence-machine	482,335	Sept. 13	697	166	60	1486
Cady, Henry G., Pine Bluff, Ark. Spirometer	482,336	Sept. 13	699	167	60	1486
Cady, Horace G., Scott, N. Y. Carpet-stretcher	483,406	Nov. 1	399	107	61	654
Cafferty, Ridner P., Jr., and W. N., assignors of one-half to C. Grimmer, G. H. Gillette, and J. W. Grimmer, New York, N. Y. Swimming attachment	476,000	May 31	3376	851	59	1346
Cafferty, William N. (See Cafferty, Ridner P., Jr., and W. N.)						
Cahall, Charles L. (See Hollis, Albert D., assignor.)						
Cahall, H. E., <i>et al.</i> (See Cahall, John, assignor.)						
Cahall, John, assignor, by mesne assignments, to H. E. and W. H. Cahall, Mansfield, Ohio. Boiler	485,087	Oct. 25	2462	634	61	535
Cahall, John, assignor, by mesne assignments, to H. E. and W. H. Cahall, Mansfield, Ohio. Boiler	485,088	Oct. 25	2464	634	61	536
Cahall, W. H., <i>et al.</i> (See Cahall, John, assignor.)						
Cahill, John, New York, N. Y. Rolling-slat blind	466,901	Jan. 12	971	248	58	194
Cahill, Mortimer. (See Martin and Cahill.)						
Cahn, Friedrich A., Hanover, Germany. Scraper or cleaner for boots or shoes	478,845	July 12	1203	299	60	254
Cailet, Justin. (See Amilly and Cailet.)						
Cain, Cornelius T., Owensborough, Ky. Breast-collar	487,604	Dec. 6	590	151	61	1439
Cain, Frederick, St. Paul, Minn. Garbage drier and burner	484,774	Oct. 25	1950	497, 498	61	433
Cain, George, Wilmerding, Pa. Air-brake hose-coupling	469,830	Mar. 1	267	99	58	1152
Cain, James A., Markham, Cal. Box-nailer	485,530	Nov. 1	573	154	61	600
Cain, James H., Cana, N. C. Tobacco stick or hanger	471,532	Mar. 29	2913	742	58	1599
Cain, John W., Rusk, W. Va. Fruit-picker	469,125	Feb. 16	1897	485	58	915
Cain, Michael H. (See Stacey, Henry, assignor.)						
Caird, David, Ulverston, England. Manufacture of metal barrels, &c	473,495	Apr. 26	2360	599	59	497
Cairns, Charles L., Jersey City, N. J. Centrifugal apparatus	476,979	June 14	1170	283	59	1683
Cahow, Daniel B., Akron, Ohio. Pump	480,169	Aug. 2	656	167	60	707
Calcaño I Paniza, Juan B., Caracas, Venezuela. Recording mechanism for musical instruments	467,854	Jan. 26	2514	637, 638, 639	58	501
Calcutt, Marvin Y., assignor of two-thirds to H. L. Rochelle and E. Brady, Seattle, Wash. Elevator	479,390	July 19	2061	515, 516, 380	60	429
Calder, George, Jr., Lancaster, Pa. Matrix-making machine	474,809	May 17	1484	379	59	949
Calder, Robert, Rochester, assignor to F. T. Giblin, Utica, N. Y. Heating apparatus	472,940	Apr. 12	1410	360	59	282
Calderswood, George G., Biddeford, Me. Stovepipe	483,207	Sept. 27	2092	530	60	1785
Caldwell, Alexander, Essex, Iowa. Agricultural implement	486,849	Nov. 29	2670	698, 699	61	1175
Caldwell, Alexander, Essex, Iowa. Agricultural implement	486,850	Nov. 29	2672	699	61	1175
Caldwell, Alfred, Providence, R. I. Attaching tips to flexible tubing for gas	480,247	Aug. 9	792	202	60	744
Caldwell, Daniel I., <i>et al.</i> , trustees. (See Krepps, Virgil A., assignor.)						
Caldwell, Edward P. (See Martinson, Henning, assignor.)						
Caldwell, Edward P., assignor of one-half to E. J. Edwards, Minneapolis, Minn. Combination-paddock	473,059	Apr. 19	1615	412	59	333
Caldwell, Frank G., Wheeling, W. Va. Sheet-metal panel for ceilings and walls	467,000	Jan. 12	1123	285	58	221
Caldwell, Frank G., assignor to Caldwell & Peterson Manufacturing Company, Wheeling, W. Va. Sheet-metal ceiling-panel	476,185	May 31	3676	929	59	1406
Caldwell, Henry A., assignor to Electric Cutting Machine Company, Chicago, Ill. Cloth-cutting machine	470,233	Mar. 8	903	223, 224	58	1283
Caldwell, John H., Philadelphia, Pa. Electric-light mast-arm	476,607	June 7	574	137	59	1550
Caldwell Manufacturing Company. (See Rosentreter, Frank L., assignor.)						
Caldwell & Peterson Manufacturing Company. (See Caldwell, Frank G., assignor.)						
Caldwell, Robert W., Sr. (See Dixon, George E., assignor.)						
Caldwell, William E., Louisville, Ky. Tower	487,902	Dec. 13	1093	273	61	1555
Calef, Joseph W., assignor of one-half to E. R. Hayward, North Easton, Mass. Device for seeding raisins	467,367	Jan. 19	1727	442	58	344
Calef, Joseph W., assignor of one-half to E. R. Hayward, Easton, Mass. Drag-saw machine	470,779	Mar. 15	1773	456	58	1459
Calhoun, Hugh, Hot Springs, and A. M. Beam, Bear, Ark. Chloridizing muffle-furnace	483,532	Oct. 4	23	6	61	7
California Petroleum and Asphalt Company. (See Pitchford and Cooper, assignors.)						
Calkins, Addison N., Quincy, Ill. Grain-meter	476,608	June 7	575	137	59	1550
Calkins, Almon B., assignor of one-half to F. C. Diminy, Jr., New York, N. Y. Mercury column for ascertaining pressures	469,960	Mar. 1	473	118	58	1190
Callahan, Cornelius, Boston, Mass. Relief-valve	487,991	Dec. 13	1243	309	61	1584
Callahan, Frank, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Callahan, Frank C., assignor of one-half to J. B. Klein, Bridgeport, Conn. Electrically-controlled trap-door	471,947	Mar. 29	3537	903	58	1816
Callahan, John, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Callaway, N. S. (See Callaway and West, assignors.)						
Callaway, William, Sr., Knox, assignor to F. B. Yarbro, Kewanna, Ind. Machine for wiring fence-pickets	479,636	July 26	2446	610	60	517
Callaway, William H., and C. C. West; said Callaway assignor to N. S. Callaway, San Angelo, Tex. Car-coupling	477,989	June 28	2815	704	59	2037
Calley, Freeman A., Franklin, N. H. Knitting-machine	470,909	Mar. 15	1972	504	58	1498
Callmeyer, Léonie P., Madison, N. J. Means for detecting the opening of sealed envelopes	482,073	Sept. 6	247	60	60	1384
Calls, George, and F. J. Tetley, London, England. Horseshoe-fastening	481,000	Aug. 16	1989	498	60	992
Calne, Elizabeth, New York, N. Y. Sewing-machine	472,333	Apr. 5	515	133	59	97
Calmer, G. G., <i>et al.</i> (See Fitzwater, William M., assignor.)						
Caloric Cone Company. (See Cornell, Oliver H. P., assignor.)						
Calton, John D. (See Calton, William T. and J. D.)						
Calton, William T. and J. D., New House, N. C. Cultivator	468,907	Feb. 16	1557	396	58	848

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Calver, Washington I., assignor of one-half to A. W. Miller, Hagerstown, Md. Seat and luggage-carrier attachment for bicycles	477,042	June 14	1263	306	59	1703
Calvert, Charles E., assignor of one-half to D. R. Creecy, Jr., Portsmouth, Va. House-door letter-box	487,210	Nov. 29	3268	835	61	1292
Camden, John S., Parkersburg, W. Va. Measuring-vessel	486,762	Nov. 22	2515	656	61	1128
Cameron, Allan B., Williamsport, Pa. Ornamental wood and metal work	473,185	Apr. 19	1844	464	59	373
Cameron, Angus, assignor to Capitol Manufacturing Company, Chicago, Ill. Screw-tap	471,948	Mar. 29	3538	904	58	1817
Cameron, Angus, Chicago, Ill., assignor, by mesne assignments, to Cameron Manufacturing Company, Milwaukee, Wis. Printer's quoin	484,907	Oct. 25	2177	560	61	479
Cameron, Brewster. (See Tiffany, Walton C., assignor.)						
Cameron, Ezra G., Cleveland, Ohio, assignor of one-half to D. M. Foote, Eaton Rapids, Mich. Blacking-case	475,294	May 24	2243	578	59	1115
Cameron, George W., Poplar Bluff, Mo. Watchmaker's tool	487,988	Dec. 13	1239	308	61	1583
Cameron, James W., New York, N. Y. Preserving animal food	473,893	Apr. 26	3008	758	59	621
Cameron, John. (See Gibson and Cameron.)						
Cameron Manufacturing Company. (See Cameron, Angus, assignor.)						
Cameron, Perley W., New Haven, Conn., and F. J. Dillon, Providence, R. I. Medicine-bit	467,658	Jan. 26	2199	559	58	441
Cameron, William A. (See Ferraioli, Louis G., assignor.)						
Cammell, George H. (See Bott and Cammell.)						
Camp, Horace B., Cuyahoga Falls, Ohio. Apparatus for laying underground conduits for electric wires	467,650	Jan. 26	2188	556	58	439
Camp, James N., Atlanta, Ga. Music-leaf turner	485,255	Nov. 1	153	45	61	604
Camp, Wallace H. (See Ashley and Camp.)						
Campbell, Andrew C. (See Lamb and Campbell.)						
Campbell, Andrew C., assignor to Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Clutch-treadle	478,398	July 5	524	128	60	103
Campbell, Andrew T., Alamo, Ind. Wrench for twisting fence-wires	466,769	Jan. 12	741	192	58	151
Campbell Barrel Machine Company. (See Campbell, Henry, assignor.)						
Campbell, Benjamin J., Altoona, Kans. Churn-motor	467,495	Jan. 26	1928	{ 492 493 576 577 578 }	{ 58 59 }	392 1114
Campbell, Charles H., New York, N. Y., and W. Whigham, Pittsburg, Pa. Apparatus for loading cars	475,293	May 24	2238			
Campbell, Cydnor B., assignor of two-thirds to D. S. Beverly and J. M. Allen, Glouster, Ohio. Combined pencil holder, sharpener, and eraser	475,485	May 24	2550	649	59	1173
Campbell, David E., Cincinnati, Ohio. Cash and package carrier apparatus	475,265	May 17	2195	{ 559 560 561 }	{ 59 59 }	1089
Campbell, Emily H. (See Campbell, William B., assignor.)						
Campbell, George H. (See Sterling, Walter A., assignor.)						
Campbell, George W., assignor to J. V. Taggart and J. H. Boone, El Paso, and F. Brown, Jr., Austin, Tex. Windmill	481,712	Aug. 30	3179	{ 776 777 485 }	{ 60 58 }	1247 916
Campbell, Georgine, New York, N. Y. Hasp-lock	469,126	Feb. 16	1898			
Campbell, Greenleaf W., et al. (See Morrison, Hamon, assignor.)						
Campbell, Hardy W., Putney, S. D. Seeder, roller, and pulverizer	479,242	July 19	1818	{ 455 456 }	{ 60 58 }	381
Campbell, Harry H. (See Aiken, Wood, and Campbell.)						
Campbell, Henry, Baltimore, Md. Penholder	475,033	May 17	1842	467	59	1019
Campbell, Henry, Baltimore, Md. Barrel setting-up and firing machine	479,735	July 26	2642	655	60	552
Campbell, Henry, Baltimore, Md. Device for affixing stamps and labels	486,430	Nov. 22	1999	530	61	1026
Campbell, Henry, assignor to Campbell Barrel Machine Company, Baltimore, Md. Setting-up and forming machine for barrels, &c.	479,627	July 26	2448	610	60	517
Campbell, Henry, assignor to Campbell Barrel Machine Company, Baltimore, Md. Making barrels, &c.	479,734	July 26	2641	655	60	552
Campbell, James A., assignor of two-thirds to G. P. Harrison and P. Michel, Jr., New Orleans, La. Produce-barrel head	467,870	Jan. 26	2542	644	58	506
Campbell, James M., Montague, Mich. Washing-machine	486,763	Nov. 22	2516	656	61	1128
Campbell, James M. E., New Palestine, and R. P. Rankin, Clayton, Ind. Dumping-wagon	484,491	Oct. 18	1492	379	61	326
Campbell, James P. (See Mayson, Thomas W., assignor.)						
Campbell, James W., Germantown, assignor to Ferguson Brothers, New York, N. Y. Joint for furniture, &c.	468,963	Feb. 16	1657	424	58	867
Campbell, John, and A. J. Brama, Bradford, England. Apparatus for actuating dabbing-brushes for combing-machines	475,034	May 17	1844	467	59	1019
Campbell, Joseph H., Chicago, Ill. Rail joint and chair	483,898	Oct. 4	556	140	61	115
Campbell, Joseph, W. H., and E. J., Toronto, Canada. Covering for wagons	473,292	Apr. 19	2013	506	59	408
Campbell, Lawrence S., assignor of one-half to J. M. Heath and A. Ostrander, Allegan, Mich. Feed-regulator	486,851	Nov. 29	2673	{ 699 700 }	{ 61 58 }	1176
Campbell Machine Company. (See Metcalf and Gooding, assignors.)						
Campbell, Malcolm Y., Chicago, Ill. Conpling for hoops, &c.	476,001	May 31	3377	851	59	1346
Campbell, Mark, Chicago, Ill. Curling-iron. (Retssue)	11,237	Apr. 26	3018	760	59	623
Campbell, Mary. (See Walsh, Patrick R., assignor.)						
Campbell, Myron A. (See Stone and Campbell.)						
Campbell Printing Press and Manufacturing Company. (See Huson, Winfield S., assignor.)						
Campbell Printing Press and Manufacturing Company. (See Southgate, Louis W., assignor.)						
Campbell, Robert, Lostock, near Northwich, England. Fumigator	487,173	Nov. 29	3216	823	61	1283
Campbell, Robert J. (See Campbell, Joseph, W. H., and R. J.)						
Campbell, W. T., et al. (See Hill, David J., assignor.)						
Campbell, William A., assignor of one-half to W. S. Hayden and E. H. Taylor, Marceline, Mo. Dehorning implement	468,236	Feb. 2	494	121	58	621
Campbell, William B., assignor, by mesne assignments, to E. H. Campbell, Brooklyn, N. Y. Woven-wire bed-bottom	482,337	Sept. 13	700	167	60	1487
Campbell, William H. (See Campbell, Joseph, W. H., and R. J.)						
Campbell, William H., New York, N. Y. Railway-ticket	468,927	Feb. 16	1595	{ 403 404 }	{ 58 58 }	855
Campbell & Zell Company. (See Zell, Robert R., assignor.)						
Campion, William, Brooklyn, N. Y. Warp-knitting machine	466,555	Jan. 5	395	100	58	76
Canby, William W., Philadelphia, Pa. Beam clamp and hanger	470,102	Mar. 1	687	168	58	1233
Canciani, Canciano, Udine, Italy. Extension truck-ladder	474,628	May 10	1194	304	59	877
Canda, Ferdinand E., New York, N. Y. Under-trussing for railway-cars	472,854	Apr. 12	1278	327	59	255
Candee, Charles E., Brooklyn, N. Y. Lock	474,519	May 10	1022	{ 262 263 }	{ 59 58 }	845

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Candee, Charles E., New York, N. Y. Lock	478,781	July 12	1099	{ 272 273 }	60	234
Candee, Charles E., New York, N. Y. Lock	478,782	July 12	1102	273	60	234
Candee, Charles E., New York, N. Y. Lock	478,783	July 12	1104	273	60	234
Candee, Charles E., New York, N. Y. Lock	478,784	July 12	1108	{ 273 274 }	60	235
Candee, Charles E., New York, N. Y. Lock	478,916	July 12	1298	323	60	272
Candee, Charles E., New York, N. Y. Lock	478,917	July 12	1301	324	60	272
Cane, Henry, assignor of one-half to W. Gerson, Spokane Falls, Wash. Ore-separator	468,540	Feb. 9	998	255	58	727
Canedy, William E., Downer's Grove, Ill. Clutch	483,533	Oct. 4	25	6	61	8
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Manchester, England. Gun carriage or mounting	467,855	Jan. 26	2518	638	58	501
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Manchester, England. Gun carriage or mounting	470,036	Mar. 1	586	146	58	1212
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Breech-loading gun	470,244	Mar. 8	991	245 246 247 248 249	58	1301
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Apparatus for loading guns	470,285	Mar. 8	994	250 251 252 253 254 255	58	1302
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Apparatus for launching fish-torpedoes	470,286	Mar. 8	1003	{ 255 256 }	58	1303
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Gun carriage or mounting	470,287	Mar. 8	1007	257	58	1304
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Torpedo-tube mounting	470,288	Mar. 8	1009	{ 258 259 }	58	1304
Canet, Jean B. G. A., Paris, France, assignor of one-half to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Breech-loading gun	474,288	May 3	619	{ 153 154 155 }	59	757
Canet, Jean B. G. A., Paris, France, assignor to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Breech-loading ordnance	474,289	May 3	622	156 157 158 159	59	758
Canet, Jean B. G. A., Paris, France, assignor to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Mounting for turret and other guns	474,290	May 3	628	{ 158 159 }	59	759
Canet, Jean B. G. A., Paris, France, assignor to Sir Joseph Whitworth & Company, Limited, Openshaw, England. Torpedo-launching apparatus	474,291	May 3	633	160	59	760
Canfield, George H., Newark, N. J. Side-bar coupling for carriages	467,635	Jan. 26	2162	550	58	434
Canfield, Hobart, Morristown, N. J. Balanced piston-valve for compound engines	477,924	June 28	2722	681	59	2017
Canfield, Horace G. (See Cushman and Canfield.)						
Canfield, Rufus R., Clearfield, Pa. Nut-lock	467,616	Jan. 26	2140	543	58	430
Cauham, Fredrick L., Lisbon Falls, Me. Centering device	480,558	Aug. 9	1293	324	60	841
Cann, Edwin, Winnipeg, Canada. Cut-off for telephones	468,281	Feb. 2	574	142	58	635
Cannan, Robert. (See Kennedy, Diss, and Caunan.)						
Canning, James, Montpelier, Vt. Power-hammer	484,775	Oct. 25	1952	498	61	433
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Device for supporting and adjusting the front and back covers of carding-engines	481,222	Aug. 23	2379	586	60	1080
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Grinding mechanism for the flats of traveling-flat carding-machines	483,534	Oct. 4	26	6, 7	61	8
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Grinding mechanism for flats of traveling-flat carding-engines	483,535	Oct. 4	29	7, 8	61	9
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Belt-shipping device	484,407	Oct. 18	1353	345	61	299
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Stop-motion device for fly-frames	484,776	Oct. 25	1955	499	61	434
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Bottom-cone-lifting device for fly-frames	484,845	Oct. 25	2078	{ 534 535 }	61	458
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Protector for the ends of the clothing of the flats of carding-engines	484,846	Oct. 25	2080	535	61	459
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Carding-engine....	484,928	Oct. 25	2218	{ 571 572 5 6 7 8 9 10 }	61	486
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Mechanism connected with the lifting or traverse rails of fly-frames	485,171	Nov. 1	18	{ 6 7 8 9 10 }	61	577
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Device for supporting and adjusting screens or undercasings for the cylinders or rollers of carding-engines	485,679	Nov. 8	806	215	61	754
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Carding-engine....	485,680	Nov. 8	807	216	61	755
Canning, William P., assignor to Lowell Machine Shop, Lowell, Mass. Traveling-flat carding-engine	485,681	Nov. 8	810	216	61	755
Cannon, Clinton D., Battle Creek, Mich. Vehicle-wheel	478,918	July 12	1303	324	60	273
Cannon, Dennis W., West Chester, Pa. Furniture	468,052	Feb. 2	218	54	58	567
Cansler, Hurnon K. and T. G., Itasca, Tex. Cotton-chopper	467,915	Feb. 2	14	4	58	529
Cansler, Thomas G. (See Cansler, Hurnon K. and T. G.)						
Canton Steel Roofing Company. (See Belding, Thomas C., assignor.)						
Cantwell, Edward L., Calcutta, India. Machine for hulling rice	483,899	Oct. 4	558	{ 140 141 }	61	116
Canty, John W., Youngstown, Iowa. Attachment for mining-cages	472,159	Apr. 5	233	62	59	44
Cannteson, Ole, Leland, Ill. Clevis	480,364	Aug. 9	993	249	60	782
Capehart, Alexander S. (See Goodson and Capehart.)						
Capek, John V., assignor of one-half to E. H. Johnson, New York, N. Y. Electrically-heated oven	470,418	Mar. 8	1235	316	58	1343
Capek, John V., assignor of one-half to E. H. Johnson, New York, N. Y. Electric oven	470,419	Mar. 8	1237	316	58	1343
Capek, John V., assignor of one-half to E. H. Johnson, New York, N. Y. Electrical heater	482,074	Sept. 6	248	60	60	1384
Capen, George D. (See Baumhoff, George W., assignor.)						
Capen, George D. (See Baumhoff and Hagemeier, assignors.)						
Capewell, George J., Cheshire, Conn. Button	487,344	Dec. 6	170	48	61	1354

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Capewell, George J., Cheshire, Conn. Button	487,345	Dec. 6	171	48	61	1354
Capewell, George J., Hartford, Conn. Alarm attachment for watches	488,062	Dec. 13	1373	341	61	1612
Capitain, Henry D., Chicago, Ill. Medicine-case	480,709	Aug. 16	1548	386	60	904
Capitol Manufacturing Company. (See Cameron, Angus, assignor.)						
Capitol Manufacturing Company. (See Gurney, Charles H., assignor.)						
Capplis, Catharine, Rondout, N. Y. Parcel-carrier	473,566	Apr. 26	2492	630	59	522
Capp, Charles J. (See Overfelt, Evans, and Capp.)						
Capps, John G. (See Williams and Capps.)						
Capwell, Roy P., Linden, N. J. Cylinder drain-cock	472,855	Apr. 12	1279	327	59	256
Capwell, Thomas R. (See Munger and Capwell.)						
Capwell, Thomas R., and W. C. Fuller, Dunkirk, N. Y. Vehicle-gear	480,691	Aug. 9	1514	376	60	883
Carbis, Michael J., Bingham, Utah Ter. Flue-cleaner	473,821	Apr. 26	2878	722	59	596
Cardon, Jules, Lillo, France. Machine for broaking, scutching, and hackling flax, &c.	469,679	Mar. 1	13	5, 6	58	1101
Cardwell, Addison A., Clarenceville, N. Y. Stair-carpet button	472,250	Apr. 5	381	100	59	71
Cardwell, Charles, Commercial Point, Ky. Gate	476,127	May 31	3578	900	59	1387
Cardwell, Columbus F., Bridal Veil, Oreg. Door-securer	468,218	Feb. 2	465	115	58	616
Cardwell, Robert, Liverpool, and S. Watson, Manchester, England. Rail-chair and coup- ling for permanent ways	478,399	July 5	525	128	60	104
Carel, Frederick, and W. F. Davidson, Charleston, W. Va. Grate	474,292	May 3	635	160	59	760
Carel, Frederick, and W. F. Davidson, Charleston, W. Va. Grate	485,450	Nov. 1	463	123 124	61	667
Carew, James M., New York, N. Y. Machine for applying adhesive material to the sur- face of paper, &c.	475,535	May 24	2631	669 670	59	1188
Carey, Augustus C., Lake Pleasant, Mass. Incandescent electric lamp	470,471	Mar. 8	1326	345	58	1360
Carey, Augustus C., Lake Pleasant, Mass. Manifold-pen	473,207	Apr. 19	1876	472	59	380
Carey, Augustus C., Lake Pleasant, Mass. Incandescent electric lamp	473,208	Apr. 19	1877	473	59	380
Carey, Augustus C., Lake Pleasant, Mass. Rheostat	473,209	Apr. 19	1879	473	59	380
Carey, Augustus C., Lake Pleasant, Mass. Incandescent electric lamp	485,682	Nov. 8	811	216	61	755
Carey, James D., Cleveland, Ohio. Wood-turning machine	481,661	Aug. 30	3098	755 756	60	1231
Carey, Joshua M. (See Force, Alexander S., assignor.)						
Carey, Philip, Cincinnati, Ohio. Machine for making paper tubes	488,384	Dec. 20	1903	476	61	1733
Carey, Robert, London, England. Hydraulic lift	477,294	June 21	1697	416	59	1800
Carhart, Henry S., Ann Arbor, Mich. Standard cell for electric batteries	485,059	Oct. 25	2465	634	61	536
Carichoff, Eugene R., Richmond, Ky. Voltmeter	485,826	Nov. 8	1013	272	61	796
Carl, Alexander, et al. (See Stinebring, George W., assignor.)						
Carl, George, et al. (See Stinebring, George W., assignor.)						
Carl, Willie H., et al. (See Stinebring, George W., assignor.)						
Carle, Amos D., Malden, Mass. Sash-balance	477,099	June 14	1363	332	59	1723
Carle Brothers. (See Stinebring, George W., assignor.)						
Carleton, Cyrus, assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Hair-clipper	481,254	Aug. 23	2444	602	60	1092
Carleton, Ezra C., Port Huron, Mich. Reflector for water-gages	485,451	Nov. 1	464	124	61	667
Carleton, Milton E., Canton, Mich. Implement handle	473,250	Apr. 19	1944	489	59	394
Carleton, Roswell. (See Bodfish, William H., assignor.)						
Carleton, Roswell. (See Ramsey and Carleton.)						
Carley, Horace S., New York, N. Y. Child's chair	476,034	May 31	3422	864	59	1357
Carley, Oliver F., et al. (See Palmer, Irenas J., assignor.)						
Carlin, James E. (See Sanders and Carlin.)						
Carlin, Ross, New Orleans, La. Rod-packing	478,919	July 12	1304	325	60	273
Carlin, William P., assignor of one-half to J. M. Martin, Jeffersonton, Ky. Pump-plunger	474,365	May 10	785	204	59	799
Carlinet, John G., assignor of seven-tenths to J. Wolstencroft, W. O'Neill, and W. H. So- lev, Philadelphia, Pa. Pneumatic tool	487,086	Nov. 29	3080	791	61	1256
Carll, Addison B., Jersey City, N. J. Pipe-thimble	470,845	Mar. 15	1886	483	58	1480
Carll, Addison B., Jersey City, N. J. Wrench	474,810	May 17	1487	380	59	950
Carll, Charles W., and J. W. Phillips, Trenton, N. J. Conduit and trolley for electric- railway systems	472,982	Apr. 19	1488	380 381	59	310
Carlson, Andrew, Gilbert, Mich. Pump	475,536	May 24	2634	670	59	1189
Carlson, Gabriel, Minneapolis, Minn. Lawn-sprinkler	484,294	Oct. 11	1171	298	61	251
Carlson, Gustave, Sparks, assignor of one-half to C. H. Cornell, Valentine, Nebr. Whiffle- tree-hook	471,949	Mar. 29	3539	904	58	1817
Carlson, Gustave, Sparks, assignor of one-half to C. H. Cornell, Valentine, Nebr. Potato- bug gatherer	472,423	Apr. 5	656	167	59	123
Carlsson, Svan. (See Higdem and Carlsson.)						
Carlton, Joseph A., and H. L. Johnston, Atlanta, Ga. Automatic electric block system	471,525	Mar. 22	2899	737 738	58	1689
Carman, Charles L., Chicago, Ill. Clutch	483,601	Oct. 4	125	31, 32	61	27
Carman, Clarence A., Paterson, N. J. Anti-rattler for thill-couplings	481,549	Aug. 30	2924	719	60	1198
Carman, Thomas H. (See Ellis, Arthur W., assignor.)						
Carmell, Willis G., Columbus, Ohio. Tramway-switch	488,599	Dec. 27	2250	558	61	1818
Carmichael, Henry, Malden, Mass. Thermostatic vessel	487,713	Dec. 13	774	198	61	1491
Carmichael, John W. (See Taylor, Charles H., assignor.)						
Carmichael, Thomas W., Bellmore, Ind. Fence-machine	469,539	Feb. 23	2549	655	58	1048
Carmody, Martin, Workington, England. Buttonhole-cutter	471,950	Mar. 29	3540	905 906	58	1817
Carmont, Hazlewood, London, England. Vehicle-wheel	472,856	Apr. 12	1281	328 329	59	256
Carnegie, Phipps & Company. (See Wood, Ezra F., assignor.)						
Carnell, George, Philadelphia, Pa. Brick-mold sander	472,334	Apr. 5	518	134	59	97
Carnes, John, Lima, Ohio. Paper-folding machine	484,295	Oct. 11	1173	298 299	61	252
Carnes, Samuel T. (See Stokely, Lewis W., assignor.)						
Carney, Sydney H. (See Hollingshead, William B., assignor.)						
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash indi- cator, register, and recorder	466,710	Jan. 5	625	162 163 164 165	58	121
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash reg- ister and indicator	473,170	Apr. 19	1802	455 456	59	367
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash reg- ister and indicator	479,701	July 26	2572	640 641 642	60	540
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Complete- stroke mechanism for cash-registers	482,161	Sept. 6	394	93, 94	60	1412

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash-reg- ister	482,517	Sept. 13	1003	{ 242 243 244 }	60	1545
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash reg- ister and indicator	484,296	Oct. 11	1176	299	61	252
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash reg- ister, indicator, and recorder	484,297	Oct. 11	1178	{ 300 301 }	61	252
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Coin-dis- player	481,650	Oct. 18	1745	444	61	376
Carney, Thomas, assignor to National Cash Register Company, Dayton, Ohio. Cash indi- cator and recorder	488,063	Dec. 13	1374	{ 341 342 }	61	1613
Carrick, George W., East Orange, N. J., assignor to Reed & Carrick, New York, N. Y. Sealed can	482,055	Sept. 6	217	51	60	1377
Caron, Arresfide, Minneapolis, Minn. Clothes-drier	475,751	May 31	2368	753	59	1267
Carpenter, Albert H., Macksville, Kans. Windmill	468,541	Feb. 9	999	256	58	728
Carpenter, Alfonso H., Springfield, Vt. Vaporizer	487,247	Dec. 6	16	5	61	1324
Carpenter, Charles E., Minneapolis, Minn. Electric heater	477,628	June 21	2243	562	59	1907
Carpenter, Charles E., assignor to Carpenter-Nevens Electro Heating Company, Minneap- olis, Minn. Electric embossing-stamp	477,627	June 21	2242	561	59	1907
Carpenter, Charles E., Minneapolis, Minn, assignor of one-third to W. S. Andrews, New York, N. Y. Rheostat	481,781	Aug. 30	3312	809	60	1273
Carpenter, Charles E., Louisville, Ky. Non-magnetic watch-balance	487,550	Dec. 6	517	134	61	1423
Carpenter, Charles W., <i>et al.</i> (See Crowell, Luther C., assignor.)						
Carpenter, Charles W., <i>et al.</i> (See Crowell, Luther C., assignor.) (Reissue.)						
Carpenter, Charles W., <i>et al.</i> (See Scott, Walter, assignor.)						
Carpenter, Conrad H., assignor of one-fourth to S. L. Willyerd and G. W. Wolf, Lannius, Tex. Car-coupling	488,963	Dec. 27	2819	695	61	1934
Carpenter, Daniel H., Orlando, Fla. Wrench	467,151	Jan. 19	1403	358	58	283
Carpenter, Daniel H., Orlando, Fla. Wrench	486,764	Nov. 22	2517	657	61	1128
Carpenter, Daniel H., Orlando, Fla. Wrench	487,087	Nov. 29	3081	791	61	1257
Carpenter, Don A., Fort Collins, Colo. Apparatus for recording the rise and fall of water	470,542	Mar. 8	1423	371	58	1380
Carpenter & Dyett. (See Griffith, William P., assignor.)						
Carpenter, Edwin Z., executor. (See Ladd, Daniel E.)						
Carpenter, Emma H., Springfield, Vt. Catamenial sack or bandage	470,983	Mar. 15	2087	534	58	1521
Carpenter, Esther, Helena, Mont. Spool-holder	479,554	July 26	2347	585	60	498
Carpenter, Francis W., Harrison, N. Y. Toy fire-escape	467,332	Jan. 19	1679	430	58	335
Carpenter, Francis W., Harrison, N. Y. Toy	475,486	May 24	2550	650	59	1173
Carpenter, Frank W., High Point, assignor of one-half to E. A. Devenish, Oxford, N. C. Tobacco-pipe cleaner	471,504	Mar. 22	2876	732	58	1684
Carpenter, J. Ross, Monmouth, Ill. Gate	472,522	Apr. 12	808	208	59	166
Carpenter, Jesse F., Washington, D. C. Valve for air-brakes	478,846	July 12	1204	299	60	254
Carpenter, Jesse F., Washington, D. C. Air-brake	479,736	July 26	2643	655	60	553
Carpenter, Joseph B., Marietta, S. C. Car-coupling	472,857	Apr. 12	1283	329	59	256
Carpenter-Nevens Electro Heating Company. (See Carpenter, Charles E., assignor.)						
Carpenter, William A., <i>et al.</i> (See Coleman, John, assignor.)						
Carpentier, Jules. (See Deprez and Carpentier.)						
Carper Railway Engine Company. (See Strouse and Griffin, assignors.)						
Carr, Albert C. (See Dillon and Carr.)						
Carr, Albert C., Middlesborough, Ky. Kitchen cabinet	475,197	May 17	2094	529	59	1069
Carr, Charles, Boston, Mass. Cash indicator and register	468,329	Feb. 9	661	{ 163 164 165 }	58	661
Carr, Charles, Boston, Mass. Cash register and indicator	468,330	Feb. 9	666	{ 165 166 }	58	662
Carr, Charles, Boston, Mass. Cash register and indicator	486,979	Nov. 29	2912	752	61	1223
Carr, Charles, Boston, Mass. Cash-register	486,980	Nov. 29	2915	753	61	1224
Carr, Charles A. (See Openshaw and Carr.)						
Carr, Charles E., St. Johnsbury, Vt. Telegraph-instrument	476,730	June 7	753	186	59	1587
Carr, George, Carville, Iowa. Paper-hanger	479,971	Aug. 2	312	76	60	641
Carr, James, Syracuse, N. Y. Surface-gage	467,732	Jan. 26	2326	{ 590 591 }	58	465
Carr, James, Syracuse, N. Y. Surface-gage	468,093	Feb. 2	274	67	58	577
Carr, James L., Henryville, Ind. Car-coupling	469,540	Feb. 23	2550	655	58	1048
Carr, John M., Knobnoster, Mo. Barrel-truck	473,381	Apr. 19	2172	545	59	439
Carr, Obed W., <i>et al.</i> (See Vernon, Archer T., assignor.)						
Carr, Robert W. (See McGee and Carr.)						
Carr, Sylvester L., Chicago, Ill. Trussers-supporter	488,181	Dec. 20	1568	393	61	1668
Carr, Walter F., and C. F. Ferrin, Minneapolis, Minn. Conduit for electric railways	476,128	May 31	3579	901	59	1387
Carr, Warren H., Bath, Me. Railway-rail joint	478,920	July 12	1305	325	60	273
Carr, William M., assignor of one-half to E. S. Slaughter, Tyrone, Ky. Screw-driver	486,395	Nov. 15	1938	513	61	1001
Carrère, John M., Jr., New Brighton, N. Y. Automatically-opening outlet for basins, bath-tubs, &c.	470,179	Mar. 8	823	203	58	1268
Carrick, James C. (See Clark and Carrick.)						
Carrick, James C. (See Greenland and Carrick.)						
Carrick, James C., assignor of one-third to E. R. Smalley, Spivey, Kans. Car-coupling	481,525	Aug. 23	2883	708	60	1175
Carrico, Henry F. (See Hewlett and Cecil, assignors.)						
Carrie, James, Brooklyn, N. Y. Roller-skate	482,721	Sept. 20	1321	323	60	1619
Carrier, David, Fond du Lac, Wis. Machine for grinding the teeth of harvester-sickles	485,607	Nov. 8	695	183	61	731
Carrington, Harry T., assignor to H. G. Sterne and M. Karger, Birmingham, Ala. Loco- motive-ash-pan scraper	473,692	Apr. 26	2688	{ 676 677 }	59	560
Carroll, Charles, Oswego, N. Y. Steam-boiler	469,038	Feb. 16	1787	456	58	893
Carroll, Charles, New Orleans, La. Combined promissory note and envelope	479,555	July 26	2348	586	60	499
Carroll, Craft C., New York, N. Y. Composition of matter and producing the same	475,382	May 24	2389	599	59	1143
Carroll, Craft C., New York, N. Y. Vocal sounding-board	475,928	May 31	3265	823	59	1324
Carroll, Craft C., New York, N. Y. Apparatus for melting and casting metals	480,232	Aug. 2	765	193	60	727
Carroll, Edgar J., assignor to W. T. Carroll, Worcester, Mass. Spindle-step	488,688	Dec. 27	2394	593	61	1846
Carroll, Henry L., <i>et al.</i> (See Jones, John B., assignor.)						
Carroll, John H., De Smet, S. D. Combined car and hose coupling	478,400	July 5	526	129	60	104
Carroll, Joshua B. (See Cox and Carroll.)						
Carroll, William C., Chicago, Ill. Surgical pump	473,546	Apr. 26	2442	618	59	512
Carroll, William T. (See Carroll, Edgar J., assignor.)						
Carroll, William T., Worcester, Mass. Non-metallic bearing	475,929	May 31	3266	824	59	1324
Carrow, John S. (See Heady and Carrow.)						
Carruthers, John, assignor of one-half to M. J. Peters, Harmony, Pa. Casing-spear	479,933	Aug. 2	249	61	60	630

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Carse, Henry, Rock Island, Ill. Apparatus for making carbonated beverages	467,916	Feb. 2	15	5	58	530
Carse, William H., W. T. Blackburn, and R. P. Owens, Rogers, Ark. Hand hay-press	480,382	Aug. 9	1022	257	60	788
Carson, George, Council Bluffs, Iowa. Ore separator and concentrator	487,248	Dec. 6	17	5	61	1324
Carson, H. F., et al. (See Henning, John E., assignor.)						
Carson, Howard A., et al. (See Drew, Joseph N., assignor.)						
Carson, James B., Atlanta, Ga. Speaking-tube	466,652	Jan. 5	540	140	53	104
Carson, John F., et al. (See Bartlett, Henry F., assignor.)						
Carson, John H. (See Venn, Isaac H., assignor.)						
Carson, Leonidas W., Elma, Iowa. Car-coupling	469,541	Feb. 23	2551	656	58	1048
Carson, Manly T., Jackson, Tenn., and J. D. Gurganus, Whistler, Ala. Car-door	472,858	Apr. 12	1284	329	59	257
Carson, Samuel R., assignor to V. R. Carson, Port Deposit, Md. Hay-rack	468,190	Feb. 2	430	330	58	609
Carson, Theron. (See Bowyer and Hull, assignors.)						
Carson, V. Randolph. (See Carson, Samuel R., assignor.)						
Carson, William W., Knoxville, Tenn. Mole, dike, or dam for silt-bearing streams	478,154	July 5	122	31	60	27
Carstairs, John T., Wellington, Canada. Hydraulic propeller	484,651	Oct. 18	1748	444	61	377
Carstarphen, William P., Jr., assignor to Electric Reciprocating Company, Denver, Colo. Electrical reciprocating tool	476,225	May 31	3749	947	59	1420
Carter, Alexander G., Fresno, Cal. Fruit-pitter	474,901	May 17	1632	417	59	978
Carter, Arthur R., and H. C. Hughes, London, England. Manufacture of stained glass for windows, &c.	477,990	June 23	2816	705	59	2037
Carter & Company. (See Bottle, Edward K., assignor.)						
Carter, Edward, D., Celeste, Tex. Cotton-baling apparatus	474,293	May 3	636	161	59	760
Carter, Ephraim T., Morrison, Ill. Draft-equalizer	468,237	Feb. 2	495	121	58	622
Carter, Franklin S., Burlington, N. J., and G. P. Stumpf, Philadelphia, Pa. Electrical annunciator	486,243	Nov. 15	1694	448	61	950
Carter, Franklin S., Burlington, N. J., assignor to F. S. Carter, C. M. and E. W. Wilkins, Philadelphia, Pa. Electrical annunciator	486,820	Nov. 22	2615	681	61	1149
Carter, George S., Minneapolis, Minn. Knockdown box	486,819	Nov. 22	2614	682	61	1148
Carter, Henry and T. A., Bristol, England, assignors, by mesne assignments, to Holmes Manufacturing Company, Providence, R. I. Apparatus for the ventilating, refrigerating, heating, &c., of carriages, halls, and rooms	484,353	Oct. 11	1266	323	61	270
Carter, Herman, Lilly Chapel, Ohio, assignor to C. Crabbs, Toronto, Canada. Fence	479,972	Aug. 2	813	77	60	641
Carter, John, Niles, Ohio. Sash-weight-casting apparatus	483,208	Sept. 27	2093	531	60	1785
Carter, John B., Kokomo, Ind. Apparatus for manufacturing paper-pulp	479,243	July 19	1819	456	60	361
Carter, John B., Kokomo, Ind. Rubbing-surface for pulp-reducing machines	482,619	Sept. 13	1162	281	60	1575
Carter, John B., Kokomo, Ind. Apparatus for producing pulp	485,090	Oct. 25	2467	634	61	537
Carter, John B., and J. H. Berst, Kokomo, Ind. Process of and apparatus for disintegrating fibrous substances	487,912	Dec. 13	1110	278	61	1558
Carter, John B., and J. H. Berst, Kokomo, Ind. Fiber-disintegrating machine	487,913	Dec. 13	1113	278	61	1558
Carter, John T., Danville, Va. Tobacco-casing machine	474,650	May 10	1228	314	59	884
Carter, John T., assignor to Carter Machine Company, Danville, Va. Tobacco-casing machine	480,070	Aug. 2	497	126	60	677
Carter, Joseph J., Alvin, assignor to A. C. Hill and W. W. Maxwell, Travis county, Tex. Insecticide	482,403	Sept. 13	813		60	1509
Carter Machine Company. (See Carter, John T., assignor.)						
Carter, McIon J. D., London, England. Producing letters or designs in relief	485,608	Nov. 8	696	183	61	731
Carter, Russell H., Laconia, assignor to S. Hodgson, Meredith, N. H. Transferring mechanism for producing tape-narrowings on knitting-machines	486,431	Nov. 22	2001	531	61	1026
Carter, Sloan & Co. (See Maier, Gottlieb, Jr., assignor.)						
Carter, Stephen J., Chicago, Ill. Apparatus for coating moldings	476,002	May 31	3377	851	59	1347
Carter, Thomas A. (See Carter, Henry and T. A.)						
Carter, Thomas H. (See Ravencroft, Evan B., assignor.)						
Carter, W. T. (See Pharr, Walter, assignor.)						
Carter, William, Albion, N. Y. Musical instrument	477,167	June 14	1469	360	59	1744
Carter, William E. (See Songer, Gordon T., assignor.)						
Carter, William L., Cedar Falls, Iowa. Gate	468,033	Feb. 2	192	47	58	561
Carter, Willis S., Woburn, Mass. Advertising-wagon	474,366	May 10	786	204	59	799
Carthy, Florence M., and T. F. Flynn, Orange, N. J. Window-shade fixture	487,714	Dec. 13	775	199	61	1492
Cartwright, David J. (See Potter and Cartwright.)						
Cartwright, Edward, assignor of seven-ninths to W. H. Mann, J. W. Wehn, Jr., A. Bigelow, F. Jelenik, Jr., Wilber, Nebr., J. A. Paddock, Deadwood, S. D., E. W. Clancy, E. Longtin, Beatrice, and T. Castor, Lincoln, Nebr. Smoke-consuming furnace	478,401	July 5	528	129	60	104
Cartwright, Robert, Rochester, assignor to Thomson Meter Company, New York, N. Y. Index-hand for counting-registers	476,129	May 31	3582	902	59	1388
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	473,911	May 3	32	6, 7	59	642
Carty, John J., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	484,626	Oct. 18	1696	430	61	367
Carvell, John V., Eddyville, Ill., assignor of one-half to J. W. King, Washington, D. C. Keyhole-guard for padlocks	483,345	Sept. 27	2325	584	60	1827
Carver, George H. (See Carver, James W., assignor.)						
Carver, George H., assignor to Plano Manufacturing Company, Plano, Ill. Device for adjusting the tension of canvas aprons in harvesters	469,293	Feb. 23	2171	557	58	974
Carver, George H., assignor to Plano Manufacturing Company, Plano, Ill. Horse hay-rake	473,496	Apr. 26	2362	599	59	497
Carver, James E., Gara, Mo. Gravity-motor	487,715	Dec. 13	776	199	61	1492
Carver, James W., Pawlet, Vt., assignor of one-half to G. H. Carver, National City, Cal. Sight for firearms	466,599	Jan. 5	461	118	58	89
Cary, Spencer C., Baldwin, assignor to W. H. Vanderbilt, Brooklyn, N. Y. Metal box-strap	485,150	Oct. 25	2555	616	61	554
Cary, William T., Wakenda, Mo. Convertible bin-support	470,037	Mar. 1	589	147	58	1213
Casaday, William L., South Bend, Ind. Sulky-plow	466,945	Jan. 12	1035	263	58	205
Cascaden, Thomas, Jr., Waterloo, Iowa. Food-steamer	476,247	June 7	24	5	59	1444
Case, Albert W., South Manchester, Conn. Paper-polishing machine	468,436	Feb. 9	822	207	58	693
Case, Charles A., New York, N. Y. Elevator	478,966	July 19	1414	350	60	305
Case, Cromwell O., assignor to P. & F. Corbin, New Britain, Conn. Pneumatic door-check	475,930	May 31	3267	824	59	1324
Case, Cromwell O., assignor to P. & F. Corbin, New Britain, Conn. Knob attachment	487,416	Dec. 6	308	79	61	1382
Case, Dorset D. (See Midgley and Case.)						
Case, Elon B., assignor of one-half to A. M. Baker, Noblesville, Ind. Carpet-stretcher	466,749	Jan. 5	700	180	58	133
Case, Ensley J., Peoria, Ill. Polisher for metal castings	476,248	June 7	25	5	59	1444
Case, Frank E., Canton, Ohio. Surgical chair	483,900	Oct. 4	559	141	61	116
Case, Frank J., and G. T. Challiss, Atchison, Kans. Car-coupling	485,452	Nov. 1	465	124	61	667

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Case, George, assignor of seven-eighths to W. McKee, Paterson, N. J. Apparatus for igniting fire under steam-boilers of steam fire-engines	473,415	Apr. 19	2228	560	59	449
Case, George F. (See Hicks, Thomas H., assignor.)						
Case, James B., Webster Groves, and W. H. Hendrick, assignors to N. O. Nelson Manufacturing Company, St. Louis, Mo. Valve	481,001	Aug. 16	1990	498	60	992
Case, Joseph D. (See Grisel and Severio, assignors.)						
Case, Manning H. (See Bangs and Waite, assignors.)						
Case, Manning H. (See Farmer, Julius M., assignor.)						
Case, Manning H., et al. (See Bangs, Edwin D., assignor.)						
Casebeer, Howard M., Lincoln, Nebr. Mouth-holding apparatus for dentists and surgeons.	485,609	Nov. 8	697	183	61	731
Casey, Harvey J., Durham, N. C. Sash-operating mechanism	486,765	Nov. 22	2517	657	61	1128
Casey, Peter. (See Shannon, John, assignor.)						
Casey, Peter, assignor to himself, J. Shannon, Pittsburg, and W. W. Grier, Hulton, Pa. Wood-graining machine	466,322	Jan. 5	24	5	58	8
Cash, Arthur W., Bridgeport, Conn. Pipe-vise	472,010	Mar. 29	3622	926	58	1833
Cash, Arthur W., Bridgeport, Conn. Pipe-threading machine	482,296	Sept. 6	617	147	60	1455
Cash, Arthur W., Bridgeport, assignor to Typograph Company, Hartford, Conn. Type-writing machine	466,600	Jan. 5	462	{ 118 119 }	58	89
Cash, Francis C., assignor of one-half to C. B. Lord, Lynn, Mass. Safety-gate for cars.	473,210	Apr. 19	1880	473	59	381
Cashell, George W., assignor of one-half to S. Myers, Nevada, Mo. Cattle-guard	475,233	May 17	2153	545	59	1080
Caskey, Samuel S., and J. M. Dodge, assignors to Link-Belt Engineering Company, Philadelphia, Pa. Molding-flask	474,210	May 3	500	120	59	734
Cason, James W., Blackburn, La. Harrow	488,425	Dec. 20	1969	492	61	1746
Caspani, Gaetano, Milan, Italy. Motor for driving sewing-machines	469,077	Feb. 16	1840	471	58	904
Caspar, Henry, New Orleans, La. Collar and cuff cabinet	478,566	July 12	779	190	60	170
Caspar, Henry, New Orleans, La. Collar, cuff, and garment rack	484,085	Oct. 11	843	213	61	187
Caspar, Henry, Chicago, Ill. Toy	486,965	Nov. 29	2863	747	61	1219
Casper, Edward A., Princeville, Ill. Gate	479,702	July 26	2576	642	60	540
Casperson, Carl A., Forsbacka, Sweden. Determining the temper of iron or steel	471,809	Mar. 29	3349	853	58	1779
Cass, John B., Brooklyn, N. Y. Last	479,628	July 26	2450	611	60	518
Cass, William H., Buffalo, N. Y. Skeleton frame for sand cores	479,783	Aug. 2	14	4	60	585
Cassada, Miles T., et al. (See Sweet, William F., assignor.)						
Cassell, Peter, et al. (See Altmeyer, Matthew, assignor.)						
Cassella & Co., Leopold. (See Hoffmann, Meinhard, assignor.)						
Cassella & Co., Leopold. (See Hoffmann, Meinhard, assignor.) (Reissue.)						
Cassella & Co., Leopold. (See Weinberg, Arthur, assignor.)						
Casselman, George A., Fort Dodge, Iowa. Composition of matter for wall decoration	482,544	Sept. 13	1055	.....	60	1555
Cassidy & Adler. (See Herdengen, Eduard, assignor.)						
Cassidy, Isabel, New York, N. Y. Complexion-steamer	486,081	Nov. 15	1431	378	61	899
Cassidy, John T., Harrison, N. J. Portable bridge	484,086	Oct. 11	843	213	61	187
Cassidy, Joseph A., et al. (See Butler, William A., assignor.)						
Cassteel, Charles, St. Louis, Mo., assignor to Cincinnati Mortar Manufacturing and Builders' Supply Company, Cincinnati, Ohio. Plaster	478,951	July 12	1348	.....	60	282
Castañeda, Jesus, Mexico, Mexico. Separating oily inks from ganze	471,323	Mar. 22	2604	.....	58	1631
Castellaw, Edwin A., Jacksonville, Fla. Hand-rest	468,082	Feb. 2	260	63	58	575
Castner, Hamilton Y., London, England. Bleaching compound	486,188	Nov. 15	1609	.....	61	934
Castner, Otto W., Newark, N. J. Razor-strop	469,893	Mar. 1	363	92	58	1171
Castor, Tobias, et al. (See Cartwright, Edward, assignor.)						
Castro, Damaso, Brooklyn, N. Y. Cigar-perforator	474,793	May 10	1459	371	59	931
Caswell, Alvin C., Fitchburg, Mass., assignor to Nashua Iron and Brass Foundry Company, Nashua, N. H. Photographic-background holder	482,002	Sept. 6	126	31	60	1359
Catarieus, Daniel, Brunswick, and A. S. Crable, Lansingburg, N. Y. Adjustable guard-rail for street-cars	468,454	Feb. 9	850	215	58	699
Catchpole, Alfred, Geneva, N. Y. Steam and hot-water boiler	466,770	Jan. 12	742	193	58	151
Cate, William H. M., Henniker, assignor to Universal Weeder Company, Weare, N. H. Weeder and cultivator	473,868	Apr. 26	2959	746	59	611
Cathcart, Alexander T. and W. L., Gwynedd, Pa. Circular-knitting machine	472,029	Apr. 5	14	4, 5	59	5
Cathcart, William L. (See Cathcart, Alexander T. and W. L.)						
Cather, Robert G., Flemington, W. Va. Bridle-blinder	468,238	Feb. 2	495	121	58	622
Catherinet, Victor E. (See Guillard and Catherinet.)						
Catlin, Charles A., assignor to Rumford Chemical Works, Providence, R. I. Baking-powder	474,811	May 17	1488	.....	59	950
Catlin, Ida V., et al. (See House, John, assignor.)						
Catlin, Orin W., Fairfield, Iowa. Music-leaf turner	469,831	Mar. 1	268	69	58	1153
Cattell, Walter, Smithfield, Pa. Corn-planter	470,661	Mar. 15	1590	414	58	1424
Cauffield, Luke F., Ashtabula, Ohio. Leather-frame	484,137	Oct. 11	912	234	61	201
Caughy, Frank J. (See Caughy, John H., assignor.)						
Caughy, John H., assignor of one-half to F. J. Caughy, Baltimore, Md. Automatic electric-lamp lighter and extinguisher	472,494	Apr. 5	759	193	59	144
Cauldwell, James A., Owego, N. Y. Last-standard	468,385	Feb. 9	750	166	58	678
Caulfield, James P., Baltimore, Md. Wheeled toy	470,660	Mar. 15	1902	487	58	1484
Cansey, Joseph L., Kansas City, Mo. Salt-sprinkler for dough-cutting machines	466,244	Jan. 12	867	{ 221 222 }	58	175
Cavanagh, Joseph, assignor to Link Belt Engineering Company, Philadelphia, Pa. Bucket-elevator	482,941	Sept. 20	1662	418	60	1686
Cavell, William R. (See Morton, Wilson, assignor.)						
Caven, John. (See Dillon, Thomas, assignor.)						
Cavner, Alexander R., deceased, Chicago, Ill.; E. E. Holman, administrator. Locomotive-engine	469,844	Mar. 1	286	75	58	1156
Cavner, Alexander R., deceased; E. E. Holman, administrator, and assignor to Cavner Locomotive Improvement Company, Chicago, Ill. Locomotive-engine	478,681	July 12	939	233	60	201
Cavner, Alexander R., deceased; E. E. Holman, administrator, and assignor to Cavner Locomotive Improvement Company, Chicago, Ill. Locomotive-engine	478,682	July 12	940	{ 233 234 }	60	202
Cavner, Alexander R., deceased; E. E. Holman, administrator, and assignor to Cavner Locomotive Improvement Company, Chicago, Ill. Apparatus for lighting locomotive-engines	478,683	July 12	942	234	60	202
Cavner, Alexander R., deceased; E. E. Holman, administrator, and assignor to Cavner Locomotive Improvement Company, Chicago, Ill. Locomotive-engine	478,684	July 12	943	234	60	203
Cavner, Alexander R., deceased; E. E. Holman, administrator, and assignor to Cavner Locomotive Improvement Company, Chicago, Ill. Locomotive-engine	478,685	July 12	945	234	60	203
Cavner Locomotive Improvement Company. (See Cavner, Alexander R., assignor.)						
Cay, John D., Tallahassee, Fla. Railway-track nut-lock	478,686	July 12	947	235	60	204
Cayce, Henry P., McGregor, Tex. Sash-balance	481,103	Aug. 16	2169	537	60	1025
Cayce, Robert W., Gatesville, Tex. Tire-tightener	476,870	June 14	988	239	59	1647

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Cayton, James C., Thornton, Tex. Planter	488,239	Dec. 20	1665	415	61	1687
Cecil, De John C. (See Hewlett and Cecil.)						
Cedervall, Frans R., Göteborg, Sweden. Lubricator for propeller-shafts	475,436	May 24	2468	629	59	1157
Celluloid Company. (See Stevens, John H., assignor.)						
Central Oilgas Stove Company. (See Boeck, Charles H., assignor.)						
Cero, Alios, Dodge, Nebr. Draw-gage	486,156	Nov. 15	1571	416	61	926
Cessna, James O. (See Lefebvre and Cessna.)						
Chabaud, Antoine, L. L. Van Heers, and L. A. Allard, St. Louis, Mo. Combined furnace } for treating and reducing ores and for refining the resulting metal	487,605	Dec. 6	591	{ 151 152 }	{ 61	1439
Chabot, Joseph A., Somerville, and J. Jacobs, Boston, Mass. Combined work-holder and } drill	475,664	May 24	2826	715	59	1227
Chace, William H., assignor to Union Belt Company, Fall River, Mass. Picker-strap for } looms	470,984	Mar. 15	2089	534	58	1521
Chadbourne, Horace, Kalamazoo, Mich. Automatic cut-off governor	467,080	Jan. 12	1259	318	58	247
Chadbourne, Walter H., et al. (See Livengood, Winfield S., assignor.)						
Chadbourne, Zebulon L., E. A. Behringer, Brooklyn, N. Y., and H. J. McCoy, Orange, } N. J. Device for securing hose to couplings	477,043	June 14	1264	307	59	1703
Chadbourne, Zebulon L., E. A. Behringer, Brooklyn, N. Y., and H. J. McCoy, Orange, N. J. } Device for applying hose-clamps	484,298	Oct. 11	1185	301	61	253
Chaddick, T. P. (See Herring, James H., assignor.)						
Chaddock, David C., Minerva, Ohio. Hay rake and loader	475,752	May 31	2970	{ 753 754 }	{ 59	1267
Chadwick, Charles T. (See Haskins, Schulenburg, and Chadwick.)						
Chadwick, Thomas H., Jeannette, Pa. Furnace-door	469,894	Mar. 1	365	92	58	1171
Chafee, Charles W., Marengo, Ill. Marking attachment for planters	482,075	Sept. 6	250	60, 61	60	1385
Chaffee, Charles S., A. S. Hoffman, and F. A. Green, Birmingham, Conn. Carpet-beater ...	486,276	Nov. 15	1762	{ 463 464 }	{ 61	965
Chaffee, Louis S., deceased; M. H. Chaffee, administratrix, and assignor of one-half to H. E. } Rheubottom, Cortland, N. Y. Guiding device for sewing-machines	486,821	Nov. 22	2616	682	61	1149
Chaffee, Mary H., administratrix. (See Chaffee, Louis S.)						
Chailly, François, New York, N. Y. Knife-sharpener	468,472	Feb. 9	877	223	58	704
Chain, Charles H., Alliance, Ohio. End-gate	472,523	Apr. 12	810	208	59	167
Chalfant, Levi, Alexandria, Ind. Scaffold	475,665	May 24	2827	716	59	1227
Chalk, Bennet R. (See Barnett and Chalk.)						
Challiner, Charles, Manchester, England. Tire for wheels	467,769	Jan. 26	2379	605	58	475
Challiss, George T. (See Case and Challiss.)						
Chalmers, William B., London, England. Signaling apparatus	469,961	Mar. 1	478	{ 118 119 }	{ 58	1191
Chamberlain, Daniel, Boston, Mass. Stove-grate	474,367	May 10	787	205	59	800
Chamberlain, Edgar, assignor of one-half to G. M. Lease, Centralia, Mo. Hand-car	468,611	Feb. 9	1101	280	58	748
Chamberlain, Ephraim, Medfield, Mass. Horse-blanket	484,996	Oct. 25	2325	600	61	507
Chamberlain, George, San Saba county, near Milburn, Tex. Wire stretcher and fastener ...	483,320	Sept. 27	2293	577	60	1821
Chamberlain, Henry G., Ridgeway, Wis. Stock-feeding rack	478,402	July 5	529	129	60	104
Chamberlain, James. (See Redican, Joseph, assignor.)						
Chamberlain, John A., Kennard, Nebr. Alarm-bell trip	472,030	Apr. 5	28	6	59	8
Chamberlain, Mauasseh A., Keats, Kans. Weed-cutter for listed corn	473,912	May 3	34	7	59	642
Chamberlain, Orange M., assignor to Wheelock & Brigham, Boston, Mass. Ruffling mech- } anism for sewing-machines	472,431	Apr. 5	660	168	59	124
Chamberlin, A. P., et al. (See Kirkpatrick, Robert S., assignor.)						
Chamberlin, Charles, Kansas City, assignor of one-half to W. J. Conkle, Jackson, Mo. } Pump	475,296	May 24	2245	579	59	1113
Chamberlin, Charles C., Washington, Pa. Machine for tightening the casings of oil, gas, } or water wells	466,653	Jan. 5	541	140	58	104
Chamberlin, Charles W. (See Marcotte, Tellis, assignor.)						
Chamberlin, George S., New York, N. Y. Towel-grip	479,934	Aug. 2	250	62	60	630
Chambers, Alfred E., Jr., Petersburg, Ky. Halter	477,644	June 23	2275	570	59	1930
Chambers, Arthur, Williams Bridge, N. Y. Hammer	468,191	Feb. 2	432	107	58	609
Chambers, Arthur M., and T. Smith, Chapelton, England. Appliance for loading coke ...	479,556	July 26	2349	586	60	499
Chambers, Bering, Quinlan Company. (See Bering, James E., assignor.)						
Chambers Brothers Company. (See Chambers, Cyrus, Jr., assignor.)						
Chambers, Charles P., New Garden, and G. W. Taft, Kennett Square, Pa. Transom- } lifter	488,426	Dec. 20	1970	492	61	1746
Chambers, Cyrus, Jr., Philadelphia, Pa. Combined printing and folding machine	477,886	June 28	2665	{ 666 667 }	{ 59	2005
Chambers, Cyrus, Jr., Wynnewood, assignor to Chambers Brothers Company, Philadel- } phia, Pa. Brick-drying car	488,936	Dec. 27	2771	684	61	1924
Chambers, Francis T. (See Harrington, Walter E., assignor.)						
Chambers, Frederick, Derby, England. Collapsible core-barrel	478,921	July 12	1306	325	60	273
Chambers, John S., Jr., Allegheny, Pa. Railway-gate	473,823	Apr. 26	2882	723	59	597
Chambers, John W., assignor to Northwestern Manufacturing Company, Fort Atkinson, } Wis. Buggy-boot	485,486	Nov. 1	515	136	61	677
Chambers, Thomas R., assignor of one-half to H. M. McCroskey, Glenlock, Tenn. Bed- } stead	471,533	Mar. 29	2913	742	58	1700
Chambers, William, St. Clairsville, Ohio. Gate	475,198	May 17	2095	530	59	1069
Chambers, Zachariah T., California, Mo. Washing-machine	479,488	July 26	2254	565	60	481
Champion Heating and Ventilating Company. (See Treacy, Laurence J., assignor.)						
Champion, Jeremiah W., Rocheport, Mo. Hand corn-planter	474,721	May 10	1342	341	59	907
Champion, John W. (See Maxfield, William C., assignor.)						
Champlin, John F., Cedar Vale, Kans. Hedge-cutting machine	477,198	June 21	1527	373	59	1769
Chance Brothers & Co. (See Chance, Edward F., assignor.)						
Chance, Edward F., assignor to Chance Brothers & Co., Limited, West Smethwick, Eng- } land. Machinery for rolling glass	488,114	Dec. 13	1451	365	61	1628
Chandler, Alfred B. (See Powell and Chandler.)						
Chandler, Alfred B., and G. H. Powell, assignors of one-third to C. T. Chandler, Jr., Chi- } cago Ill. Vending-machine	481,689	Aug. 30	3141	{ 766 767 }	{ 60	1240
Chandler, Alfred D., Chelmsford, Mass. Yarn-separator for spinning-frames	476,731	June 7	754	186	59	1587
Chandler, C. T., Jr. (See Powell and Chandler, assignors.)						
Chandler, Charles W., Xenia, Ohio. Combined blotter-pad and ruler	487,364	Dec. 6	209	57	61	1362
Chandler, Elmer E., Royal Oak, Mich. Weighing-truck	478,403	July 5	530	129	60	104
Chandler, Frederic A., Somerville, Mass. Adjustable supporting-standard for school } desks and seats	486,822	Nov. 22	2618	682	61	1149
Chandler, Josiah C., London, England. Washer or scrubber for gas	486,927	Nov. 29	2833	733	61	1207
Chandler & Price. (See Price, William H., Jr., assignor.)						
Chandler, Samuel P., Lake City, S. C. Harness-tug	481,471	Aug. 23	2797	688	60	1157

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Chandler & Taylor Company. (See Laycock, William, assignor.)						
Chaney, Ambrose, and E. T. Wires, Terre Haute, Ind. Hydrocarbon-burner	481,088	Aug. 16	2137	532	60	1020
Chaney, Nathan A., Cadiz, Ohio. Chain-cutter	470,103	Mar. 1	688	169	58	1233
Chanler, John A., New York, N. Y. Pavement	475,234	May 17	2154	545	59	1080
Chanler, John A., New York, N. Y. Pavement	475,235	May 17	2156	546	59	1080
Chantérac, Mario J. de. (See Rousseau, Chantérac, and La Baume.)						
Chantler, James D., Pittsburg, Pa. Slipper	483,246	Sept. 27	2149	544	60	1795
Chanute, Arthur, and M. W. Iles, Denver, Colo. Enriching lead fumes	479,489	July 26	2255		60	481
Chapin, Frederick N., Austin, Tex. Ironing-board	480,170	Aug. 2	658	168	60	707
Chapin, Henry A., <i>et al.</i> (See Brosnan, Cornelius J., assignor.)						
Chapin, John D., <i>et al.</i> (See Green, James A., assignor.)						
Chapin, Louis N. (See Webb and Chapin.)						
Chapin, William G., Brooklyn, N. Y. Machine for feeding and cutting paper and like sheet materials	475,931	May 31	3269	825	59	1325
Chapin, William G., assignor to Thompson & Norris Company, Brooklyn, N. Y. Package of corrugated packing material	484,627	Oct. 18	1698	431	61	367
Chapin, William G., assignor to Thompson & Norris Company, Brooklyn, N. Y. Packing goods	484,628	Oct. 18	1700	431 432	61	368
Chaplin, Joseph, assignor of one-half to W. Voght, North Manchester, Ind. Fence-machine	474,794	May 10	1460	371	59	931
Chaplin, Stephen, Buckley, Wash. Valve-gear	487,249	Dec. 6	18	5	61	1324
Chapman, A. A., <i>et al.</i> (See Ward, William H., assignor.)						
Chapman, Albert W. (See Shippee, Aaron B., assignor.)						
Chapman, Alphens. (See Chapman, Norton D., assignor.)						
Chapman, Anna, Jersey City, N. J. Catamential bandage	475,199	May 17	2097	530	59	1069
Chapman, Charles H., Groton, Mass. Spinning ring and traveler	473,824	Apr. 26	2883	723	59	597
Chapman, Eugene F., Keytesville, Mo. Washing-machine	473,140	Apr. 19	1755	443	59	357
Chapman, Frank L. G. (See Hoefler and Chapman.)						
Chapman, George D., <i>et al.</i> (See Lyon, Marcus E., assignor.)						
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Spring attachment for vehicles	477,622	June 21	2235	559	59	1906
Chapman, George T., White Plains, assignor of three-fourths to W. H. Merritt, New York, N. Y. Hoof-spreader	476,732	June 7	757	186	59	1588
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe	483,209	Sept. 27	2094	531	60	1785
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe	483,536	Oct. 4	31	8	61	9
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe	483,537	Oct. 4	32	8	61	9
Chapman, George T., White Plains, assignor of one-half to W. H. Merritt, New York, N. Y. Horseshoe	483,538	Oct. 4	34	8	61	9
Chapman, Harrison S., <i>et al.</i> (See Phillips, Adelbert M., assignor.)						
Chapman, Henry P. (See Plummer and Chapman.)						
Chapman, John A., Milwaukee, Wis. Sleigh	486,368	Nov. 15	1897	502	61	992
Chapman, John C., Boston, Mass. Metallic rod-packing	481,662	Aug. 30	3101	756	60	1232
Chapman, John G. (See Fraser, William, assignor.)						
Chapman, Joseph L., Haddonfield, N. J. Railway-tie and fastening	486,628	Nov. 22	2303	602	61	1085
Chapman, Lewis W., Grand Lodge, Mich. Chair	483,976	Oct. 4	684	171	61	142
Chapman, Maro S., Manchester, Conn. Envelope	470,743	Mar. 15	1718	442 443	58	1449
Chapman, Newton S., assignor of one-half to F. Hagerman, Kansas City, Mo. Locomotive feed-water heater	479,348	July 19	1987	497	60	415
Chapman, Norton D., assignor of one-half to A. Chapman, Toledo, Ohio. Carriage-coupling	478,687	July 12	947	235	60	204
Chapman, Robert A., Glymont, Md. Figure toy	472,429	Apr. 5	657	167 168 169	59	123
Chapman, Stanley L., Evanston, Ill. Apparatus for molding pulp	488,517	Dec. 20	2110	524 525	61	1776
Chapman, Stanley L., Evanston, assignor to C. K. Luce, Chicago, Ill. Copy-holder for type-writers	469,658	Feb. 23	2719	699	58	1084
Chapman, Thomas G., assignor to F. C. Austin, Chicago, Ill. Well-drilling tool	487,989	Dec. 13	1240	308 309	61	1584
Chapman, Thomas G., Chicago, and J. W. Hunt, Sandwich, Ill., assignors, by mesne assignments, to A. B. Austin. Well-sinking machine	480,904	Aug. 16	1841	458	60	964
Chapman, Thomas L., assignor to Iron Car Equipment Company, New York, N. Y. Draw-bar frame for iron cars	467,152	Jan. 19	1404	358	58	283
Chapman, William. (See O'Neill, Charles, Z., assignor.)						
Chapman, William A., and E. Gash, Macomb, Ill. Cane	470,873	Mar. 15	1925	492	58	1488
Chapman, William H., <i>et al.</i> (See Lyon, Marcus E., assignor.)						
Chappell, John E., San Francisco, Cal. Laundry drying-room	481,845	Aug. 30	3413	837 838	60	1292
Chaquette, Ephraim, San Francisco, Cal. Machine for upsetting tires	469,962	Mar. 1	481	120	58	1192
Charest, John T., Red Bluff, Cal. Water-front and fire-box for boilers	475,035	May 17	1845	468	59	1019
Charles Parker Company. (See Griswold, Lewis F., assignor.)						
Charles, Samuel M., Topeka, Kans. Sleeping-car	468,493	Feb. 9	923	235	58	712
Charles, Samuel M., Topeka, Kans. Sleeping-car	485,151	Oct. 25	2556	657	61	554
Charles Scott Spring Company. (See Ferrell, William, assignor.)						
Charles Truax, Green & Company. (See Scheffer, David M., assignor.)						
Charles Warner Company. (See Warner and Curry, assignors.)						
Charlesworth, James, Providence, R. I. Sifter	482,545	Sept. 13	1055	256	60	1555
Charlton, John, Chicago, Ill. Motor or treadle-power	474,054	May 3	278	67	59	691
Charlton, William J., Providence, R. I. Preparing and transferring photographic and other designs for engraving	467,153	Jan. 19	1405	359	58	284
Charpiot, Samuel A. (See Ivey, James B., assignor.)						
Charter, James A., Sterling, Ill. Gas-engine	473,293	Apr. 19	2014	506	59	408
Charter, James A., assignor of one-half to J. Charter, Sterling, Ill. Gas-engine	477,295	June 21	1699	416	59	1800
Charter, John. (See Charter, James A., assignor.)						
Charter, John, Sterling, Ill. Gas-engine	472,106	Apr. 5	149	40	59	28
Charteris, Thomas, London, England. Wood-block flooring	478,847	July 12	1205	299	60	254
Chartiers Valley Gas Company. (See Guéguen, Alphonse, assignor.)						
Chase, Aaron, Waltham, Mass. Portable building	469,638	Feb. 23	2684	690 691	58	1076
Chase, Amos P., Burgh Hill, Ohio. Horse-shield	484,701	Oct. 18	1818	462	61	392
Chase, Cora A., administratrix. (See Ball, Hosea.)						
Chase, Denison, Orange, Mass. Sawing-machine	479,244	July 19	1821	457	60	381

Alphabetical list of patents—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Chase, Edward B., Philadelphia, Pa. Guard for telephones	488,385	Dec. 20	1905	477	61	1733
Chase, Eli S., and C. E. Smock, Minneapolis, Minn. Pendulum scale	475,205	May 24	2244	578	59	1115
Chase, Frank, Malden, Mass. Tack-driving mechanism	483,375	Sept. 27	2369	594	60	1836
Chase, Frank, Malden, Mass., assignor to Chase Lasting Machine Company, Portland, Me. Lasting-machine	478,501	July 5	672	164	60	133
Chase, Frank B., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Apparatus for winding wire	485,256	Nov. 1	154	45	61	605
Chase, George H., and H. L. Gantt, Philadelphia, Pa. Casting armor	485,784	Nov. 8	957	257	61	786
Chase, George H., and H. L. Gantt, Philadelphia, Pa. Casting armor	485,785	Nov. 8	958	257	61	786
Chase, George S., <i>et al.</i> (See Hunt, Franklin B., assignor.)						
Chase, Harvey S., Boston, Mass., assignor, by mesne assignments, to International Ore Separating Company, of New Jersey. Magnetic separator	488,064	Dec. 13	1379	{ 342 343 }	61	1614
Chase, Henry A., assignor to A. Watts, Boston, Mass. System of transmitting signals	471,534	Mar. 29	2914	{ 742 741 }	58	1700
Chase, Henry A., assignor to A. Watts, Boston, Mass. Signaling system	472,983	Apr. 19	1489	{ 381 382 }	59	310
Chase, Henry A., assignor to A. Watts, Boston, Mass. System of signaling	474,945	May 17	1697	432	59	992
Chase, Henry A., assignor to A. Watts, Boston, Mass. Signal-timing apparatus	481,613	Aug. 30	3027	740	60	1217
Chase, Henry H., Duluth, Minn. Cow-bag protector	486,766	Nov. 22	2519	657	61	1128
Chase, James, Rochester, N. Y. Portable device for moistening the fingers or adhesive surfaces	474,812	May 17	1489	381	59	950
Chase, Jefferson, Portland, Me. Packing-case	483,991	Oct. 11	709	178	61	160
Chase, John F., Augusta, Me. Hair-pin	483,932	Oct. 4	468	117	61	96
Chase, John F., Augusta, Me. Attachment for carpet-sweepers	483,833	Oct. 4	469	117	61	97
Chase, John F., assignor of one-half to E. W. Whitehouse, Augusta, Me. Fresh-water condenser	475,036	May 17	1847	468	59	1020
Chase Lasting Machine Company. (See Chase, Frank, assignor.)						
Chase Lasting Machine Company. (See Strickler, Albert E., assignor.)						
Chase, Lewis W., Kirksville, Mo. Blackboard-eraser	475,753	May 31	2071	754	59	1267
Chase, Luther A., Yonkers, N. Y. Office-desk	477,509	June 21	2034	504	59	1866
Chase, Maxon, Lucerne, Mo. Hay-ricker	475,200	May 17	2097	530	59	1070
Chase, Milton. (See Morse and Chase.)						
Chase, Oliver R., Boston, Mass., assignor to Algonquin Manufacturing Company, Portland, Me. Machine for shaping and molding plastic materials	484,777	Oct. 25	1959	500	61	434
Chase, R. G. (See Mullen, Melville V., assignor.)						
Chase, Rodney G., Elsdon, Ill. Door for refrigerators	479,973	Aug. 2	314	77	60	642
Chatard, Ferdinand E., Baltimore, Md. Automatic damper-controller	483,832	Oct. 4	468	117	61	96
Châtenet, Pierre A., Paris, France. Steam-generator	487,551	Dec. 6	518	134	61	1423
Chatfield, James M., Thomaston, Conn. Founder's truck	468,559	Feb. 9	1031	{ 262 263 }	58	734
Chatillon, John P., assignor to J. Chatillon & Sons, New York, N. Y. Spring-scale	467,496	Jan. 26	1929	493	58	392
Chatillon, John P., assignor to J. Chatillon & Sons, New York, N. Y. Spring platform-scale	469,024	Feb. 16	1769	451	58	890
Chatillon & Sons, John. (See Chatillon, John P., assignor.)						
Chattaway, Joseph, Petoskey, Mich. Sawbuck	482,162	Sept. 6	397	94	60	1413
Chauncey, George G., Fulton, N. Y. Checkrein-holder	469,934	Mar. 1	428	107	58	1183
Chauvin, Phillip A., Bivins, Tex. Lumber-carrier	486,189	Nov. 15	1610	427	61	934
Chavannes, E., <i>et al.</i> (See Kirkpatrick, Robert S., assignor.)						
Cheatham, Heston A. (See Reed, George T., assignor.)						
Cheatham, Thomas C. (See Smart and Cheatham.)						
Chedister, Winfield S., Newark, N. J., assignor, by mesne assignments, to W. Schlessner, Brooklyn, N. Y. Permutation-lock	478,567	July 12	780	191	60	170
Cheeseman, Samuel E., Milldale, Ky. Seal	481,472	Aug. 23	2798	688	60	1157
Cheeseman, Samuel E., assignor of one-half to A. L. France, Milldale, Ky. Seal-press	487,346	Dec. 6	172	48	61	1354
Cheeseman, Sherwood E., Kansas City, Mo. Forming alloys	466,455	Jan. 5	235	60	58	45
Cheeseman, Sherwood E., Kansas City, Mo. Chemical reagent for use in the manufacture of alloys	485,453	Nov. 1	466		61	668
Chemberlin, Josiah E., Scranton, Pa. Surgical and gynecological table	476,516	June 7	442	{ 104 105 }	59	1524
Chemical Hand Fire Extinguisher Company. (See Ballou, Russell A., assignor.)						
Chemical Supply Company. (See Dewey, Frederic P., assignor.)						
Chemische Fabrik auf Actien, (vormals E. Schering.) (See Majert, Wilhelm, assignor.)						
Chemische Fabrik Griesheim. (See Lang, Julius, assignor.)						
Chenette, Joseph E., assignor of one-half to J. M. C. Walker, Johnstown, N. Y. Sewing-machine needle	474,211	May 3	502	120	59	735
Cheney, Frederick A., Elmira, N. Y. Signal for electric-railway systems	468,787	Feb. 16	1379	348	58	813
Cheney, Malvin J., and H. Bereh, Taylor, Iowa. Cultivator-tooth	482,226	Sept. 6	498	119	60	1432
Cherrington, Robert E., Hyde Park, Mass. Head-rest	479,585	July 26	2385	594	60	505
Cherry, Howard H., and S. D. Younglove, Syracuse, N. Y. Ventilated brush for dynamos	480,762	Aug. 16	1620	407	60	920
Cherry, Thomas E., assignor of one-half to F. B. Torrey, Bath, Me. Metal-planer	477,510	June 21	2035	505	59	1866
Chesbrough, Fremont B., Emerson, Mich. Cartridge-reloader	479,245	July 19	1822	457	60	382
Chesbrough, Robert A., New York, N. Y. Medicinal extract	469,850	Mar. 1	296		58	1158
Chesbrough, Robert A., New York, N. Y. Extracting perfumes	475,437	May 24	2470	630	59	1157
Cheshire, Edward. (See Cordesman and Cheshire.)						
Chesnut, James M., Williamsport, Pa. Reamer	469,057	Feb. 16	1814	463	58	899
Chester, George T., Lockport, N. Y. Machine for forming barrel-hoops	467,154	Jan. 19	1406	359	58	284
Chesterton, Arthur W., Boston, Mass. Tool for cutting glass gage-tubes	483,778	Oct. 4	389	96	61	82
Chicago and Erie Stove Company. (See Lovell and Walker, assignors.)						
Chicago Cash Carrier Company. (See Bartlett, James F., assignor.)						
Chicago Foundation Pavement Company. (See Curtis, George S., assignor.)						
Chicago Hardware Manufacturing Company. (See Monat and Pratt, assignors.)						
Chicago Heat Storage Company. (See Koneman, William A., assignor.)						
Chicago Iron Works. (See Unzicker and Masel, assignors.)						
Chicago Mailing Case Company. (See Johnson, Gustavus J., assignor.)						
Chicago Matrix Machine Company. (See Redfield, Casper L., assignor.)						
Chicago Sash Pulley Company. (See Phillips, Francis V., assignor.)						
Chicago Sewing Machine Company. (See Binns, William H., assignor.)						
Chicago Spring Butt Company. (See Keene, Joseph, assignor.)						
Chicago Stamping Company. (See Ellsworth, Charles W., assignor.)						
Chicago Stamping Company. (See Sturges, Lee, assignor.)						
Chicago Street Indicator and Advertising Company. (See Foote, Delavan S., assignor.)						
Chichester, Franklin, Poughkeepsie, N. Y. Folding chair	467,340	Jan. 19	1693	433	58	338
Chichester, Warren, Brooklyn, N. Y. Book	470,861	Mar. 15	1904	487	58	1484
Chidley, Richard, London, England. Tea-pot	473,727	Apr. 26	2741	690	59	570

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Chief Manufacturing Company. (See Teegarden, Freeman M., assignor.)						
Childs, Charles V. (See Kindl and Childs.)						
Childs & Co., Charles H. (See Babcock, Henry D., assignor.)						
Childs & Co., Charles H. (See Durr, Henry H., assignor.)						
Childs & Co., Charles H. (See Durr and Babcock, assignors.)						
Childs, Ebenezer M., Elgin, Ill. Carpet-fastener	477,323	June 21	1746	427	59	1809
Childs, Edward D., assignor of one-half to G. W. and J. F. Strohmeyer, Milwaukee, Wis. Shoe-nailing machine	479,784	Aug. 2	15	4, 5	60	585
Childs, Orlando J., Utica, N. Y. Harrow	486,082	Nov. 15	1432	{ 378 379 }	61	900
Childs, Robert H. (See Allison, Charles O., assignor.)						
Childs, Samuel W., Crooked Run, Va. Bow-rest for carriage-tops	470,832	Mar. 15	1872	479	58	1478
Childs, William A., Englewood, N. J., assignor of one-half to F. Shaw, New York, N. Y. Battery	477,645	June 28	2275	570	59	1930
Childers, John B., et al. (See Fields and Duvall, assignors.)						
Chiles, Edward. (See Hill, Warren, assignor.)						
Chilleen, John, Chicago, Ill. Organ	487,716	Dec. 13	780	200	61	1492
Chinnery & Co. (See Chinnery, Luther G. and S. M., assignors.)						
Chinnery, Luther G. and S. M., assignors to Chinnery & Co., London, England. Apparatus for the manufacture of aerated liquids	482,841	Sept. 20	1502	{ 373 374 }	60	1655
Chinnery, Swartz M. (See Chinnery, Luther G. and S. M.)						
Chipman, Edward D., and E. L. D. Foster, Goshen, Ind. Spring for beds, cushions, &c.	470,472	Mar. 8	1327	345	58	1360
Chipman, J. C. (See Harrison, Wesley T., assignor.)						
Chisham, William R., and S. E. Abbott, Hannibal, Mo. Washing-machine	477,646	June 28	2278	571	59	1930
Chisolm, William B. (See Hughes, Samuel, assignor.)						
Chisolm, William B. (See Hughes and Chisolm.)						
Chisolm, William B., assignor of one-half to S. Hughes, Charleston, S. C. Phosphate-rock drier	479,872	Aug. 2	148	36	60	611
Chittick, Thomas, Corning, N. Y. Roller attachment for sleds	487,990	Dec. 13	1242	309	61	1581
Choate, Joseph H., Jr., Stockbridge, Mass. Water-wheel	471,951	Mar. 29	3541	905	58	1817
Choate, Parker C., Brooklyn, N. Y. Producing metallic zinc	473,186	Apr. 19	1844	464	59	373
Chodsko, Adam E., San Francisco, Cal. Rock-drilling machinery	483,901	Oct. 4	565	142	61	117
Chopard, Albert, Moutier-Grandval, Switzerland. Stop-watch	470,406	Mar. 8	1220	312	58	1340
Chope, Henry R. (See Butler and Chope.)						
Choquette, Joseph H., Fall River, Mass. Pattern for drafting garments	484,138	Oct. 11	913	234	61	201
Chrietberg, Robert S., Charleston, S. C. Anchor	481,782	Aug. 30	4313	809	60	1274
Christinger, John W., Nevinville, Iowa. Beehive	486,277	Nov. 15	1764	464	61	965
Christ, Gustave A., Grand Rapids, Mich. Cattle-guard	467,001	Jan. 12	1124	285	58	222
Christ, Gustave A., Grand Rapids, Mich. Cattle-guard	470,662	Mar. 15	1592	414	58	1424
Christ, Gustave A., Grand Rapids, Mich. Railway cattle-guard	470,663	Mar. 15	1593	415	58	1125
Christ, Rinehart. (See Kahn and Christ.)						
Christensen, Carl G., Christiania, Norway. Venetian blind	481,473	Aug. 23	2799	{ 688 689 }	60	1157
Christensen, Emil, Portland, Oreg. Saw filing and setting machine	472,031	Apr. 5	29	6	59	8
Christensen, Hans P., and H. Nelson, Marinette, Wis. Wrench	478,405	July 5	535	130	60	105
Christian, E. P. (See Reed and Buob, assignors.)						
Christiansen, John, Quincy, Mass. Switch-stand	488,182	Dec. 20	1569	{ 393 394 }	61	1669
Christie, Benjamin J., Leadville, Colo. Non-conducting covering for steam-pipes, &c.	477,647	June 28	2279		59	1931
Christie, Henry P., San Francisco, Cal. Friction-coupling	472,432	Apr. 5	662	169	59	124
Christie, J. T. (See Downs, Eugene, assignor.)						
Christie, Thomas S., et al. (See Weber, Adolph, assignor.)						
Christie, William R., assignor of one-half to Jungermann Brothers, New York, N. Y. Registering toy bank	478,404	July 5	531	130	60	105
Christman, Edward. (See Mann and Christman.)						
Christman, Edward, assignor to Brennan & Company, South Western Agricultural Works, Louisville, Ky. Sawmill-dog	470,289	Mar. 8	1012	259	58	1305
Christophor, Calvin F., Spartanburg, S. C. Reversing-valve for engines	474,212	May 3	502	121	59	735
Christopher, Calvin F., assignor of one-half to D. R. and T. C. Duncan, Spartanburg, S. C. Driving mechanism for road-engines	483,281	Sept. 27	2233	561	60	1810
Christy, Charles, Jr., assignor of one-half to W. E. King, Canton, Ohio. Hose-coupling	472,471	Apr. 5	722	184	59	137
Christy, Harry L. (See MacPherson, John G., assignor.)						
Christy, James A., assignor of part to B. Schraff and F. E. Wait, San Francisco, Cal. Telephone-holder	467,917	Feb. 2	18	5	58	530
Christy, James A., assignor to T. W. Cosgrove, B. Schraff, F. E. Wait, and E. J. Baldwin, San Francisco, Cal. Telephone	480,656	Aug. 9	1460	363	60	873
Christy, James A., and E. J. Baldwin, San Francisco, Cal. Telephone-receiver	471,535	Mar. 29	2915	742	58	1700
Christy, Russ J., assignor to R. H. Rice, Fremont, Ohio, and L. H. Cress, New York, N. Y. Grinding-machine	469,772	Mar. 1	164	43, 44	58	1132
Christy, William J., San José, Cal. Stringed musical instrument	483,136	Sept. 27	1972	500	60	1760
Church, Arthur L., Philadelphia, Pa. Valve for compound engines	471,842	Mar. 29	3395	866	58	1788
Church, Charles E., assignor to Hancock Inspirator Company, Boston, Mass. Injector	475,201	May 17	2099	531	59	1070
Church & Co. (See Sundstrom, Karl J., assignor.)						
Church, Duane H., Newton, Mass. Making bimetallic balances for watches	474,590	May 10	1136	290	59	866
Church, Duane H., Newton, Mass. Watch-regulator	484,176	Oct. 11	981	251	61	214
Church, Duane H., Newton, Mass. Watchcase-pendant	484,177	Oct. 11	982	251	61	215
Church, Duane H., Waltham, Mass. Machine for making gears or pinions	476,953	June 14	1131	{ 272 273 }	59	1676
Church, Duane H., Waltham, Mass. Uprighting-lathe	486,609	Nov. 22	2274	593	61	1078
Church, Duane H., Waltham, Mass. Jewel-setting machine	488,240	Dec. 20	1666	{ 416 417 }	61	1687
Church, Dwight M., Willimantic, Conn. Railway-switch	488,161	Dec. 13	1531	384	61	1644
Church, Melvin B., Grand Rapids, Mich. Trestle	467,081	Jan. 12	1259	319	58	247
Church, Melvin B., Grand Rapids, Mich. Coating surfaces with plastic material	487,606	Dec. 6	593	152	61	1440
Church, Walter C., Brixton, England. Slide-valve for steam-engines	476,130	May 31	3583	{ 903 904 905 }	59	1388
Church, William, St. Paul, Minn. Wrench	474,987	May 17	1776	449	59	1005
Church, William, St. Paul, Minn. Fireproof paint	478,785	July 12	1111		60	235
Churchill, Thomas A., Deland, Ill. Farm-gate	484,568	Oct. 18	1605	407	61	349
Churchward, James, Brooklyn, N. Y., assignor to Q. & C. Company, Chicago, Ill., and New York, N. Y. Apparatus for manufacturing railway-tie plates	468,928	Feb. 16	1597	404	58	855

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Chusin, Ange. (See Guasco and Chusin.)						
Cincinnati Mortar Manufacturing and Builders' Supply Company. (See Cassteel, Charles, assignor.)						
Cipperly, Clarence R. (See Bly, James F., assignor.)						
Cirkel, August, Boyd, Wis. Apparatus for storing, handling, and transporting liquids....	486,690	Nov. 22	2400	626	61	1105
Cirkel, August, Boyd, Wis. Apparatus for storing, handling, and transporting liquids....	486,691	Nov. 22	2401	627	61	1105
Cissel, Richard S. T., Elizabeth, N. J. Hot-air register.....	479,586	July 26	2386	595	60	505
Cissner, Charles, assignor of one-half to L. Billhimer, Red River, Ohio. Car-coupling.....	485,172	Nov. 1	28	10	61	578
Citizen, Samuel P., Terre Haute, Ind., assignor to himself, and C. M. Wellsford, Guthrie, Oklahoma Ter. Paint.....	479,785	Aug. 2	19		60	586
Cladin, Waldo M., Philadelphia, Pa., and K. L. Ames, Chicago, Ill. Shoe.....	487,250	Dec. 6	19	6	61	1325
Claggett, Charles E. (See Dennis and Claggett.)						
Claggett, Frank B., Oshkosh, Wis. Machine for making fly-paper.....	468,641	Feb. 9	1143	291	58	756
Claggett, Frank B., Oshkosh, Wis. Machine for making sticky fly-paper.....	480,071	Aug. 2	499	127	60	677
Claggett, Robert B., et al. (See Clayton, Anna H., assignor.)						
Clair, Benoit. (See Clair, Victor and B.)						
Clair, Victor and B., St. Etienne, France. Firearm with breech operated by gases of explosion.....	483,539	Oct. 4	35	9	61	10
Clamond, Charles, Paris, France. Microphone.....	486,244	Nov. 15	1696	449	61	951
Clancy, Albert B., Olivia, Minn. Pump attachment.....	488,183	Dec. 20	1570	394	61	1669
Clancy, Andrew, San Diego, Cal. Apparatus for connecting pipes.....	484,408	Oct. 18	1354	346	61	299
Clancy, Ervin W., et al. (See Cartwright, Edward, assignor.)						
Clancy, George P., et al. (See Sennett, Leonidas, assignor.)						
Clancy, J. Richard. (See Redfield, Lewis H., assignor.)						
Clancy, William, Anaconda, Mont. Apparatus for cleaning and concentrating ores.....	476,035	May 31	3424	{ 864 865 }	59	1357
Clapp, Charles W. (See Westervelt and Clapp.)						
Clapp, Dwight C., assignor of two-thirds to D. M. Estey, Owosso, Mich., and Estey Manufacturing Company. Bureau.....	469,542	Feb. 23	2552	656	58	1049
Clapp, Edward C., Athol, Mass. Micrometer.....	468,642	Feb. 9	1145	{ 291 292 }	58	756
Clapp, Edward D. (See Horning and Clapp.)						
Clapp, Edwin P., Rush, N. Y. Steam-boiler.....	474,039	May 3	245	59	59	685
Clapp, William, Cohoes, N. Y. Tree-protector.....	466,654	Jan. 5	541	{ 140 141 }	58	105
Clapper, Theodore. (See Turner, Jacob W., assignor.)						
Clark, Abraham, Greenville, S. C. Lettering-tablet.....	481,002	Aug. 16	1992	499	60	992
Clark, Albert M., Ann Arbor, Mich. Attachment for windmills.....	475,009	May 17	1808	459	59	1011
Clark, Alexander H., Fond du Lac, Wis. Bicycle.....	486,432	Nov. 22	2004	{ 531 532 }	61	1026
Clark, Asa. (See Reed and Clark.)						
Clark, Augustus T. (See Brooks, Herbert H., assignor.)						
Clark, Benjamin F., Harper, and J. C. Carrick, Spivey, Kans. Wagon end-gate.....	480,383	Aug. 9	1023	257	60	788
Clark Car Coupler Company. (See Clark, Walter B., assignor.)						
Clark, Charles A., assignor, by mesne assignments, to Combination Roll and Rubber Company, Bloomfield, N. J. Rubber belting.....	472,601	Apr. 12	918	236	59	188
Clark, Charles W. (See Clark, William E. and C. W.)						
Clark, Chester W., Mishawaka, Ind. Cultivator.....	469,659	Feb. 23	2722	{ 699 700 }	58	1084
Clark, Clarence S., et al. (See Lawrence, George A., assignor.)						
Clark, Cynthia J., et al. (See Clark, Jasper, assignor.)						
Clark, David A., St. Louis, Mo. Toy pistol.....	471,098	Mar. 22	2265	582	58	1567
Clark, E. Clinton. (See Barnes, David L., assignor.)						
Clark, Earl E., Canton, Ohio. Friction-clutch.....	477,244	June 21	1621	396	59	1785
Clark, Edward A., Boston, Mass. Electroplating toy apparatus.....	479,557	July 26	2350	{ 586 587 }	60	499
Clark, Edward L., Pittsburg, Pa. Rolling-mill plant. (Reissue).....	11,280	Oct. 25	2572	{ 659 660 }	61	557
Clark, Finley Y., Saratoga Springs, N. Y. Bottle-stopper fastener.....	485,173	Nov. 1	29	10	61	578
Clark, Frank, Newton Centre, Mass. Leather-gage.....	469,680	Mar. 1	16	7	58	1102
Clark, Fred E. (See Parker and Clark.)						
Clark, Frederick O. (See Hazard, Dexter, assignor.)						
Clark, George B., Utica, N. Y. Shaft-coupling for lift-bridges.....	469,314	Feb. 23	2199	563	58	980
Clark, George M., assignor to C. S. Hubbard, Higganum, Conn. Harrow.....	466,771	Jan. 12	744	{ 193 194 }	58	151
Clark, George M., assignor to C. S. Hubbard, Higganum, Conn. Land-plowing machine ..	466,772	Jan. 12	746	{ 194 195 }	58	152
Clark, George M., assignor to C. S. Hubbard, Haddam, Conn. Land-plowing machine.....	478,311	July 5	392	94, 95	60	79
Clark, George M., assignor to C. S. Hubbard, Haddam, Conn. Land-plowing machine.....	478,500	July 5	669	{ 163 164 }	60	133
Clark, George S., Philadelphia, Pa. Safety-vault. (Reissue).....	11,240	May 24	2955	{ 748 749 }	59	1249
Clark, George W., Brooklyn, N. Y. Shoulder-brace.....	471,267	Mar. 22	2527	642	58	1616
Clark, Georgie. (See Currier and Clark.)						
Clark, H. P. (See Kerslake, Harry A., assignor.)						
Clark, Harriet M., Flushing, N. Y. Combined waist and suspenders.....	477,648	June 28	2280	571	59	1931
Clark, Henry A. (See Lombard, Nathaniel, assignor.)						
Clark, Henson L., Russiaville, Ind. Scaffold.....	472,160	Apr. 5	235	62	59	44
Clark, Horace L., Rutherford, N. J. Wick-lift for lamps.....	481,748	Aug. 30	3255	792	60	1262
Clark, James, Jr. (See Maxwell and Clark.)						
Clark, James, Medina, N. Y. Reversing-valve.....	481,162	Aug. 23	2282	{ 562 563 }	60	1060
Clark, James F., Columbia Sulphur Springs, W. Va. Rotary blackboard.....	488,625	Dec. 27	2290	567	61	1826
Clark, James H., Chicago, Ill. Sewing-machine.....	485,371	Nov. 1	344	92	61	643
Clark, James H. E., Council Bluffs, Iowa. Calk-sharpener.....	479,204	July 19	1758	441	60	369
Clark, James W., Etna, Ohio. Post-hole digger.....	488,918	Dec. 27	2748	678	61	1918
Clark, Jasper, assignor to T. C. Northcott and C. J. Clark, Elmira, N. Y. Sheet-metal-bending machine.....	480,396	Aug. 9	1044	262	60	792
Clark, Jay W. (See Wheeler, Clarence L., assignor.)						
Clark, Jerome B., Allendale, assignor to Allendale Company, Providence, R. I. Machine for multiple-folding wide fabrics.....	483,735	Oct. 4	314	79	61	66
Clark, John, and F. W. Floyd, Detroit, Mich. Quarter-boot for horses.....	476,517	June 7	443	105	59	1524
Clark, John A. (See Wyman and Clark.)						
Clark, John H., assignor to Whittier Machine Company, Boston, Mass. Electric elevator.....	477,100	June 14	1364	332	59	1723

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Clark, John H., assignor to Whittier Machine Company, Boston, Mass. Electric switch ..	481,297	Aug. 23	2521	619	60	1105
Clark, John K., assignor, by mesne assignments, to M. K. Clark, Buffalo, N. Y. Latch ..	472,430	Apr. 5	659	168	59	124
Clark, John K., assignor, by mesne assignments, to M. K. Clark, Buffalo, N. Y. Latch ..	480,171	Aug. 2	659	168	60	708
Clark, John W., assignor of one-half to M. J. Baker, Philadelphia, Pa. Bookbinding-machine ..	472,011	Mar. 29	3623	926	53	1834
Clark, Joseph, San Francisco, Cal. Safety gas-cock ..	473,611	Apr. 26	2565	646	59	536
Clark, Joseph V., Cincinnati, Ohio. Lubricator ..	485,454	Nov. 1	467	125	61	668
Clark, Leonidas F., Ilion, N. Y. Type-writing machine ..	471,785	Mar. 29	3311	814	58	1772
Clark, Lizzie. (See Clark, Robert W., assignor.) ..						
Clark, Martin M., Chicago, Ill. Galvanic battery ..	476,733	June 7	758	187	59	1588
Clark, Martin M., assignor to Western Electric Company, Chicago, Ill. Galvanic battery ..	479,786	Aug. 2	20	5	60	586
Clark, Mary K. (See Clark, John K., assignor.) ..						
Clark, Melville, Chicago, Ill. Organ ..	472,032	Apr. 5	32	7	59	8
Clark, Melville, Chicago, Ill. Reed-organ ..	473,383	Apr. 19	2174	546	59	439
Clark, Melville, Chicago, Ill. Cabinet-organ ..	484,929	Oct. 25	2221	572	61	487
Clark, Merrill E., and F. S. Shaw, assignors to Clark Moulding Works, Worcester, Mass. Cornice drapery fixture ..	479,787	Aug. 2	20	5	60	586
Clark Moulding Works. (See Clark and Shaw, assignors.) ..						
Clark, Myron W. (See Smith and Clark.) ..						
Clark, Nemiah H., Philadelphia, Pa. Bureau ..	484,948	Oct. 25	2244	578	61	492
Clark, Philo M., Bonner Springs, Kans. Siphon-bottle ..	480,763	Aug. 16	1624	407	60	921
Clark, Robert. (See Cox and Clark.) ..						
Clark, Robert J. (See Robare, Louis F., assignor.) ..						
Clark, Robert W., Buffalo, N. Y. Gas and air mixer ..	470,862	Mar. 15	1904	487	58	1484
Clark, Robert W., assignor, by mesne assignments, to L. Clark, Buffalo, N. Y. Steam-trap ..						
Clark, Rollin, Keokuk, Iowa. Can-soldering clamp ..	466,324	Jan. 5	26	6	58	8
Clark, Thomas, Quincy, Ill. Corn-popper ..	480,559	Aug. 9	1294	324	60	841
Clark, Thomas F., Lancaster, N. H. Car-brake ..	475,666	May 24	2827	716	59	1227
Clark, Thomas F., Lancaster, N. H. Car-brake ..	469,963	Mar. 1	423	120	58	1192
Clark, Thomas J., Gila, N. Mex. Buckle ..	476,871	June 14	999	240	59	1647
Clark, Thomas J., Gila, N. Mex. Buckle ..	480,397	Aug. 9	1046	262	60	792
Clark, Thomas R., et al. (See Heath, Henry, assignor.) ..						
Clark, Troward, Eastry, near Dover, England. Pitman connection for mowing-machines ..	487,403	Dec. 6	284	73	61	1377
Clark, Walter B., Woodlawn Park, Ill. Car-coupling ..	481,325	Aug. 23	2564	630	60	1113
Clark, Walter B., assignor to Clark Car Coupler Company, Chicago, Ill. Car-coupling ..	484,997	Oct. 25	2326	600	61	507
Clark, Walton, assignor, by mesne assignments, to United Gas Improvement Company, Philadelphia, Pa. Manufacturing water-gas ..	466,323	Jan. 5	25	5	58	8
Clark, William, Sydney, New South Wales. Latrine and automatic flushing apparatus ..	471,418	Mar. 22	2755	703	58	1661
Clark, William, London, England. Handle for hair-clippers ..	486,083	Nov. 15	1434	379	61	985
Clark, William E., and C. W., McLunne, Ohio. Jar, jug, or can ..	475,078	May 17	1909	484	59	1031
Clark, William H., Brooklyn, N. Y. Electric insulator ..	482,297	Sept. 6	619	147	60	1456
Clark, William H., and H. C. Keefer, Kingfisher, Oklahoma Ter. Earth-auger ..	483,300	Sept. 27	2264	570	60	1816
Clark, William L., Sioux City, Iowa. Method of and apparatus for making metal castings ..	473,382	Apr. 19	2173	546	59	439
Clark, William P., Elberton, Ga. Car-coupling ..	468,192	Feb. 2	433	107	58	609
Clark, William P., Elberton, Ga. Car-coupling ..	477,168	June 14	1470	360	59	1745
Clark, William S., Philadelphia, Pa. Range-boiler attachment ..	478,688	July 12	948	235	60	204
Clarke, Alexander D., St. Louis, Mo. Apparatus for transferring railway-cars ..	487,717	Dec. 13	786	200 201 202	61	1493
Clarke, Charles E., assignor of one-half to G. A. Reynolds, Saginaw, Mich. Puzzle ..	487,318	Dec. 6	135	39	61	1348
Clarke, Charles M., Pittsburg, Pa. Machine for ornamenting wood or other surfaces ..	467,155	Jan. 19	1408	359 360	58	284
Clarke, George, Handsworth, assignor to Evered & Company, Limited, London, Birmingham, and Smethwick, near Birmingham, England. Manufacture of cases and staples of socket-bolts for doors ..	470,985	Mar. 15	2090	535	58	1521
Clarke, Harry T., assignor to Portland Iron Works, Portland, Oreg. Adjustable cut-off-valve gear ..	478,047	June 28	2911	727	59	2053
Clarke, Henry, and T. Mawhy, Leicester, England. Machine for making lace hosiery ..	486,767	Nov. 22	2520	657 658 659 660	61	1129
Clarke, Henry B., Chicago, Ill. Apparatus for heating water ..	482,076	Sept. 6	253	61	60	1385
Clarke, Louis S., Pittsburg, Pa. Phonograph ..	474,946	May 17	1701	433	59	992
Clarke, Milo M., Westery, K. I. Car-coupling ..	482,546	Sept. 13	1056	257	60	1555
Clarke, William C. (See Griffen and Clarke.) ..						
Clarcken, George M. (See Sorg, Albert A., assignor.) ..						
Clarkson, Edward, Bradford, England, assignor of one-half to E. Farnell, Woonsocket, R. I. Gill-faller ..	476,785	June 14	845	208	59	1619
Clarkson, Edward H. N., Baltimore, Md. Shingle-planing machine ..	474,544	May 10	1062	271 272	59	852
Clarkson, Frank S., assignor of three-fourths to F. B. Sloan, Baltimore, Md. Sash-cord fastener ..	467,156	Jan. 19	1409	361	58	285
Clarkson, Frank S., assignor of three-fourths to F. B. Sloan, Baltimore, Md. Sash-cord guide ..	475,202	May 17	2103	531	59	1071
Clarkson, Joseph T., Amesbury, Mass. Carriage ..	466,773	Jan. 12	753	195	58	153
Clarkson, Nicholas, New York, N. Y. Ice-cream freezer ..	476,518	June 7	444	105	59	1524
Clarkson, Thomas, London, England. Machine for classifying or sizing ores and like materials ..	472,433	Apr. 5	663	169	59	124
Clarridge, Charles H., Libertyville, Iowa. Calculator ..	479,629	July 26	2451	611	60	518
Clary, Charles M., Lewistown, Mont. Swinging gate ..	484,847	Oct. 25	2081	535	61	459
Clason, Abraham T., Danbury, Conn. Hat-rounding machine ..	477,991	June 28	2818	705	59	2037
Class, John, Canton, Ohio. Sawmill-dog ..	470,543	Mar. 8	1424	371	58	1340
Class, John, Canton, Ohio. Saw. (Reissue) ..	11,246	June 21	2248	563	59	1908
Class, Philip H., Northampton, Mass. Ice-velocipede ..	483,422	Sept. 27	2437	613	60	1849
Classen, Mathias, Kalamazoo, Nebr. Door-jamb ..	484,551	Oct. 18	1853	402	61	345
Clauberg, Frederick A., Jersey City, N. J. Razor ..	480,916	Aug. 16	1584	462	60	967
Claudin, John E., and P. Robert; said John E. Claudin assignor to J. R. Claudin, Roanoke, Ill. Cash register and adder ..	480,030	Nov. 8	1346	358	61	865
Claudin, Joseph R. (See Claudin and Robert, assignors.) ..						
Clans, Hubert, Thale-in-the-Harz, Germany. Enameling sheet-metal ware ..	466,325	Jan. 5	27		58	8
Claus, Hubert, Thale, Germany. Enameling sheet-metal articles ..	472,033	Apr. 5	36		59	9
Claus, Hubert, Thale, Germany. Enamel for metal articles ..	485,574	Nov. 1	647	172	61	706
Claus, Hubert, Thale, Germany. Elastic wheel ..	488,539	Dec. 27	2152	532	61	1798

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Clause, John J., Chicago, Ill. Machine for trimming segmental cylindrical stereotype-forms	471,601	Mar. 29	3011	766	58	1716
Clause, John J., Chicago, Ill. Plate-holder for printing-cylinders	487,992	Dec. 13	1244	310	61	1584
Clause, John J., assignor to F. Rudolph, Chicago, Ill. Apparatus for applying varnish	472,286	Apr. 5	437	113	59	82
Clausnitzer, Max, Breslau, Germany. Setting rough diamonds, &c., in holders or implements of metal.	486,084	Nov. 15	1435	379	61	900
Clauss, George, Jr., Elizabeth, and A. M. Schomburg, Newark, N. J. Bottle-filling machine	482,853	Sept. 20	1597	401	60	1672
Clauss, George, Jr., Elizabeth, and A. M. Schomburg, Newark, N. J. Bottle-filling machine	482,894	Sept. 20	1600	401 402	60	1673
Clauss Shear Company. (See Eberhard, John J., assignor.)						
Clawson, Clement C., Newark, N. J. Coin-controlled dice-thrower	488,328	Dec. 20	1808	453	61	1715
Clawson, Linns G., and E. G. Wheeler, Pleasant Hill, Mo. Wagon-scale	467,918	Feb. 2	19	5	58	530
Clawson, Linus P., assignor to Black & Clawson Company, Hamilton, Ohio. Paper-making machine	485,575	Nov. 1	648	172	61	706
Clawson, Linus P., and J. A. Keller, assignors to Black & Clawson Company, Hamilton, Ohio. Paper-slitting machine	479,349	July 19	1988	497	60	415
Clay, Adam W. (See Gorrell and Clay.)						
Clay, Arthur T., Rashick, England. Machine for finishing woven fabrics	488,787	Dec. 27	2538	630	61	1875
Clay, Edward C. (See Senckenbaugh, John J., assignor.)						
Clay, Edwin W., Louisville, Ky. Sign for electric lamps	486,324	Nov. 15	1825	481	61	978
Clay Glass Tile Company. (See Houghton and Haines, assignors.)						
Clay, Henry, assignor to H. Snyder, trustee, Philadelphia, Pa. Armor-plate	485,683	Nov. 8	812	217	61	755
Clay, Levi, et al. (See Richardson, Theodore M., assignor.)						
Claydon, James. (See Smith and Claydon.)						
Claypool, William, Cozad, Nebr. Water-elevator	472,602	Apr. 12	919	236 237	59	188
Clayton, Anna H., assignor of one-half to R. B. Claggett and J. H. Stoner, Louisville, Ky. Motor for sewing-machines	485,487	Nov. 1	516	136	61	677
Clayton, Frank. (See Piper, Edwin S., assignor.)						
Clayton, George. (See Clayton, John S. and G.)						
Clayton, James, et al. (See Aldrich, George W., assignor.)						
Clayton, James, Brooklyn, N. Y. Valve for air and gas compressors	487,064	Nov. 29	3040	780	61	1248
Clayton, John, Minneapolis, Minn. Wheel-plow	484,652	Oct. 18	1750	445 446	61	378
Clayton, John S. and G., Providence, R. I. Curtain-ring	468,105	Feb. 2	297	72	58	581
Clayton, John W., Chattanooga, Tenn. Quilting attachment for sewing-machines	482,467	Sept. 13	913	223	60	1526
Clayton, Thomas G. (See Johnson and Clayton.)						
Cleaveland Fence Company. (See Loughlin, Michael E., assignor.)						
Cleaveland, John B., Indianapolis, Ind. Wire-stretcher and tension device	475,383	May 24	2390	610	59	1143
Cleaveland, John B., assignor to M. E. Cleaveland, Indianapolis, Ind. Fence-wire	475,718	May 24	2907	737	59	1242
Cleaveland, John B., assignor to M. E. Cleaveland, Indianapolis, Ind. Wire fence	475,719	May 24	2908	737	59	1242
Cleaveland, John B., assignor to M. E. Cleaveland, Indianapolis, Ind. Wire-braiding machine	486,823	Nov. 22	2620	683	61	1150
Cleaveland, John B., assignor to M. E. Cleaveland, Indianapolis, Ind. Braided fence-wire	486,824	Nov. 22	2621	684	61	1150
Cleaveland, Mary E. (See Cleaveland, John B., assignor.)						
Clegg, Daniel W., Stapleton, N. Y. Lighting and heating apparatus	485,827	Nov. 8	1014	272 273	61	796
Clegg, James, London, England. Electric-light carbon	487,046	Nov. 29	3014		61	1242
Clegg, Wilfrid, assignor to John Hope & Sons Engraving and Manufacturing Company, Providence, R. I. Pantograph engraving-machine	476,186	May 31	3677	929	59	1407
Cleland, Andrew J., Mankato, Minn. Automatic car-coupling	471,952	Mar. 29	3542	905	58	1818
Clemens, Peter, Dane, Wis. Windmill	470,910	Mar. 15	1975	504 505	58	1439
Clément, Felix, Salins, France. Bicycle	468,643	Feb. 9	1146	292	53	757
Clement, Joseph W., Lowell, Mass. Banjo	470,986	Mar. 15	2091	535	58	1521
Clements, James and J., and F. H. Rollins, Lake City, Iowa. Corn-harvesting machine	477,169	June 14	1471	360 361	59	1745
Clements, John. (See Clements and Rollins.)						
Clements, John T., et al. (See Hunt, Franklin B., assignor.)						
Clements, Masten L., Indianapolis, Ind. Wire fence	474,813	May 17	1491	381	59	950
Clements, Oliver B., and J. I. Smith, Madison, Mo. Gate	474,213	May 3	504	121	59	735
Clements, Samuel L., East Eagle, Ky. Flooring and ceiling tongs	484,299	Oct. 11	1186	302	61	253
Clemes, William H., assignor to Taylor & Boggis Foundry Company, Cleveland, Ohio. Design for a wick-tube and burner-plate. (Reissue)	11,239	May 17			59	1098
Clemons, Henry D., assignor to American Writing Machine Company, Hartford, Conn. Type-writing machine	478,223	July 5	248	60	60	51
Clemons, Maynard E., Attleborough, Mass. Chair for railway-rails	475,539	May 24	2639	671	59	1189
Clemson, George N., Middletown, assignor to National Saw Company, New York, N. Y. Saw-filing machine	473,294	Apr. 19	2015	506 507	59	409
Clendenin, William. (See Tuffley, George E., assignor.)						
Clennam, Milton A., assignor of one-half to W. C. Rarig, San Francisco, Cal. Connecting-rod joint and bearing	471,953	Mar. 29	3543	906	58	1818
Clerr, Jules E., Bordeaux, France. Device for closing bottles or similar vessels	487,385	Dec. 6	237	64	61	1368
Clerk, Ellen, Jefferson City, Mo. Folding book-back	484,653	Oct. 18	1753	446	61	378
Clerke, John W., Cleveland, Ohio. Commode	481,255	Aug. 23	2446	602	60	1092
Cleveland, Albert A. (See Williams and Cleveland.)						
Cleveland Fancet Company. (See Weatherhead, Edward H., assignor.)						
Cleveland, George P., Coleman, Tex. Rotary plow	486,325	Nov. 15	1826	482	61	978
Cleveland Target Company. (See Damm, Frederick C., assignor.)						
Cleveland Target Company. (See Eaton and Damm, assignors.)						
Cleveland, Uriah A., Albert Lea, Minn. Plow	484,178	Oct. 11	984	252	61	215
Cleveland, William B., Geneva, Ohio. Cut-out switch	478,689	July 12	949	235	60	204
Cleveland, William F., Rounthwaite, Canada. Belt-holder	487,993	Dec. 13	1245	310	61	1585
Cleveland, William T., Newport, Tex. Shears for cutting hot metal	469,078	Feb. 16	1841	471	58	904
Cliff, Charles F., Durham, Canada. Differential hoisting-machine	487,994	Dec. 13	1246	310	61	1585
Cliff, Edward, Newark, N. J. Semi-elliptic spring	474,159	May 3	422	101	59	720
Clifford, John, and J. H. Gavin, assignors to L. Wolff Manufacturing Company, Chicago, Ill. Needle-bath apparatus	475,754	May 31	2972	754	59	1267
Clifford, John, and J. H. Gavin, assignors to L. Wolff Manufacturing Company, Chicago, Ill. Waste and overflow connection for cement laundry-tubs	480,692	Aug. 9	1515	376	60	883
Clifford, John M., Madison, Wis. Shoe	486,085	Nov. 15	1436	380	61	900
Clifford, Patrick, Quincy, Mass. Sock-clasp	469,935	Mar. 1	429	107	58	1183
Clifford, Thomas, Rochester, N. Y. Furnace attachment	467,157	Jan. 19	1411	361	58	285

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Di-g.	Vol.	Page.
Clift, Joseph, Dorking, England. Attachment for electric lamps.....	483,044	Sept. 20	1832	465	60	1721
Climax Cigarette and Cigar Machine Company. (See Bauer, Henry, assignor.)						
Climax Road Machine Company. (See McAlpine, Charles A., assignor.)						
Climenson, William W., Honeybrook, Pa. Pen and pencil holder.....	466,711	Jan. 5	646	166	58	123
Climenson, William W., Honey Brook, assignor to Honey-Brook Novelty Company, Lancaster, Pa. Burglar-alarm.....	488,162	Dec. 13	1533	385	61	1645
Cline, Charles E., and C. H. Kilpatrick, assignors of one-third to G. W. Cline, Abingdon, Ill. Gate.....	487,718	Dec. 13	790	202	61	1494
Cline, David L., assignor of one-half to L. B. Sullivan, Nevada, Mo. Wire-stretcher.....	469,369	Feb. 23	2223	587	58	997
Cline, Frederick N., and H. McFarlane, Chicago, Ill. Tire-furnace.....	469,415	Feb. 23	2358	605 } 606 }	58	1011
Cline, George A., and W. Trimble, Toronto, Canada. Voting-machine.....	473,913	May 3	35	7.8	59	643
Cline, George J., Goshen, Ind. Attachment for corn-planters.....	476,036	May 31	3425	865 } 866 }	59	1357
Cline, George J., Goshen, Ind. Garment-supporter.....	481,256	Aug. 23	2447	603	60	1092
Cline, George J., Goshen, Ind. Sickle-grinder.....	487,552	Dec. 6	520	135	61	1423
Cline, George J., assignor of one-half to C. L. Landgraver, Goshen, Ind. Wrench.....	466,456	Jan. 5	237	61	58	45
Cline, George W. (See Cline and Kilpatrick, assignors.)						
Clingman, John, Dayton, Ohio. Carburetor.....	484,949	Oct. 25	2245	578	61	492
Clinton, Charles M. (See Melotte and Clinton.)						
Clinton, Charles M., and J. McNamara, Ithaca, N. Y. Type-writing machine.....	474,333	May 3	718	187 } 188 }	59	775
Clinton, Miles L., Ithaca, N. Y. Steam-boiler.....	488,689	Dec. 27	2396	593 } 594 }	61	1846
Clinton Wire Cloth Company. (See Scarles, Benjamin, assignor.)						
Clippinger, Amos R., Centralia, Kans. Corn-harvester.....	472,916	Apr. 12	1373	352	59	276
Clive, Albert A., Ilion, N. Y. Magazine breech-loading gun.....	472,251	Apr. 5	382	100	59	71
Cload, Alfred C. (See Belmont and Cload.)						
Clock, Jesse M., New York, N. Y. Tool-grinder.....	476,872	June 14	991	240	59	1648
Clogston, Charles E., et al. (See Beckwith, Theodore A., assignor.)						
Clore, Jesse N., et al. (See Willis, William H., assignor.)						
Close, James A., Woodstock, Canada. Violin tail-piece.....	481,783	Aug. 30	3314	809	60	1274
Close, Walter R., Bangor, Me. Fog-signal.....	482,077	Sept. 6	254	61	60	1345
Close, Walter R., assignor of one-half to C. E. Hill, Bangor, Me. Fog-signal.....	472,335	Apr. 5	519	135	59	97
Closz, Charles and J., St. Ansgar, Iowa. Oat-screen.....	471,071	Mar. 15	2219	570	58	1546
Closz, Charles and J., St. Ansgar, Iowa. Corn-separating screen.....	471,072	Mar. 15	2222	570	58	1546
Closz, Charles and J., St. Ansgar, Iowa. Grain-screen.....	471,073	Mar. 15	2223	570	58	1546
Closz, Jacob. (See Closz, Charles and J.)						
Cloud, James M., et al. (See Lavallet, Joseph G., assignor.)						
Cloud, John W., Chicago, Ill. Pin-operating device for car-couplings.....	468,060	Feb. 2	230	57	58	569
Cloud, John W., Chicago, Ill. Apparatus for cooling steel rails and bars.....	468,788	Feb. 16	1380	348 } 349 }	58	814
Cloud, John W., Chicago, Ill. Means for cooling steel tires or rings.....	468,789	Feb. 16	1382	349 } 350 }	58	814
Cloud, Joseph, Philadelphia, Pa. Culinary utensil.....	486,157	Nov. 15	1572	417	61	927
Clough, Albert L., Manchester, N. H. Electric cut-out.....	467,919	Feb. 2	22	6	58	531
Clough, Francis W., Springfield, Mass. Gear-cutter.....	476,734	June 7	759	187 } 188 }	59	1588
Clough, William E., Cincinnati, Ohio. Speculum.....	475,975	May 31	3342	843	59	1339
Clough, William R., Altou, N. H. Corkscrew.....	474,055	Mar. 3	281	68	59	691
Clouse, William L., and W. R. Anderson, Tiffin, Ohio. Machine for cutting and bending nut-blanks.....	477,511	June 21	2037	505 } 506 } 507 }	59	1866
Clonser, William, assignor of one-half to J. A. Porter, Greenfield, Ohio. Foot-rest for embalming-tables.....	478,568	July 12	782	191	60	170
Cloutier, Bernard. (See Dean, James H., assignor.)						
Cloutier, Samuel, Lewiston, Me. Barber's chair.....	488,707	Dec. 27	2419	599	61	1851
Clover, A. C., et al. (See Curran, William, assignor.)						
Clover, Seth, et al. (See Farrington, Joel, assignor.)						
Clow, George, et al. (See Clow, William, assignor.)						
Clow, William, et al. (See Young, Charles H., assignor.)						
Clow, William, assignor of three-fourths to W. G. Reed, G. Clow, and J. M. Sinclair, Toronto, Canada. Fish-scaler.....	481,104	Aug. 16	2170	537	60	1026
Clow, William E., Chicago, Ill. Composition tub, tank, &c.....	469,416	Feb. 23	2362	606	58	1012
Cloyes, James H., Des Moines, Iowa. Side-spring vehicle.....	468,422	Feb. 9	804	201	58	690
Clum, William E. (See Underwood and Clum.)						
Clute, Andrew J., Jr. (See Stulken and Clute.)						
Clute, Veeder S., assignor of one-half to W. W. Stevenson, Cohoes, N. Y. Electrically-controlled stop-motion for knitting-machines.....	481,726	Aug. 30	3212	784	60	1253
Clutho, Charles, Toronto, Canada. Truss.....	467,552	Jan. 26	2051	517	58	413
Clyne, James B., assignor to White Sewing Machine Company, Cleveland, Ohio. Machine for making screws.....	469,201	Feb. 16	2034	517	58	938
Coale, Joseph M., Baltimore, Md. Oil-cup.....	479,246	July 19	1823	457	60	382
Coale, Joseph M., Baltimore, Md. Safety-valve.....	488,309	Dec. 20	1775	447	61	1708
Coates, Clarence, Cliftondale, and C. E. Perry, Hyde Park, Mass. Paper-cutting machine.....	467,082	Jan. 12	1261	319	58	248
Coates, Clinton T., and W. R. Helton, Terre Haute, assignors to I. Fechtelner, Vigo county, Ind. Oil-burner.....	475,297	May 24	2247	579	59	1116
Coates, Damon N. (See Hall, George O., assignor.)						
Coates, George H., Worcester, Mass. Flexible shaft.....	486,852	Nov. 29	2675	700	61	1176
Coates, John F., assignor of five-sixths to L. J. and E. Weinstein and I. Fechtelner, Terre Haute, Ind. Oil-burner.....	479,558	July 26	2352	587	60	500
Coates, Ray G., Punta Arenas, Costa Rica. Air-brake.....	467,920	Feb. 2	24	6	58	531
Coates, Ray G., Punta Arenas, Costa Rica. Air-brake.....	467,921	Feb. 2	27	6	58	531
Coates, Robert, Washington, D. C. Overboot for horses.....	473,295	Apr. 19	2018	507	59	409
Cobb, Alton E., Phoenix, Ariz. Ter. Lid-lifter for kettles, &c.....	479,055	July 19	1520	379	60	326
Cobb, Benjamin P., Odessa, Mo. Meat-block attachment.....	488,670	Dec. 27	2669	661	61	1902
Cobb, Dewey A., Philadelphia, Pa. Machine for compressing and forming the ends of sectional woven-wire springs.....	486,853	Nov. 29	2676	700	61	1176
Cobb, Dewey A., assignor to Weston & Wells Manufacturing Company, Philadelphia, Pa. Apparatus for shaping tubular fabrics.....	470,800	Mar. 15	1810	465	58	1466
Cobb, George H. (See Squire, Cobb, and Towl.)						
Cobb, Willard E., Portland, Me. Window-screen.....	479,752	July 26	2669	662	60	558
Cobham, Frederick P., assignor of one-half to F. and A. Moreck, Jr., Warren, Pa. Extension-table.....	471,954	Mar. 29	3544	906	58	1818

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Cobham, Frederick P., assignor of one-half to F. E. Windsor, Warren, Pa. Bag-lock.....	475,037	May 17	1848	469	59	1020
Cobham, Frederick P., assignor of one-half to O. C. Allen and G. H. Higgins, Warren, Pa. Extension-table.....	473,060	Apr. 19	1617	412 413	59	334
Cobham, Henry, Jr., Warren, Pa. Extension-table.....	482,620	Sept. 13	1163	281 282	60	1575
Coburn, Alonzo A. (See Wilson, James H., assignor.)						
Coburn, Byron, Le Roy, N. Y. Fly-wheel.....	477,324	June 21	1747	427 428	59	1810
Coburn, Edward D. (See Hornbeck, Cornelius F., assignor.)						
Coburn, John A. (See Gardner and Coburn.)						
Coburn, Larned, et al. (See Jacoby, William, assignor.)						
Cocchi, John, and F. A. Zeitler, Berlin, Germany. Mechanical attachment for musical instruments.....	467,572	Jan. 26	2077	524 525 526	58	418
Cochins, George, Houston, Tex. Mechanical motor.....	478,088	July 5	21	7	60	7
Cochran, Andrew, and E. C. Stover, Trenton, N. J. Flashing device for water-closet bowls.....	475,537	May 24	2636	670	59	1189
Cochran, Arthur D., Indianapolis, Ind. Street-car curtain.....	474,902	May 17	1634	417	59	979
Cochran, Arthur D., Indianapolis, Ind. Street-car curtain.....	486,433	Nov. 22	2006	532	61	1027
Cochran, Edward A., Oak Park, Ill. Wrench.....	481,389	Aug. 23	2661	652	60	1130
Cochran, Henry, Chester, Pa. Corner-stay for cars.....	470,392	Mar. 8	1199	306	58	1336
Cochran, Henry, Chester, Pa. Gate for car-platforms.....	472,727	Apr. 12	1104	284	59	221
Cochran, Henry, Chester, Pa. Signal-light.....	479,164	July 19	1690	422	60	357
Cochran, Henry, Chester, Pa. Sky-light for electric cars.....	484,515	Oct. 18	1529	388	61	333
Cochran, Henry, and J. L. Hardie, Chester, Pa. Dust-collar for vehicle-axes.....	473,612	Apr. 26	2567	647	59	536
Cochran, John J., assignor of two-thirds to A. T. Gerrans and H. A. Bridges, St. Louis, Mo. Wrapper.....	481,846	Aug. 30	3414	838	60	1293
Cochran, John M., Russellville, Ala. Machine for splicing fence-wires.....	470,544	Mar. 8	1427	372	58	1381
Cochran, John M., Russellville, Ala. Wire-bending pliers.....	470,545	Mar. 8	1427	372	58	1381
Cochran, John T., Oakland, Cal. Bituminous-rock-reducing machine.....	482,914	Sept. 20	1627	408	60	1678
Cochran, Samuel D., assignor, by mesne assignments, to A. H. Walton, trustee, Wyoming, Ohio. Autographic register.....	475,487	May 24	2552	650	59	1173
Cochrane, David, assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Separator for purifying steam.....	474,160	May 3	423	101	59	720
Cochrane, David, assignor to Harrison Safety Boiler Works, Philadelphia, Pa. Separator for steam.....	483,992	Oct. 11	709	178	61	160
Cochrane, William, Philadelphia, Pa. Adjustable drawing table or desk.....	468,929	Feb. 16	1508	404 405	58	855
Cockayne, Benjamin F. (See Baron and Cockayne.)						
Cockburn Barrow and Machine Company. (See Barr, William C., assignor.)						
Cockburn, John, assignor to North British Rubber Company, Limited, Edinburgh, Scotland. Flexible hose or tubing.....	475,384	May 24	2391	611	59	1143
Cocker, Alexander I., G. W. Collyer, and C. Haines, Tarrytown, N. Y. Alloy.....	480,233	Aug. 2	767	.....	60	727
Cockerill, Thomas. (See Garner, Cockerill, and Porrett.)						
Cockrell, William A., Milwaukee, Wis. Dust-collector.....	468,964	Feb. 16	1658	424	58	867
Cockrell, William A., Mount Perry, Ohio. Grain-scourer.....	485,488	Nov. 1	517	137	61	677
Cockrill, Henry S., Baltimore, Md. Fireproof stage-curtain.....	487,470	Dec. 6	398	103	61	1399
Codner, William S. (See Mason and Codner.)						
Cody, Frederick A., and L. T. Lawton, Meriden, Conn., assignors to American Automatic Lighting Company, of New Jersey. Hydrocarbon-lighting device.....	484,354	Oct. 11	1267	323 324	61	270
Coe, Daniel E., Darby, Pa. Manufacturing yarn from waste.....	466,457	Jan. 5	237	.....	58	45
Coe, Frank M., et al. (See Brosnan, Cornelius J., assignor.)						
Coe, Henry I. (See McBride, John J., assignor.)						
Coe, John W., Jr., Chicago, Ill. House-door letter-box.....	485,860	Nov. 8	1066	283	61	807
Coe, Walter H., Providence, R. I. Packing decorative films.....	472,252	Apr. 5	385	101	59	72
Coe, Walter H., Providence, R. I. Device for applying decorative films.....	474,629	May 10	1196	304	59	878
Coepfer, Carl, Coeln, Germany. Electric-arc lamp.....	484,530	Oct. 18	1551	394	61	337
Coëtlogon, Arthur A. C. de, Paris, France. Preparing celluloid and similar materials for printing.....	474,814	May 17	1493	.....	59	950
Cohee, Andrew J., Portland, Oreg. Fire-alarm telegraph.....	481,847	Aug. 30	3415	838	60	1293
Cohee, George A., Dalton, Ga. Washing-machine.....	481,003	Aug. 16	1992	499	60	993
Coffey, Charles, et al. (See Loomis, George L., assignor.)						
Coffey, John A., Washington, D. C. Grave-marker.....	473,296	Apr. 19	2020	507	59	409
Coffey, John R., et al. (See Dyer, Isaac T., assignor.)						
Coffey, Nathan F. (See Parker, Jones, and Coffey.)						
Coffin, Amory, Phoenixville, assignor to Phenix Iron Company, Philadelphia, Pa. Structural column.....	477,925	June 28	2723	681 682	59	2017
Coffin, Amory, assignor to Phenix Iron Company, Phoenixville, Pa. Structural metal work.....	485,489	Nov. 1	518	137	61	677
Coffin, Arthur W., San Francisco, Cal. Ticket-punch.....	480,560	Aug. 9	1295	324	60	841
Coffin, C. A., et al., executors. (See Van Depoele, Charles J.)						
Coffin, Charles L., Detroit, Mich. Electric link-welding machine.....	470,038	Mar. 1	590	147	58	1214
Coffin, Charles L., Detroit, Mich. Hoop-welding apparatus.....	475,667	May 24	2828	716	59	1227
Coffin, Charles L., Detroit, Mich. Commutator-brush.....	475,668	May 24	2829	716	59	1228
Coffin, Charles L., Detroit, Mich. Electric welding.....	477,101	June 14	1367	333	59	1724
Coffin, Charles L., Detroit, Mich. Electric welding.....	483,423	Sept. 27	2439	613	60	1850
Coffin, Charles L., Detroit, Mich. Electric metal-working device.....	483,424	Sept. 27	2440	614	60	1850
Coffin, Charles L., Detroit, Mich. Electric metal-working.....	483,425	Sept. 27	2441	614	60	1850
Coffin, Charles L., Detroit, Mich. Electric metal-heating.....	483,426	Sept. 27	2442	614	60	1850
Coffin, Charles L., Detroit, Mich. Electric metal-working.....	483,427	Sept. 27	2443	615	60	1850
Coffin, Charles L., Detroit, Mich. Electric metal-working.....	483,428	Sept. 27	2444	615	60	1851
Coffin, Charles L., Detroit, Mich. Arc and incandescent metal-heating.....	487,607	Dec. 6	595	152	61	1440
Coffin, Charles L., Detroit, Mich. Electrical soldering-iron.....	488,871	Dec. 27	2670	661	61	1902
Coffin, Charles L., Detroit, Mich. Electrically-heated soldering-tool.....	488,872	Dec. 27	2671	661	61	1903
Coffin, John P. (See Blount, William C., assignor.)						
Coffin, Joseph H., Somerville, Mass. Sail for vessels.....	479,133	July 19	1644	411	60	347
Coffin, Walter E., Marshall, Tex. Carling-socket for car-frames.....	470,744	Mar. 15	1719	443	58	1449
Coffman, Isadore L., and D. P. Denney, Uniontown, Pa. Car-coupling.....	487,251	Dec. 6	20	6	61	1325
Coffman, John R., assignor of one-half to C. A. Benton, Detroit, Mich. Brush-holder.....	472,435	Apr. 5	665	170	59	125
Coffman, Lucinda, Monroe City, Mo. Carpet-stretcher.....	472,434	Apr. 5	664	170	59	125
Coffman, M. D., et al. (See Johnson, Charles J. W., assignor.)						
Cogan, Robert B., W. M. Pierce, and J. C. F. Jones, Braddock, Pa. Axle cooler and lubricator.....	474,294	May 3	639	161	59	761
Cogger, William B., Springfield, Ill. School furniture.....	478,786	July 12	1112	274 275	60	235
Cogswell, Wilfred G., assignor to H. E. Long, Duluth, Minn., and C. E. Soule, Grand Haven, Mich. Means for operating safety cut-offs for grain-elevators.....	482,468	Sept. 13	914	223	60	1526

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Cogswoll, William B., Syracuse, N. Y. Finder attachment for cameras	484,179	Oct. 11	985	252	61	215
Cohen, Emanuel G., Cleveland, Ohio. Hand stapling implement	477,351	June 21	1784	436	59	1817
Cohen, Joseph B., assignor of one-half to F. Lathrop, New York, N. Y. Window-sash	470,139	Mar. 1	737	184	58	1243
Cohen, Louis. (See Eckert and Cohen.)						
Cohen, Reuben, Montreal, Canada. Cigar-tip perforator	485,861	Nov. 8	1067	284	61	807
Cohen, Samuel, New York, N. Y. Hat	478,952	July 12	1349	334	60	282
Cohn, Oscar, assignor to M. W. Henius, Bridgeport, Conn. Cleaning device for type-writing machines	478,406	July 5	536	130	60	105
Cohn, Ricka, <i>et al.</i> (See Mundt, Wilhelm, assignor.)						
Cokayne, William, assignor of one-third to J. C. Shafor, Sedalia, Ind. Nut-lock	482,518	Sept. 13	1009	244	60	1546
Colahan, Charles, Cleveland, Ohio. Cord-knotter for grain-binders	476,519	June 7	445	{ 105 106 }	{ 59	1524
Colam, William N., assignor of one-half to Dick Kerr & Company, Limited, London, England. Car-coupling	476,086	Nov. 15	1436	380	61	901
Colborne, Oliver, Chicago, Ill. Power hack-sawing machine	479,399	July 26	2081	522	60	447
Colburn, Frederick C., Arlington, N. J., assignor to Arlington Manufacturing Company, New York, N. Y. Writing-pen	482,298	Sept. 6	620	148	60	1456
Colburn, Leslie H., Toledo, Ohio. Slotting-machine	477,737	June 28	2414	{ 603 604 }	{ 59	1960
Colby, Branch H., St. Louis, Mo. Game-box	467,770	Jan. 26	2381	605	53	476
Colby, Charles C. (See Ingraham, Harry B., assignor.)						
Colby, Charles H., assignor to J. Colby & Co., Brooklyn, N. Y. Operator's seat	478,987	July 19	1415	350	60	305
Colby & Co., J. (See Colby, Charles H., assignor.)						
Colby, Edward J., assignor to Colby Specialty Supply Company, Chicago, Ill. Locking-rack for umbrellas, coats, hats, &c.	475,720	May 24	2909	738	59	1242
Colby, George A. (See Dorwart, Benjamin K., assignor.)						
Colby Specialty Supply Company. (See Colby, Edward J., assignor.)						
Colclough, Charles. (See Roche and Colclough.)						
Coldwater Oil Stove Company. (See Benedict, Maurice G., assignor.)						
Coldwell, Joseph, New Bedford, assignor to Crompton Loom Works, Worcester, Mass. Shedding mechanism for looms for cross-weaving	488,497	Dec. 20	2082	577	61	1770
Coldwell, Thomas, Newburg, N. Y. Slicing-machine	470,987	Mar. 15	2093	536	58	1522
Coldwell, Thomas, Newburg, N. Y. Lawn-mower	475,976	May 31	3341	843	59	1339
Coldwell, Thomas, Newburg, N. Y. Hand-rake	481,895	Aug. 30	3495	856	60	1308
Coldwell, Thomas, and W. H. Newburg, N. Y. Lawn-mower	475,669	May 24	2829	717	59	1228
Coldwell, William H. (See Coldwell, Thomas and W. H.)						
Cole, Alexander G., <i>et al.</i> (See Armitage, Edwin, assignor.)						
Cole, Burnham W. (See Gallup, Jasper E., assignor.)						
Cole, Charles S., Bridgeport, Conn. Neck tie or band	482,547	Sept. 13	1058	257	60	1555
Cole, De Witt C., New York, N. Y. Corset-fastener	466,902	Jan. 12	973	248	58	194
Cole, Dexter, Payne's Corners, assignor of one-half to F. G. Stewart, Penza, and C. R. Denison, Coalburg, Ohio. Car-coupling	470,180	Mar. 8	825	204	53	1268
Cole, Edward D., Macon, assignor of one-half to W. H. Starr, Decatur, Ill. Hame-clip section	478,569	July 12	782	191	60	170
Cole, Elmer E. and O. Hudson, Mich. Machine for attaching vertical wires in wire fences	480,710	Aug. 16	1549	386	60	904
Cole, Emerson, Brooklyn, N. Y. Barrel	482,675	Sept. 13	1236	301	60	1590
Cole, Francis J., Baltimore, Md. Slack-adjuster for car-brakes	481,784	Aug. 30	3315	810	60	1274
Cole, Francis J., and G. B. Hazlehurst, Baltimore, Md. Oil-cup	478,224	July 5	249	61	60	51
Cole, Frederick W. (See Crane and Cole.)						
Cole, George P., Saratoga Springs, N. Y. Hoopole	472,961	Apr. 12	1446	369	59	289
Cole, George W. (See Harder, James E., assignor.)						
Cole, George W., Chicago, Ill. Hanger or support for log-carriers, &c.	482,163	Sept. 6	398	94	60	1413
Cole, James A., San Jacinto, Cal. Plow	474,651	May 10	1229	314	59	884
Cole, James W., St. Louis, Mo., assignor to Fortimolite Metal Company, of Illinois. Casting iron pigs, ingots, &c.	468,292	Feb. 2	593	.....	58	639
Cole, John D., Lausing, Iowa. Portable sketching easel and stool	487,553	Dec. 6	521	135	61	1424
Cole, John J., assignor to J. B. Witty, J. W. Mitchell, D. F. Whitcomb, and J. E. McNamara, West Indianapolis, Ind. Lathe-rest	467,341	Jan. 19	1694	433	58	338
Cole, Orden. (See Cole, Elmer E. and O.)						
Cole, Otis. (See Smallwood, George T., assignor.)						
Cole, Robert E. (See Dacus, Robert H., assignor.)						
Cole, Robert, Shelby, Mich. Sand-band	466,326	Jan. 5	28	6	58	8
Cole, Walter, London, England. Manufacture of butter	478,736	July 12	1029	252	60	220
Cole, Warren W. (See Bailey and Cole.)						
Cole, William R., Portsville, Pa. Stamp and envelope gum moistener	477,887	June 28	2667	667	59	2006
Cole, William R., Pottsville, Pa. Combined hat and coat hanger and cigar-cutter	481,929	Sept. 6	14	4	60	1337
Cole, William R., Detroit, Mich., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus	466,887	Jan. 12	952	243	58	190
Cole & Williams. (See Williams, Alfred G., assignor.)						
Colell, Paul H., assignor of one-half to R. L. Prange, New York, N. Y. Parlor bowling game-board	484,087	Oct. 11	844	214	61	187
Coleman, Allison, Henrietta, Tex. Type	482,784	Sept. 20	1428	354	60	1640
Coleman, Arnold D., assignor of one-half to M. Cudahy, Chicago, Ill. Machine for capping and seaming the ends of cans	473,171	Apr. 19	1811	{ 456 457 458 }	{ 59	368
Coleman, Clyde J., assignor of one-half to A. F. Wineman, Chicago, Ill. Connector for electric wires	468,293	Feb. 2	596	147	58	639
Coleman, George D., Chicago, Ill. Apparatus for corroding lead	481,004	Aug. 16	1993	499	60	993
Coleman, George D., Chicago, Ill. Making lead protoxide	481,005	Aug. 16	1996	500	60	993
Coleman, George D., Chicago, Ill. Manufacturing white lead	481,006	Aug. 16	1998	500	60	994
Coleman, George D., Chicago, Ill. Making white lead	481,007	Aug. 16	1999	500	60	994
Coleman, George F., Mount Vernon, N. Y. Water-evaporator for steam-boilers	467,398	Jan. 19	1774	452	58	353
Coleman Hardware Company. (See Nickel and Wainwright, assignors.)						
Coleman, Jasper B., and V. I. Guver, Midway S. C. Fishing-rod	470,473	Mar. 8	1327	345	58	1361
Coleman, John, assignor of three-fourths to J. L. Beck, W. A. Carpenter, E. P. Lee, Lynchburg, and F. Hunger, Roanoke, Va. Nut-lock	473,613	Apr. 26	2568	647	59	537
Coleman, Joseph H., Tottenham, Canada. Car-coupling	482,569	Sept. 13	1090	264	60	1561
Coleman, William S., <i>et al.</i> (See McKercher, George, assignor.)						
Coler, Peter P., Clyman, Wis. Grain-binder	477,992	June 28	2819	{ 705 706 }	{ 59	2038
Coles, Charles H., Owosso, Mich. Printing cash-recorder	471,099	Mar. 22	2265	583	58	1567
Coles, Charlie H., Owosso, Mich. Cash-recorder	472,336	Apr. 5	520	{ 135 136 }	{ 59	98
Coles, John B., Bayonne, N. J. Slating compound	485,455	Nov. 1	471	.....	61	668

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Coles, Thomas L. (See Munsie, James F., assignor.)						
Coley, Joseph, Worcester, Mass. Double-faced woven pile fabric	473,977	Oct. 4	685	171	61	142
Colgan, Catherine, assignor to L. Dryfoos, New York, N. Y. Skirt	477,833	June 28	2577	645	59	1909
Colgate, Arthur E., assignor of one-half to L. Mason, New York, N. Y. Secondary battery.	479,753	July 26	2669	663	60	558
Colket, George H. (See Lockwood, George E., assignor.) (Reissue.)						
Collard, David, assignor to himself and J. M. Jrannott, Hope, Idaho. Sleigh-brake	483,429	Sept. 27	2444	615	60	1851
Collar, Amos M., Woonsocket, R. I. Lap-stick inserter	487,995	Dec. 13	1247	310	61	1585
Colleton, John H. (See De Neut, John H., assignor.)						
Collett, Austin B., Lynn, assignor of one-half to D. F. Kimball, Chelsea, Mass. Car-brake handle	483,779	Oct. 4	390	97	61	80
Collett, Austin M., Omaha, Nebr. Pinch-bar	480,398	Aug. 9	1047	263	60	792
Colley, Andrew C., Eclectic, Ala. Lock	470,474	Mar. 8	1328	346	58	1361
Collier, Arthur T., Caterham Valley, England. Telephone-receiver	474,214	May 3	505	122	59	735
Collier, Arthur T., St. Albans, England. Telephonic transmitter	484,778	Oct. 25	1961	500	61	435
Collins, Caleb G., Kearney, N. J., assignor to C. A. Stevens, New York, N. Y. Purification of brine	470,181	Mar. 8	826	204	58	1219
Collins, Caleb G., Kearney, N. J., assignor to C. A. Stevens, New York, N. Y. Purifying water	478,048	June 28	2911	727	59	2054
Colling, Charles J., assignor to J. M. Robinson & Co., Cincinnati, Ohio. Metal-shears	472,107	Apr. 5	150	40	59	29
Colling, Charles J., assignor to J. M. Robinson & Co., Cincinnati, Ohio. Machine for bending sheet metal	475,299	May 24	2250	580	59	1116
Collins, Charles M., South Bend, Ind. Device for controlling the water-jets of street-sprinklers	476,187	May 31	3679	929	59	1407
Collins, Charles M., assignor of one-half to J. M. Studebaker, South Bend, Ind. Toy cart	474,215	May 3	507	122	59	736
Collins, Charles R., assignor to United Gas Improvement Company, Philadelphia, Pa. Gas-making apparatus	472,785	Apr. 12	1187	304	59	237
Collins, Charles R., assignor to United Gas Improvement Company, Philadelphia, Pa. Oil-spraying device	485,257	Nov. 1	155	45	61	605
Collins, Charles W., Granite, Mont. Elevator	479,559	July 26	2353	5-7	60	500
Collins, David W., Philadelphia, Pa. Device for moistening envelopes, wrappers, &c	482,751	Dec. 27	2481	616	61	1864
Collins, Frank W., Cortland, N. Y. Stove-grate	475,298	May 24	2248	579	59	1116
Collins, Jeremiah W., Sherrill, N. Y. Snap-hook	472,962	Apr. 12	1447	369	59	289
Collins, John R. (See O'Grady and Collins.)						
Collins, John R., Rochester, Minn. Pump-piston and valve	478,089	July 5	22	7	60	7
Collins, John W., Washington, D. C. Hot-air register	471,681	Mar. 29	3131	798	58	1739
Collins, John W., Ludington, Mich. Belaying-pin	474,722	May 10	1344	341	59	907
Collins, Joseph H., Jr., deceased, Philadelphia, Pa., (R. S. and W. J. Collins, administrators,) and L. N. Knapp, Greenwich, Conn.; said administrators and said Knapp assignors, by mesne assignments, to United Gas Improvement Company, Philadelphia, Pa. Apparatus for manufacturing gas	480,248	Aug. 9	793	202	60	744
Collins, Joseph H., Jr., deceased, Philadelphia, Pa., (R. S. and W. J. Collins, administrators,) and L. N. Knapp, Paterson, N. J.; said administrators and said Knapp assignors, by mesne assignments, to United Gas Improvement Company, Philadelphia, Pa. Gas-producing apparatus	480,249	Aug. 9	798	204	60	745
Collins, Judith L., Monongahela City, Pa. Educational appliance	487,695	Dec. 6	741	190	61	1467
Collins, Olmstead, assignor of three-fourths to J. Kaltenbach, St. Louis, Mo., and C. E. Haydon, Texarkana, Ark. Axle-box	483,045	Sept. 20	1833	466	60	1721
Collins Plow Company. (See Brown and Gehrt, assignors.)						
Collins, Rebecca S., et al., administrators. (See Collins and Knapp.)						
Collins, Reuben G., Dollar Bay, Mich. Dumping-mold	466,888	Jan. 12	953	243	58	190
Collins, Samuel, Philadelphia, Pa. Umbrella-notch	476,364	June 7	216	53	59	1478
Collins, Thomas, Forks, Pa. Hay-stacker	467,856	Jan. 26	2520	638	58	502
Collins, Varnum D., Princeton, N. J. Mosquito or fly net	474,947	May 17	1706	434	59	993
Collins, William B. (See Brown and Collins.)						
Collins, William E., Bethel, Conn. Guard for banjos	483,683	Oct. 4	240	60	61	50
Collins, William G., East Orange, N. J. Ink stand or bottle	467,275	Jan. 19	1591	406	58	319
Collins, William H., Malden, Mass. Soda-water apparatus	484,809	Oct. 25	2146	551	61	473
Collins, William J., et al., administrators. (See Collins and Knapp.)						
Collis, John, Des Moines, Iowa. Pipe-hanger	471,348	Mar. 22	2641	671	58	1640
Collis, John, Des Moines, Iowa. Radiator-valve device	479,400	July 26	2083	522	60	448
Collum, George S., Hartford, Conn. Confectioner's tool	488,752	Dec. 27	2482	617	61	1864
Collum, George S., assignor to C. H. Russell and W. H. Collum, Hartford, Conn. Scissors-sharpener	479,737	July 26	2645	656	60	553
Collum, William H., et al. (See Collum, George S., assignor.)						
Collyer, George W. (See Cocker, Collyer, and Haines.)						
Colman, Frank B. (See Ives and Colman.)						
Colony, James D., and W. H. Albee, Brookfield, Mass. Die-press	472,337	Apr. 5	523	136	59	98
Colorado Iron Works. (See Bowers, William H. H., assignor.)						
Colthar, William U., Springfield, Ohio. Fastening device for wheel-tires	467,083	Jan. 12	1262	319	58	248
Coltman, Richard S. (See Quinn, Michael, assignor.)						
Colton, Arthur, Detroit, Mich. Toy savings-bank	469,773	Mar. 1	165	44	58	1132
Colton, Arthur L., Cleveland, Ohio. Check-file	486,434	Nov. 22	2007	532	61	1027
Colton, Byron. (See Colton, Milton and B.)						
Colton, Charles A. (See Hatch and Colton.)						
Colton, George A., Chicago, Ill. Transom-lifter	470,780	Mar. 15	1774	456	58	1459
Colton, George A., Chicago, Ill. Transom-lifter	476,037	May 31	3427	866	59	1357
Colton, George A., Chicago, Ill. Transom-lifter	476,365	June 7	218	54	59	1478
Colton, George H., Hiram, Ohio. Fuel-feeding device	475,203	May 17	2104	531	59	1071
Colton, Milton and B., Lamont, Iowa. Corn-husking machine	485,531	Nov. 1	575	154	61	690
Colt's Patent Fire Arms Manufacturing Company. (See Ehbets, Carl J., assignor.)						
Columbia Car and Tool Works. (See Heacock and Lovejoy, assignors.)						
Columbia Powder Manufacturing Company. (See Maxim, Hudson, assignor.)						
Columbian Electric Light, Power, Heat, and Manufacturing Company. (See Wright, William, assignor.)						
Columbian Manufacturing Company. (See Porter, Daniel R., assignor.)						
Columbus Egg Company. (See Assorati and Cayas, assignors.)						
Colves, Charles, assignor of one third to H. C. Myer, Beardstown, Ill. Truss	477,044	June 14	1265	307	59	1703
Colvin, Robert J., assignor of one-half to D. P. Bitner, Lancaster, Pa. Metallic railway-tie and stringer	474,216	May 3	509	122	59	736
Colvin, Robert J., assignor to D. P. Bitner, Lancaster, Pa. Padlock	487,608	Dec. 6	595	153	61	1440
Comas, Francisco, et al. (See O'Kelly, James M., assignor.)						
Combe, Abram, Belfast, Ireland. Twisting-frame	482,164	Sept. 6	399	95	60	1113

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Combination Roll and Rubber Company. (See Clark, Charles A., assignor.)						
Combined Electric and Trip Bell Cord Company. (See Selden, Charles, assignor.)						
Combis, Peter, and W. H. Gray, St. Louis, Mo. Awning	477,512	June 21	2040	507	59	1867
Combs, Orrin, Walnut Grove, Ill. Bridle-bit	477,102	June 14	1368	333	59	1724
Comer, John H., et al. (See Morse, Cyrus B., assignor.)						
Comes Automatic Steamer Lighter Company. (See Comes, Keros L., assignor.)						
Comes, Keros L., assignor to Comes Automatic Steamer Lighter Company, Danbury, Conn. Fire-lighting attachment for steam fire-engines	476,249	June 7	26	6	59	1444
Comes, Keros L., assignor to Meeker Bros., Danbury, Conn. Machine for fitting hat-sweats	487,252	Dec. 6	21	6	61	1325
Comes, Keros L., assignor to Meeker Bros., Danbury, Conn. Machine for joining the meeting ends of hat-sweats	487,253	Dec. 6	22	7	61	1325
Comfort, John W., et al. (See Weaver and Manypenny, assignors.)						
Commander, Edward A. (See Miles and Commander.)						
Compagnie Anonyme Continentale pour la Fabrication des Compteurs à Gaz et Autres Appareils. (See Brillié, Lucien V., assignor.)						
Compagnie Anonyme des Forges de Chatillon et Commentry. (See Dénoyelle, Léon, assignor.)						
Compagnie de Fives-Lille. (See Duval, Martin L. E., assignor.)						
Compagnie Française des Eaux-de-Vie L. Teillard. (See Broyer and Petit, assignors.)						
Complete Combustion Company. (See Parkhurst, Edward B., assignor.)						
Compton, Melvin D., Newark, N. J. Adjustable thermostat	482,420	Sept. 13	842	202	60	1513
Compton, Norris M. (See Rose, William J., assignor.)						
Compton, Richard W., Moberly, assignor of one-half to B. F. Heirs, St. Louis, Mo. Car-loading apparatus	475,236	May 17	2157	{ 546 547 }	59	1081
Compton, S., et al. (See Day and Moore, assignors.)						
Compton, Whitefield, Rockford, Ill. Manure-spreader	482,785	Sept. 20	1429	354	60	1640
Computing Scale Company. (See Culmer, John W., assignor.)						
Comstock, Alphonso S., Evanston, Ill. Sail	481,614	Aug. 30	3029	740	60	1218
Comstock, Alphonso S., Evanston, Ill. Luggage-carrier	483,346	Sept. 27	2325	585	60	1827
Comstock, Alphonso S., Evanston, Ill. Tent-pin	484,998	Oct. 25	2328	600	61	507
Comstock, Charles, Indianapolis, Ind. Vehicle	4-0,421	Aug. 9	10-6	272	60	799
Comstock, Charles, Richmond, Va. Vehicle	485,091	Oct. 25	2469	635	61	537
Comstock, Cheney & Company. (See Shailer, William W., assignor.)						
Comstock, Fred B. (See Hulbert, Ralph D., assignor.)						
Comstock, Harry, Fulton, N. Y. Split pulley	475,204	May 17	2105	532	59	1071
Comstock, Harry, Fulton, N. Y. Attachment for pipe-cutters. (Reissue)	11,243	June 7	809	199	59	1599
Comstock, William H., Oskaloosa, Iowa. Coffee-pot	482,299	Sept. 6	621	148	60	1456
Conable, Edgar W. (See Huggins, Frederick E., assignor.)						
Conant, Frank B., Reed City, Mich. Lattice-gate	474,161	May 3	424	102	59	720
Conant, Henry J., Watertown, Mass. Steam-engine	470,664	Mar. 15	1595	415	58	1425
Conant, Henry J., Watertown, Mass. Water-cooler	470,745	Mar. 15	1720	443	58	1449
Conboy, Daniel, Toronto, Canada. Carriage-top	469,964	Mar. 1	484	120	58	1192
Concannon, Sherman, Lenexa, Kans. Hay-stacking machine	472,338	Apr. 5	525	136	59	99
Concave Paddle Wheel Company. (See Howard, John, assignor.)						
Concrete Iron Company. (See Wilson, Joel, assignor.)						
Condé, Samuel L., Rockford, Ill. Type-writer cabinet	486,435	Nov. 22	2009	533	61	1028
Condell, John S., Jr., et al. (See Webster, Augustus D., assignor.)						
Conder, Francis R., Guilford, England. Purifying sewage	475,670	May 24	2832		59	1228
Condict, Nathan W., Jr., Jersey City, N. J. Ammonia-still	478,407	July 5	537	131	60	106
Condon, John W., Rochester, Ind., assignor to C. G. and W. J. Shepard, Buffalo, N. Y. Domestic hand-press	468,023	Feb. 2	181	44	58	559
Condon, Richard, Lyons, Iowa. Car-coupling	474,815	May 17	1494	381	59	951
Condon, Richard, Lyons, Iowa. Wagon-tongue	474,816	May 17	1495	381	59	951
Condon, Richard, Lyons, Iowa. Wagon-body	474,817	May 17	1496	382	59	951
Condon, Richard, Lyons, Iowa. Vehicle	474,818	May 17	1497	{ 382 383 }	59	951
Condon, Richard, Lyons, Iowa. Automatic car-brake	480,250	Aug. 9	802	{ 205 206 }	60	746
Condon, Richard, Lyons, Iowa. Harness	485,258	Nov. 1	157	45, 46	61	605
Cone, Henry, Alameda, Cal. Self-fastening rim for jars or vessels	484,779	Oct. 25	1962	500	61	435
Cone, Virginia M., Alameda, Cal. Heat-regulator for cooking-stoves	470,546	Mar. 8	1429	372	58	1381
Congdon Brake Shoe Company. (See Barnes, David L., assignor.)						
Congdon Brake Shoe Company. (See Sargent, William D., assignor.)						
Congdon, Charles H., St. Paul, Minn. Chromatic pitch-pipe	478,570	July 12	783	191	60	170
Congelton, Oshorn, Philadelphia, Pa. Construction of vessels	472,859	Apr. 12	1285	330	59	257
Conger, Patrick H., Waterloo, Iowa. Seal-lock	476,250	June 7	28	6	59	1444
Conine, James B. (See Fariss, Thomas J., assignor.)						
Conkle, Harry C. (See Wilson, Stephen, assignor.)						
Conkle, Walton J. (See Chauberlin, Charles, assignor.)						
Conklin, Franklin. (See Howe, Edwin J., assignor.)						
Conklin, Joseph I., Brooklyn, N. Y. Electric locomotive	473,693	Apr. 26	2689	677	59	560
Conkling, Allen, Chicago, Ill. Mechanical feeding device	479,630	July 26	2455	612	60	518
Conkling, Gurdon, Glens Falls, N. Y. Composition of matter and preparing comminuted iron ore	468,219	Feb. 2	466		58	616
Conkling, Gurdon, Glens Falls, N. Y. Magnetic separator	481,474	Aug. 23	2500	689	60	1158
Conkling, Ira L., Philadelphia, Pa. Game-board	485,029	Oct. 25	2380	{ 611 612 }	61	518
Conley, John, Denver, Colo. Fastening railway-rails to metal sleepers	472,034	Apr. 5	37	7	59	9
Conley, Joseph, and J. M. Wolfe, Tarkio, Mo. Brick-kiln	477,993	June 28	2823	706	59	2038
Conley, Joseph, and J. M. Wolfe, Tarkio, Mo. Brick-kiln	477,994	June 28	2824	707	59	2039
Conley, Joseph, and J. M. Wolfe, Tarkio, Mo. Brick-kiln	487,174	Nov. 29	3217	824	61	1283
Conley, Michael R., Brooklyn, N. Y. Metallurgical furnace	477,623	June 21	2236	559	59	1906
Conley, Oliver P., Eaton, Ohio. Car-coupling	476,786	June 14	846	209	59	1619
Conn, Andrew H., Wilton Junction, Iowa. Bridle-bit	474,368	May 10	788	205	59	800
Conn, Joseph, Fall River, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Cloth-winding mechanism	483,510	Sept. 27	2556	641	60	1873
Conn, William, Kellogg, Kans. Band-cutter and feeder for thrashing-machines	487,347	Dec. 6	173	48, 49	61	1354
Connecticut Pipe Manufacturing Company. (See Phipps, Edward H., assignor.)						
Connell, James C., Simla, India. Harness	483,540	Oct. 4	37	9	61	10
Connell, John P., Kensington, Conn. Gong door-bell	477,649	June 28	2281	571	59	1931
Connell, Patrick J., College Point, N. Y. Wheel-guard	484,300	Oct. 11	1187	302	61	254
Connolly, James, Des Moines, Iowa. Boiler-furnace and smoke-consumer	426,854	Nov. 29	2677	701	61	1176
Connolly, James T., Milton, Pa. Device for tapping stay-bolt holes	475,672	May 24	2834	717	59	1228

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Connelly, James T., Milton, Pa. Axle-lubricator	480,318	Aug. 9	923	233	60	770
Connelly, James T., Milton, Pa. Locomotive-boiler	488,919	Dec. 27	2750	678	61	1919
Connelly, John S., Plainfield, N. J. Speed-governor for gas-engines	475,385	May 24	2392	611	59	1143
Conner, Benjamin F., <i>et al.</i> (See Kenney, Thomas M., assignor.)						
Conner, Charles E., Brockton, Mass. Heel nailing and slugging machine	470,547	Mar. 8	1429	372	58	1382
Conner, Charles S., <i>et al.</i> (See Kenney, Thomas M., assignor.)						
Conner, William J., Labette, Kans. Door-check	482,227	Sept. 6	498	119	60	1432
Connor, Joseph, assignor of one-half to A. J. Fuller, Philadelphia, Pa. Pipe-coupling	476,188	May 31	3680	930	59	1407
Connors, William J., and W. W. Eddy, Grass Valley, Cal. Amalgamator	478,922	July 12	1308	326	60	274
Conover, Chauncey E., Cincinnati, Ohio. Insulator	479,134	July 19	1645	411	60	347
Conover, George M., assignor of one-half to F. H. Norton, Cleveland, Ohio. Draw-shave	468,239	Feb. 2	496	122	58	622
Conover, George W., Chicago, Ill. Electric bell	480,319	Aug. 9	924	234	60	770
Conrader, Rudolph, Erie, Pa. Apparatus for vaporizing and burning hydrocarbon oils	471,505	Mar. 22	2877	732	58	1684
Conradson, Conrad M., Madison, Wis. Universal tool-grinder	467,857	Jan. 26	2521	639 640	58	502
Conradson, Conrad M., Madison, Wis. Molder's flask	471,324	Mar. 22	2605	660	58	1631
Conradson, Conrad M., Madison, Wis. Feeding device for lathes	477,513	June 21	2040	508	59	1867
Conradson, Conrad M., Madison, Wis. Electric locomotive	482,863	Sept. 20	1534	382	60	1662
Conradson, Conrad M., Madison, Wis. Split wheel	482,864	Sept. 20	1537	382	60	1662
Conradson, Conrad M., Madison, Wis. Electric locomotive	487,114	Nov. 29	3123	801	61	1266
Conrad, Eugene, Keighley, England. Lathe	475,671	May 24	2833	717	59	1228
Conrath, Julius H., Jefferson City, Mo. Folding guard for bedsteads	475,932	May 31	3273	826	59	1325
Conser, John, Sedalia, Mo. Bee-hive	483,137	Sept. 27	1973	500	60	1761
Consolidated Brake Adjuster Company. (See Marshall, Waldo H., assignor.)						
Consolidated Button Hole Finishing Machine Company. (See Phelps and Thomson, assignors.)						
Consolidated Car Heating Company. (See McElroy, James F., assignor.)						
Consolidated Car Heating Company. (See Sewall, James H., assignor.)						
Consolidated Fastener Company. (See Dowse, William B. H., assignor.)						
Consolidated Fastener Company. (See Hall, Frank E., assignor.)						
Consolidated Fastener Company. (See Kraetzer, Edwin J., assignor.)						
Consolidated Fastener Company. (See Woodward, Erastus, assignor.)						
Consolidated Railway Telegraph Company. (See Edison and Gilliland, assignors.)						
Constant, Boston S., Logansport, assignor of one-half to N. M. Bowen, Indianapolis, Ind. Feed mechanism for elevators	467,887	Jan. 26	2571	651	58	511
Constantine, Thomas S. (See Groth, William, assignor.)						
Continental Filter Company. (See Williamson, David, assignor.)						
Continental Iron Works. (See Rowland, Thomas F., Jr., assignor.)						
Continuous Rail Joint Company of America. (See Lentz and Thompson, assignors.)						
Convers, George G., Salisbury, Pa. Reducing franklinite ores	488,470	Dec. 20	2035	.....	61	1761
Convers, George G., Salisbury, Pa. Treating franklinite and willemite	488,471	Dec. 20	2037	.....	61	1761
Converse, Edmund. (See Turner, William A., assignor.)						
Converse, Maschil D., New York, N. Y. Nail-extractor	482,338	Sept. 13	702	167	60	1487
Convert, Charles F. A., assignor to Liquid Carbonic Acid Manufacturing Company, Chicago, Ill. Pressure-regulating device	481,272	Aug. 23	2468	608	60	1097
Convert, Charles F. A., assignor to Liquid Carbonic Acid Manufacturing Company, Chicago, Ill. Hydrocarbon-burner and device for automatically feeding the same	481,273	Aug. 23	2471	609	60	1097
Conway, David B., Moorland, Iowa. Change-receiver	475,673	May 24	2836	718	59	1228
Conway, Edward C., assignor of one-third to W. C. Walker, Rochester, N. Y. Window-frame	475,438	May 24	2471	630	59	1157
Conway Harrison V., assignor of one-half to I. N. Throckmorton, Boone, Iowa. Axle-lubricator	484,088	Oct. 11	845	214	61	187
Conway, Michael R. (See Harden and Conway.)						
Cook, August D., Lawrenceburg, Ind. Pump	484,139	Oct. 11	915	235	61	202
Cook, Burton H., Brooklyn, N. Y. Culinary grater and slicer	469,354	Feb. 23	2257	580	58	992
Cook, Carlos A., Chicago, Ill. Vending-machine	470,347	Mar. 8	1122	287 288	58	1323
Cook, Charles A., Chicago, Ill. Ironing-board	468,790	Feb. 16	1384	350	58	814
Cook, Charles J., Montreal, Canada. Tail-piece for stringed musical instruments	475,674	May 24	2837	718	59	1228
Cook, Charles L., Louisville, Ky. Rod-packing	481,105	Aug. 16	2170	537	60	1026
Cook, Charles S., <i>et al.</i> (See Demareez, Charles, assignor.) (Reissue.)						
Cook, David N., Salem, Mass. Brake-shoe	466,655	Jan. 5	543	141	58	105
Cook, David N., Salem, Mass. Window-ventilator	488,920	Dec. 27	2751	678	61	1919
Cook, Douglas D., assignor to W. S. Gunn, Grand Rapids, Mich. Wardrobe-bed	476,003	May 31	3379	851 852	59	1347
Cook, Edward W. (See Cook, Thomas A., assignor.)						
Cook, Edwin G., and H. H. Evman, Fullerton, Nehr. Book-rack	479,788	Aug. 2	22	5, 6	60	586
Cook, Egbert C., Oak Park, Ill. Collapsible booth	482,078	Sept. 6	256	62	60	1386
Cook, Frank. (See Hankenhof, Julius, assignor.)						
Cook, Frederick D., Sharpsburg, Pa. Enameled-iron wainscoting	485,259	Nov. 1	159	46	61	605
Cook, Frederick W., assignor, by mesne assignments, to F. P. H. Loftis, San Francisco, Cal. Gang-edger	469,543	Feb. 23	2553	656	58	1049
Cook, Gustave, assignor of one-half to W. H. Bofinger, New Orleans, La. Switch-stand	485,908	Nov. 8	1148	304	61	824
Cook, Hanson, Hyndman, Pa. Washing-machine	488,727	Dec. 27	2447	608	61	1857
Cook, Herbert F., assignor to L. W. Bingham, C. L. Douglas, and C. B. Squire, Cleveland, Ohio. Steam-boiler	478,690	July 12	950	236	60	204
Cook, Hugo, Dayton, Ohio. Cash register and indicator	469,544	Feb. 23	2555	657	58	1049
Cook, Hugo, Dayton, Ohio. Cash register and indicator	469,545	Feb. 23	2564	657 658	58	1050
Cook, Hugo, Dayton, Ohio. Cash indicator and register	473,694	Apr. 26	2690	677 678	59	560
Cook, Hugo, Dayton, Ohio. Cash register, indicator, and recorder	482,165	Sept. 6	400	95, 96	60	1414
Cook, Hugo, Dayton, Ohio. Cash-register	482,505	Sept. 13	982	238	60	1511
Cook, Hugo, Dayton, Ohio. Advertising apparatus for cash-registers	482,722	Sept. 20	1323	323	60	1619
Cook, Hugo, Dayton, Ohio. Cash register and indicator	483,511	Sept. 27	2557	641 642	60	1873
Cook, Hugo, Dayton, Ohio. Autographic register	486,768	Nov. 22	2525	660 661	61	1130
Cook, Irving, Fall River, Mass. Switch	485,786	Nov. 8	960	257	61	786
Cook, Jerome Q., Huntington, Ind. Boiler-cleaner	474,369	May 10	788	205	59	800
Cook, John, New York, N. Y. Keel for boats	486,158	Nov. 15	1573	417	61	927
Cook, John R., and C. S. Hinchman, Rushville, Ind. Steam-engine valve	479,401	July 26	2085	523	60	444
Cook, John W., assignor of one-half to J. R. Medley, Harrisburg, Oreg. Clothes-pin	480,072	Aug. 2	500	127	60	678
Cook, John W. B., Camden, Ark. Fire-kindler	478,249	July 5	304	74	60	61

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Gr.	Vol.	Page.
Cook, Joseph E., assignor of one-half to E. Vradenburg, Northville, Mich. Straw-separator for thrashing-machines, &c.	467,636	Jan. 26	2163	550	58	435
Cook, Joseph W. (See Hall and Cook.)						
Cook, Lucian F., Tacoma, Wash. Transportation system	482,469	Sept. 13	916	{ 224 225 }	60	1527
Cook, Ludlow G., Minneapolis, Minn. Bolster-standard	477,650	June 28	2282	571	59	1931
Cook, Moses C. (See Cook, William S. and M. C.)						
Cook, Moses G., Ashfield, Mass. Cuff-holder	470,182	Mar. 8	828	204	58	1269
Cook, Philip J. (See Beck, Bruno, assignor.)						
Cook, Robert, et al. (See Tefft, Emory N., assignor.)						
Cook, Samuel, Little Valley, N. Y. Washing-machine	473,914	May 3	45	8	59	645
Cook, Sheldon E., Chicago, Ill. Suspender-buckle	475,386	May 24	2394	611	59	1143
Cook, Sheldon E., Chicago, Ill. Buckle	482,915	Sept. 20	1629	408	60	1678
Cook, Sidney, assignor to A. C. Simpson, Pensacola, Fla. Wrench	485,152	Oct. 25	2557	657	61	555
Cook, Theodore A., Callicoon Depot, assignor to J. and W. Mathison, Brooklyn, N. Y. Crozing-machine	480,711	Aug. 16	1551	386	60	904
Cook, Theodore A., Callicoon Depot, assignor to J. and W. Mathison, Brooklyn, N. Y. Machine for hooping and heading kegs	482,079	Sept. 6	257	62	60	1386
Cook, Theodore A., Callicoon Depot, assignor to J. and W. Mathison, Brooklyn, N. Y. Hoop-flaring machine	482,300	Sept. 6	622	148	60	1456
Cook, Thomas A., assignor to E. W. Cook, Ottawa, Canada. Match-splint-cutting machine	483,541	Oct. 4	38	9, 10	61	10
Cook, Thomas G., Brockville, Canada. Sulky spring-tooth barrow	473,141	Apr. 19	1756	443	59	358
Cook, Thomas R., Irvington, assignor of one-fourth to H. M. Barnard, H. S. Paramore, and G. A. Topp, Indianapolis, Ind. Combined try-square and bevel	485,456	Nov. 1	471	125	61	668
Cook, Thomas W. G., assignor to himself and S. Koffelt, New York, N. Y. Machine for rimming show-cards, &c.	487,609	Dec. 6	598	{ 153 154 }	61	1410
Cook, Victor A., New York, N. Y. Extension-transmitter for telephones	475,300	May 24	2251	580	59	1116
Cook, Walter E., assignor to Novelty Pearl Company, Providence, R. I. Sleeve-button	472,941	Apr. 12	1411	360	59	232
Cook, William, New York, N. Y. Folding child's carriage	477,514	June 21	2042	{ 508 509 }	59	1868
Cook, William H., assignor of one-half to E. B. Stagers, Jr., Philadelphia, Pa. Puzzle	476,980	June 14	1172	283	59	1683
Cook, William S. and M. C., South Omaha, Nebr. Soldering-iron	466,520	Jan. 5	340	85	58	66
Cooke, Edward T., and W. H. Mackay, St. Louis, Mo. Electric-lighting system	478,186	July 5	181	47	60	38
Cooke, Ernest W., Western Springs, Ill. Tool-holder	466,327	Jan. 5	24	6	58	8
Cooke, Ernest W., Western Springs, Ill. Cutter and cutter-holder	469,625	Feb. 23	2669	686	58	1073
Cooke, Ernest W., Chicago, Ill. Alloy	474,443	May 10	909		59	823
Cooke, Euclid M. (See Thompson and Cooke.)						
Cooke, George K., Jamaica, N. Y. Coin receptacle and register	471,536	Mar. 29	2916	743	58	1700
Cooke, Howard E., Woonsocket, R. I. Seat for velocipedes	479,056	July 19	1521	379	60	326
Cooke, Sarah A., Chicago, Ill. Machine for cutting and marking garments	478,988	July 19	1415	{ 350 351 }	60	305
Cool, Isaac N., Auburn, Ind. Vehicle-top	485,610	Nov. 8	698	184	61	731
Cooley, Franklin S., assignor of one-half to J. E. Goodrich, Philadelphia, Pa. Fountain-pen	471,506	Mar. 22	2878	732	58	1684
Cooley, Franklin S., assignor of one-half to J. E. Goodrich, Philadelphia, Pa. Liquid-ejecting device for bottles, &c.	487,088	Nov. 29	3083	792	61	1257
Cooley, Fred W., Minneapolis, Minn. Blank-cabinet	474,948	May 17	1707	434	59	993
Cooley, Orville, Batavia, N. Y. Mowing-machine	472,654	Apr. 12	993	256	59	202
Coombs, Pierre L. (See Finck, Nicholas, assignor.)						
Coons, Rollin L., Honesdale, Pa. Box-making machine	474,545	May 10	1063	{ 272 273 }	59	852
Cooper, A. O., et al. (See Lawrence, Lester G., assignor.)						
Cooper, Alfred, assignor to Cooper Side Propeller Company, Baltimore, Md. Side propeller for steam-vessels	468,039	Feb. 2	201	49	58	563
Cooper, Augustus S. (See Pitchford and Cooper.)						
Cooper, Charles, Guildford, Western Australia. Spark-arrester for locomotives	468,169	Feb. 2	396	98	58	601
Cooper, Charles J., Moline, Ill. Harness-machine	485,260	Nov. 1	159	46	61	606
Cooper, Charles W., New York, N. Y. Apparatus for evaporating liquids	482,340	Sept. 13	703	168	60	1487
Cooper, Dyer, Philadelphia, Pa. Steam-actuated valve	476,609	June 7	577	138	59	1551
Cooper, George, Bennington, Vt. Wire-bending machine	468,301	Feb. 2	611	153	58	641
Cooper, George B., assignor to R. Porter's Sons, Philadelphia, Pa. Sheet-metal box	478,049	June 28	2913	727	59	2054
Cooper, George B., assignor to R. Porter's Sons, Philadelphia, Pa. Jacketed can	478,050	June 28	2914	728	59	2054
Cooper, George R., et al. (See Huey, William, assignor.)						
Cooper & Hampton. (See Grotz, Charles, assignor.)						
Cooper, James R., Sugar Grove, Ill. Straw-stacker	482,080	Sept. 6	258	62, 63	60	1386
Cooper, John, Canton, Mass. Elastic knit fabric	471,349	Mar. 22	2642	671	58	1640
Cooper, John, Canton, Mass. Warp-knitting machine for knitting elastic fabrics	471,350	Mar. 22	2643	672	58	1640
Cooper, John A., Nashville, Tenn. Door-spring	481,475	Aug. 23	2801	689	60	1158
Cooper, John B., Winder, Va. Coop	472,615	Apr. 12	941	{ 242 243 }	59	192
Cooper, John W., New York, N. Y. Window	480,806	Aug. 16	1692	422	60	934
Cooper, Leslie A., Springfield, Mass. Lamp	482,994	Sept. 20	1752	443	60	1704
Cooper, Leslie A., Springfield, Mass. Gas-lamp	487,065	Nov. 29	3041	780	61	1248
Cooper, Leslie A., assignor of one-half to A. A. Warner and A. W. Allen, Springfield, Mass. Lamp	479,350	July 19	1989	498	60	415
Cooper Side Propeller Company. (See Cooper, Alfred, assignor.)						
Cooper, Ward, Laporte City, Iowa. End-gate	471,377	Mar. 22	2686	685	58	1649
Cooper, William E. M., Findlay, Ohio. Trade-book	469,546	Feb. 23	2570	638	58	1051
Cooper, William S., Philadelphia, Pa. Water-closet reservoir	474,317	May 3	511	123	59	736
Cope, George W., Detroit, assignor to H. L. Smith, Jackson, Mich. Oil-stove	485,838	Nov. 8	1029	277	61	800
Cope, Thomas J., Philadelphia, Pa. Grip for ropes	482,975	Sept. 20	1722	435	60	1698
Copeland, George H., Rich Hill, Mo. Clothes-line reel	475,038	May 17	1850	469	59	1020
Copeland, George W., Malden, assignor to Boston Lasting Machine Company, Boston, Mass. Tack-driving machine	475,488	May 24	2554	{ 650 651 }	59	1173
Copeland, George W., Malden, and J. E. Crisp, Somerville, Mass., said Crisp assignor to said Copeland. Shoe-treating machine	472,108	Apr. 5	152	41, 42	59	29
Copeland, Henry, Chattanooga, Tenn. Hay-press	480,917	Aug. 16	1855	463	60	967
Copeland, James S., Hartford, Conn. Type-writing machine	476,251	June 7	29	6, 7, 8	59	1445
Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Portland, Me. Velocipede	469,626	Feb. 23	2670	686	58	1073
Copeland, James S., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Chain adjustment for bicycles	484,492	Oct. 18	1493	379	61	326
Copeland, Jay B., Punta Gorda, Honduras. Evaporating-pan	470,548	Mar. 8	1430	373	58	1382
Copeland, Lucius D., Camden, N. J., assignor to Northrop Manufacturing Company. Hydrocarbon-vapor burner	471,465	Mar. 22	2822	719	58	1673

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &c.	Vol.	Page.
Copeland, Robert J. (See Vawter and Copeland.)						
Copeland, William A., New York, N. Y. Eyeglass-holder	485,909	Nov. 8	1149	304	61	824
Copplantz, Cyrus, Kansas City, Mo. Horseshoe	467,497	Jan. 26	1930	493	58	392
Coplen, John D., Denver, Colo. Apparatus for treating ores	467,158	Jan. 19	1412	361	58	285
Coplin, Albert D., Oakland, Cal. Hose-reel	486,692	Nov. 22	2403	627	61	1105
Coppage, Marcellus C., Terre Haute, Ind. Tube-cutter	482,496	Sept. 13	972	236	60	1538
Copper, George C., and D. F. Cox, Sandborn, Ind. Wire-stretching tool	485,611	Nov. 8	699	184	61	732
Coppersmith, John, <i>et al.</i> (See Wolf, Josef, assignor.)						
Coppet, Jean de, Paris, France. Treating minerals containing nickel	484,875	Oct. 25	2118		61	467
Coppet, Jean de, Paris, France. Treating minerals, mattes, speiss, or other substances containing nickel	486,594	Nov. 22	2244		61	1073
Coppet, Jean de, Paris, France. Treating minerals, mattes, speiss, or other substances containing nickel	486,595	Nov. 22	2247		61	1073
Coram, John C., and F. D. Huntoon, assignors to Amraytoon Paper Tube Company, Lowell, Mass. Machine for making paper tubes	475,721	May 24	2911	738 739 740 741	59	1242
Coram, John C., and F. D. Huntoon, assignors to Amraytoon Paper Tube Company, Lowell, Mass. Paper-cutting device	475,722	May 24	2918	741	59	1243
Coram, John C., and F. D. Huntoon, assignors to Amraytoon Paper Tube Company, Lowell, Mass. Paper-feeding device	475,723	May 24	2920	742	59	1244
Corano, Crescengo. (See Green, John, assignor.)						
Corbeille, Peter T. (See Boucher, Frank, assignor.)						
Corbett, Charles C., <i>et al.</i> (See Fish, Warren E., assignor.)						
Corbett, John. (See Tully, William, assignor.)						
Corbett, Joseph, assignor to T. F. Shaw, New York, N. Y. Creasing and folding machine.	472,253	Apr. 5	386	101	59	72
Corbin Cabinet Lock Company. (See Judd, Edward A., assignor.)						
Corbin, Elbert A., <i>et al.</i> (See Marsden, Mark W., assignor.)						
Corcoran, Thomas J., Peru, Ind. Loom	476,918	June 14	1069	257 258	59	1663
Cordes, George, Rababoo, Wis. Field-cultivator	471,209	Mar. 22	2438	621	58	1600
Cordesman, Henry J., Cincinnati, Ohio, and E. Cheshire, Covington, Ky., assignors to Cordesman Machine Company, Cincinnati, Ohio. Dovetailing-machine	478,544	July 5	750	183	60	149
Cordesman Machine Company. (See Cordesman and Cheshire, assignors.)						
Cordrey, Henry L., Mount Union, Iowa. Shaft-support for vehicles	479,631	July 26	2457	612	60	519
Cordry, Charles C., assignor of one-half to P. C. McDonald, Princeton, Ill. Spring-motor	468,083	Feb. 2	261	64	58	575
Cords, Albert B. W. H., Hamburg, Germany. Ship's telegraph	481,223	Aug. 23	2381	586 587	60	1080
Corey, John A., Hope Valley, R. I. Carriage-wrench	481,749	Aug. 30	3256	793	60	1262
Corey, Leonel C., Waverly, N. Y. Can, pail, &c	483,902	Oct. 4	569	143	61	118
Corey, Rufus H. (See Stroud and Corey.)						
Corey, James J., deceased; J. L. Orr, administrator, Choctolocco, Ala. Hay-press	488,400	Dec. 20	1924	482	61	1737
Corliss, George F., and L. H. Wattles, Providence, R. I. Governor for steam-engines	466,488	Jan. 5	284	72	58	54
Corliss, George F., and L. H. Wattles, Providence, R. I. Steam-engine governor	483,643	Oct. 4	186	46	61	38
Corliss, William, Providence, R. I. Safe	478,989	July 19	1421	351 352	60	306
Cornelison, Jesse, Oakland, Indian Ter. Pneumatic feeder for cotton-gins	482,916	Sept. 20	1630	408	60	1679
Cornelius, John, Oakland, Md. Ditching-machine	478,408	July 5	538	131	60	106
Cornelius, John, Oakland, Md., assignor of one-half to F. Transue, Alliance, Ohio. Wrecking-machine or stump-extractor	468,644	Feb. 9	1148	292 293	58	757
Cornelius, William A., Pittsburg, assignor of one-half to J. Purves, Munhall, Pa. Tongs	472,436	Apr. 5	667	170 171	59	125
Cornell, Charles H. (See Carlson, Gustave, assignor.)						
Cornell, Frank H. (See Enholm, Oscar A., assignor.)						
Cornell, John H., Taughannock Falls, N. Y. Vine-holder	466,932	Jan. 12	1018	260	58	202
Cornell, Joseph, Potsdam, N. Y. Folding chair	488,115	Dec. 13	1452	365 366	61	1628
Cornell, Oliver H. P., Albany, assignor, by mesne assignments, to Caloric Cone Company, New York, N. Y. Combined gas heating and lighting device	481,139	Aug. 16	2934	550 551	60	1037
Cornell, William N., Brownsville, N. Y. Means for coloring paper	486,629	Nov. 22	2305	602	61	1085
Cornely, Emil and R., Paris, France. Embroidering-machine	466,889	Jan. 12	954	243	58	191
Cornely, Emil and R., Paris, France. Embroidering-machine	479,057	July 19	1523	379 380	60	326
Cornely, Robert. (See Cornely, Emil and R.)						
Cornet, Robert J. G., assignor of one-half to C. B. Vastine, Chicago, Ill. Gas or lamp lighter.	478,953	July 12	1350	334	60	282
Cornet, Catherine H., (veuve.) (See Berger, Cornet, and Martin.)						
Cornforth, Joseph T., Denver, Colo. Banana-case	484,355	Oct. 11	1270	324	61	271
Cornish, Curtis & Greene. (See Crane, Thomas, assignor.)						
Corning, Frederick G., New York, N. Y. Fluid-support for ore-concentrating belts	478,502	July 5	675	165	60	133
Cornwell, Clark, Ypsilanti, Mich. Wood-grinder	469,812	Mar. 1	237	59	58	1147
Cornyn, James M. (See Wioternight, Henry A., assignor.)						
Corporan, Charles E., Colorado City, Colo. Electric railway-signal	473,614	Apr. 26	2569	647	59	537
Corporan, Charles E., Colorado City, Colo. Slack-adjuster for air-brakes	483,802	Oct. 4	420	104	61	87
Correll, Dennis S., Welton, Iowa. Mechanism for converting reciprocating into rotary motion.	486,369	Nov. 15	1898	502	61	992
Corrigan, Francis W., Luzerne, Pa. Coal-auger	483,210	Sept. 27	2095	531	60	1785
Corscaden, Thomas, New Britain, Conn. Manufacture of drive-chain links	467,659	Jan. 26	2200	559	58	441
Corscaden, Thomas, New Britain, Conn. Sash-cord guide	467,668	Jan. 26	2215	564	58	444
Corscaden, Thomas, New Britain, Conn. Blind-fastener	472,635	Apr. 12	967	251	59	197
Corscaden, Thomas, New Britain, Conn. Sheet-metal pulley	474,546	May 10	1069	274	59	853
Corscaden, Thomas, New Britain, Conn. Sheet-metal pulley and the manufacture thereof.	474,547	May 10	1070	274	59	853
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Antifriction-hinge	473,439	May 24	2472	630	59	1157
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Shelf-bracket	476,520	June 7	447	106	59	1525
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Manufacture of hinges.	476,521	June 7	448	106	59	1525
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Hat-hook	479,058	July 19	1526	381	60	327
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Drive-chain	482,723	Sept. 20	1325	324	60	1620
Corscaden, Thomas, assignor to Stanley Works, New Britain, Conn. Shelf bracket	483,834	Oct. 4	470	117	61	97
Corser, Harrington. (See Stone and Corser.)						
Corser, John B., Towanda, Pa. Strap-fastener	473,297	Apr. 19	2021	507	59	410
Corson, Samuel H., Cape May, N. J. Railway-switch fastening	480,320	Aug. 9	925	234	60	770
Corthell, Fred H., New Haven, Conn. Music-box	474,370	May 10	790	205	59	800
Cortland, Harvey, Toronto, Canada. Electric fire-alarm	484,140	Oct. 11	917	236	61	202
Corwell, Charles H. (See Carlson, Gustave, assignor.)						
Cory, Charles, New York, N. Y. Rudder-indicator	482,421	Sept. 13	844	202 203	60	1514

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Cory, Elihu D. (See Cory, John H., assignor.)						
Cory, John H., assignor of one-half to E. D. Cory, Allen, Mich. Lifting-jack	469,832	Mar. 1	269	70	58	1153
Cory, John L., Green Island, assignor of one-half to R. C. Blackall, Albany, N. Y. Lubricator	487,661	Dec. 6	686	176	61	1457
Cory, John L., Green Island, assignor of one-half to R. C. Blackall, Albany, N. Y. Lubricator	488,163	Dec. 13	1536	385	61	1645
Coryell, Bingham H., <i>et al.</i> (See Stutzman, Frank, assignor.)						
Coryell, John G., <i>et al.</i> (See Stutzman, Frank, assignor.)						
Cosgrove, James J., Jr., Philadelphia, Pa. Conduit-trolley	474,218	May 3	512	123	59	737
Cosgrove, John, Roanoke, Va. Hoisting-machine	471,955	Mar. 29	3547	907	58	1818
Cosgrove, Thomas W., <i>et al.</i> (See Christy, James A., assignor.)						
Cosman, Nathan, assignor of one-half to O. F. Wegener, Seattle, Wash. Kettle-cover	479,490	July 26	2255	566	60	481
Coss Company. (See Coss, James C., assignor.)						
Coss, James C., assignor to Coss Company, Mansfield, Ohio. Buggy-top	468,460	Feb. 9	860	217	58	701
Cossette, Pitre, assignor of one-third to C. Terrian, Crystal Falls, Mich. Ratchet-wrench	481,690	Aug. 30	3145	767	60	1240
Cossor, Frank. (See Rapkin and Cossor.)						
Costa, Joaquin R. da, Havre, France. Motive-power engine	484,629	Oct. 18	1702	432	61	368
Costa, Salvatore, Brooklyn, N. Y. Aspirator or ventilator	475,010	May 17	1809	433	59	1012
Cotestow, Charles W., Waterborough, Me. Egg carrier and holder	484,876	Oct. 25	2121	545	61	467
Coté, Louis P. (See Da Rozir, Levi, assignor.)						
Coté, Louis, St. Hyacinthe, Canada. Machine for forming heel-stiffeners	469,774	Mar. 1	166	44, 45	58	1133
Coté, Louis, St. Hyacinthe, Canada. Pantograph	469,775	Mar. 1	170	46	58	1133
Cott, Charles M., Columbus, Ohio. Index	487,516	Dec. 6	467	122	61	1413
Cotter, Charles A., assignor to Randolph & Clowes, Waterbury, Conn. Tube for beer-coolers	479,205	July 19	1759	441	60	369
Cotton, James B., assignor of one-half to L. C. Cotton, Dayton, Ohio. Roof-scaffold	485,318	Nov. 1	255	69	61	624
Cotton, Levin C. (See Cotton, James B., assignor.)						
Cotton, Charles A. (See Nichols and Cotton.)						
Cotton, Charles L. (See Nichols and Cotton.)						
Cotton, Charles W., Indianapolis, Ind. Tire-setting machine	474,162	May 3	425	102	59	721
Cotton, Henry, Hanley, England. Construction of mills for grinding flint, stone, bone, glaze, &c	470,833	Mar. 15	1872	479	58	1478
Cotton, James M., Ashland, N. H. Locker for apparel, &c	483,282	Sept. 27	2235	562	60	1811
Cotton, James M., Ashland, N. H. Bundle-rack for cars	483,283	Sept. 27	2236	562	60	1811
Cotton, Silvester J. (See Badger, Argulas A., assignor.)						
Cottrell, Calvert B. (See Vierengel, Matthew, assignor.) (Reissue.)						
Cottrell, Calvert B., Westerly, R. I. Offset mechanism for printing-machines	467,637	Jan. 26	2164	550	58	435
Cottrell, Calvert B., Westerly, R. I. Mechanical movement	471,786	Mar. 29	3313	844	58	1772
Cottrell, Calvert B., Westerly, R. I. Printing-machine	472,206	Apr. 5	314	81	59	59
Cottrell, Calvert B., Westerly, R. I. Inking apparatus for printing-machines	472,666	Apr. 12	1007	261	59	244
Cottrell, Calvert B., Westerly, R. I. Inking apparatus for printing-machines	473,142	Apr. 19	1757	443	59	358
Cottrell, Calvert B., Westerly, R. I. Cylinder printing-machine	474,056	May 3	282	68	59	691
Cottrell, Calvert B., Westerly, R. I. Offset mechanism for printing-machines	484,531	Oct. 18	1552	394	61	338
Cottrell, Calvert B., Westerly, R. I. Feeding mechanism for cylinder printing-machines	487,254	Dec. 6	23	7	61	1326
Cottrell, Calvert B., Westerly, R. I. Delivery apparatus for printing-machines	487,386	Dec. 6	239	64, 65	61	1368
Cottrell, Calvert B., Westerly, R. I. Feeding apparatus for printing-machines	487,914	Dec. 13	1115	278	61	1559
Cottrell, Calvert B., Westerly, R. I. Means for bending electrotype-plates	487,915	Dec. 13	1119	279	61	1559
Cottrell, Charles P., Stonington, Conn., assignor to C. B. Cottrell & Sons, Westerly, R. I. Workman's checking and recording apparatus	481,274	Aug. 23	2475	609	60	1098
Cottrell, Edgar H., Stonington, Conn., assignor to C. B. Cottrell & Sons, Westerly, R. I. Apparatus for feeding paper or other fabric from rolls	477,352	June 21	1785	436	59	1817
Cottrell, George, assignor to Joseph Wagner Manufacturing Company, San Francisco, Cal. Differential gear	474,903	May 17	1655	417	59	979
Cottrell & Sons, C. B. (See Cottrell, Charles P., assignor.)						
Cottrell & Sons, C. B. (See Cottrell, Edgar H., assignor.)						
Couch, Charles A., Columbus, Ohio. Damper	486,855	Nov. 29	2679	701	61	1177
Couch, Daniel R., Canandaigua, N. Y. Vehicle-box	480,764	Aug. 16	1625	407	60	921
Couch, George S., Minneapolis, Minn. Addressing-machine	475,755	May 31	2973	755	59	1268
Couch, John P., Henrietta, Tex. Plow	485,457	Nov. 1	472	125	61	668
Couch, Louis B., Nyack, N. Y. Umbrella-runner	478,250	July 5	305	74	60	61
Coughlin, Samuel B. (See Subers, Lawrence A., assignor.)						
Couillard, Hubert, Jacksonville, Fla. Combined bureau and wash-stand	481,848	Aug. 30	3419	839	60	1293
Coulon, Georges, Paris, France. Bolt-lock	474,444	May 10	909	235	59	823
Coulson, Samuel M., Bullitt's Bayou, La. Poison-distributor	471,633	Mar. 29	3054	777	58	1724
Coulson, William, Spring Valley, Ill. Smoke-consuming furnace	475,205	May 17	2107	532	59	1071
Coult, Walter, assignor to Boston Manufacturing Company, Waltham, Mass. Straight-knitting machine	472,698	Apr. 12	1068	276	59	215
Coults, James W., Havana, Ill. Book-support	475,933	May 31	3274	826	59	1326
Coulter, John J. (See Neshitt, Josiah, assignor.)						
Coulter, Richard D. (See Lewis, Lorenzo L., assignor.)						
Coulter, Wesley, Pittsburg, Pa. Sash-fastener	470,988	Mar. 15	2096	536	58	1522
Coulter, William B., Waterbury, Conn. Rotary steam-engine	482,166	Sept. 6	405	96, 97	60	1414
Coulter, William B., assignor of one-half to N. C. Ovaatt and M. Gallond, Waterbury, Conn. Steam-engine	467,333	Jan. 19	1680	430	58	336
Coulter, William S., Stockwell, Ind. Gate	482,301	Sept. 6	623	148	60	1456
Courcel, Gustave and J., Paris, France. Glove-fastening	487,175	Nov. 29	3218	824	61	1284
Courcel, Jules. (See Courcel, Gustave and J.)						
Coursen, Robert L. (See Barrow, Thomas, assignor.)						
Courser, Thomas, Lake City, Fla. Car-coupling	486,693	Nov. 22	2404	627	61	1105
Courtney, John J., Minneapolis, Minn. Bundle-carrier	476,981	June 14	1172	283	59	1683
Courtright, Charles D., and C. A. Powell, Kenesaw, Nebr. Corn-harvester	473,298	Apr. 19	2022	508	59	410
Courtright, Edgar, Detroit, Mich. Metallic hand-car frame	468,511	Feb. 9	949	242	58	718
Couse, Friedrich P., Westfield, Mass. Whip	473,695	Apr. 26	2697	678	59	561
Cousen, Alfred, Detroit, Mich. Mangle	476,004	May 31	3381	852	59	1347
Cousins, Henry A., New York, N. Y. Manufacturing inlaid work for decorative purposes	488,540	Dec. 27	2153		61	1798
Cousins, Henry A., New York, N. Y. Manufacturing inlaid work for decorative purposes	488,541	Dec. 27	2154		61	1798
Cousins, Henry A., New York, N. Y. Manufacture of inlaid work for decorative purposes	488,542	Dec. 27	2155	532	61	1798
Couzens, George, Cardiff, England. Guily-trap	486,177	Nov. 15	1593	423	61	331

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'sg.	Vol.	Page.
Covel, Milo, Chicago, Ill. Fish trap or net.....	466,489	Jan. 5	286	72, 73	58	55
Covell, Edward T., New Bedford, Mass. Fastening for horseshoes.....	483,602	Oct. 4	128	32	61	27
Cover, Adam J., Broken Sword, Ohio. Car-coupling.....	476,919	June 14	1071	258	59	1663
Covert, D'Estaing S. (See Withers and Covert.)						
Covert, David F., Rapid City, S. D. Clothes-line.....	475,675	May 24	2838	718	59	1329
Covert, Enoch, Farmer Village, N. Y. Rope-clamp.....	466,656	Jan. 5	544	141	58	105
Covert, Enoch, Farmer Village, N. Y. Snap-hook.....	467,399	Jan. 19	1775	453	58	353
Covert, James C., West Troy, N. Y. Girth.....	469,965	Mar. 1	485	121	58	1193
Covert, Louis E., and C. W. McCutchen, Peekskill, N. Y. Stove-leg fastening.....	487,255	Dec. 6	26	7	61	1326
Coville, Orson, <i>et al.</i> (See June, Marcus M., assignor.)						
Covington, John I., Brooklyn, N. Y. Burglar-alarm.....	467,922	Feb. 2	28	7	58	531
Covington, John I., Brooklyn, N. Y. Means for locking books.....	468,512	Feb. 9	951	242	58	718
Covington, John I., Brooklyn, N. Y. Perpetual train time-table.....	483,138	Sept. 27	1974	500	60	1761
Covington, John I., Brooklyn, N. Y. Permutation-lock.....	488,648	Dec. 27	2323	575	61	1833
Covode, H. L. (See Spidel, George W., assignor.)						
Cowan, James C., Chicago, Ill. Shifting mechanism for type-writing machines.....	477,199	June 21	1528	373	59	1770
Cowan, McClellan, and J. G. Ragains, Wichita, Kans. Grain-meter.....	477,245	June 21	1622	396	59	1786
Cowan, Stephen G., Richmond, Va. Nut-lock.....	488,184	Dec. 20	1571	394	61	1669
Cowan, William, Edinburg, Scotland. Coin-freed gas-meter.....	474,219	May 3	513	124 125 126	59	737
Coward, William H., Bath, England. Mill for crushing ores.....	467,368	Jan. 19	1798	442	58	344
Coward, Adolphus, Judson, Ala. Cultivator.....	488,270	Dec. 20	1713	431	61	1696
Cowden, James P., Cedar Rapids, Iowa. Barrel.....	474,723	May 10	1346	342	59	908
Cowden, W. J. W., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Cowdery, John S. (See Liedke, Charles H., assignor.)						
Cowdery, John S., H. J. Curtis, and E. L. Liedke, Sandusky, Ohio; said Curtis and Liedke assignors to said Cowdery. Crayon-machine.....	476,038	May 31	3428	866	59	1358
Cowdery, Warren H., Ashtabula, Ohio. Making rakes.....	481,663	Aug. 30	3102	756	60	1232
Cowell, Julius J., Weedsport, N. Y. Vise.....	488,600	Dec. 27	2231	558	61	1819
Cowell, Rensselaer A., Cleveland, Ohio. Car-coupling.....	480,807	Aug. 16	1693	422	60	934
Cowell, William H., Logan, Ohio. Railway-rail bender.....	479,491	July 26	2257	566	60	482
Coven, Robert, Cambridge, assignor to Boston Woven Hose Company, Boston, Mass. Belting.....	473,696	Apr. 26	2698	679	59	561
Cowgill, Milo J., Omaha, Nebr. System of electric lighting.....	475,538	May 24	2637	670	59	1189
Cowles, Alfred A., New York, N. Y., and J. F. Gilpin, assignors to Ansonia Brass and Copper Company, Ansonia, Conn. Annealing-furnace.....	479,115	July 19	1620	405	60	343
Cowles, Byron K. (See Lytle and Cowles.)						
Cowles, Edward P., New Decatur, Ala. Cut-off mechanism for steam-engines.....	470,863	Mar. 15	1905	488	58	1484
Cowles, George A., Rochester, N. Y. Sole.....	476,448	June 7	344	78	59	1504
Cowles, Henry S., assignor of one-half to W. Duffy, East Hartford Meadow, Conn. Chafe-iron.....	480,172	Aug. 2	660	168	60	708
Cowley, James T., Lowell, Mass. Drilling apparatus.....	486,856	Nov. 29	2680	701	61	1177
Cowley, James T., Lowell, Mass., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus.....	474,040	May 3	247	59 60 61	59	685
Cowling, John. (See Buese and Cowling.)						
Cowper-Coles, Sherard O., assignor of one-half to London Metallurgical Company, Limited, London, England. Electro-depositing alloys.....	487,176	Nov. 29	3219	.....	61	1284
Cox, Alfred H., and I. N. Haley, New York, N. Y. Portable bath.....	477,515	June 21	2045	509	59	1868
Cox, Amos G. and J. C., and J. B. Carroll, Winterville, N. C. Plow-harness.....	470,549	Mar. 8	1431	373	58	1382
Cox, Augustus G., Gratton, Va. Nut-lock.....	485,174	Nov. 1	31	11	61	579
Cox, Charles W., Oak Park, Ill. File.....	482,497	Sept. 13	973	236	60	1539
Cox, David F. (See Copper and Cox.)						
Cox, George S., Cooksville, and G. M. Lewis, Rosalie, Tex. Compound for removing grease and stains.....	468,866	Feb. 16	1496	.....	58	836
Cox, Hugh B., and J. W. Gordon, London, England. Type-writing machine.....	469,188	Feb. 16	1988	508 509	58	933
Cox, Jacob R., Clayton, assignor of three-fourths to J. A. Downard, Danville, Ind., J. V. Hadley, E. G. Hogate, J. T. Barker, and D. Hadley. Corn-planter.....	483,736	Oct. 4	317	79, 80	61	66
Cox, James L., Moore's Salt Works, Ohio. Neck-yoke attaching device for vehicle-poles.....	469,432	Feb. 23	2379	610	58	1016
Cox, James L., Moore's Salt Works, Ohio. Snap-hook.....	482,302	Sept. 6	624	149	60	1457
Cox, John C. (See Cox and Carroll.)						
Cox, John T., Camden, N. J., assignor to Anderson Preserving Company, of New Jersey. Can-filling machine.....	469,992	Mar. 1	527	131 132	58	1201
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Apparatus for severing sheets from webs of paper.....	478,409	July 5	540	132	60	106
Cox, Joseph L., assignor to Duplex Printing Press Company, Battle Creek, Mich. Printing-press.....	478,503	July 5	676	165 166	60	134
Cox, Marion W., Muddy Valley, assignor of one-half to P. T. Sommers, Duquoin, Ill. Velocipede.....	466,989	Jan. 12	1109	280	58	219
Cox, Robert M., and R. Clark, Peoria, Ill. Steam-heater.....	473,251	Apr. 19	1945	489	59	394
Cox, Robert S., Terre Haute, Ind. Dump-car.....	476,366	June 7	219	54	59	1478
Cox & Sons Company. (See Cox, Stephen, Jr., assignor.)						
Cox, Stephen, Jr., Bridgeton, N. J., assignor to Cox & Sons Company, of New Jersey. Furnace for burning liquid fuel.....	470,420	Mar. 8	1240	317	58	1344
Cox, Stephen, Jr., Bridgeton, N. J., assignor to Cox & Sons Company, of New Jersey. Furnace for burning liquid fuel.....	473,252	Apr. 19	1946	489	59	394
Cox, Stephen, Jr., Bridgeton, N. J., assignor to Cox & Sons Company, of New Jersey. Atomizer for liquid fuel.....	477,624	June 21	2238	560	59	1906
Cox, William H., Virden, Ill. Lifting-jack.....	468,965	Feb. 16	1660	424	58	868
Cox, William H., Virden, Ill. Lifting-jack.....	475,934	May 31	3277	827	59	1326
Coxe, Charles B., assignor to E. E. Esterbrook, Brooklyn, N. Y. Brick-kiln.....	486,557	Nov. 22	2174	573	61	1060
Coxe, Eckley B., Drifton, Pa. Conveyor.....	481,106	Aug. 16	2172	538	60	1026
Coxe, Eckley B., and S. Salmon, Drifton, Pa.; said Salmon assignor to said Coxe. Mechanism for drilling.....	483,903	Oct. 4	571	143 144	61	118
Coy, David. (See Fellows, Ozro S., assignor.)						
Coyle, Andrew M. (See Fowler and Coyle.)						
Coyle, Andrew M., Washington, D. C., assignor to N. Hiss, Baltimore, Md. Electrically-controlled elevator.....	471,100	Mar. 22	2267	583	58	1568
Coyle, Edward S. (See Coyle, James H. and E. S.)						
Coyle, James H., Albany, N. Y. Metallic hub for vehicles.....	470,550	Mar. 8	1433	373	58	1382
Coyle, James H., Albany, and E. S. Coyle, Ballston Spa, N. Y. Hub.....	468,220	Feb. 2	467	115	58	616
Coyne, James J., Old Forge, Pa. Coal-screen.....	477,516	June 21	2047	589	59	1869

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Coze, André, Rheims, France, assignor to S. Newman and J. Green, St. Louis, Mo. Gas-retort charger	473,143	Apr. 19	1760	444	59	358
Coze, André, Paris, France, assignor to S. Newman and J. Green, St. Louis, Mo. Apparatus for discharging gas-retorts	475,540	May 24	2640	671	59	1190
Coze, André, Rheims, France, assignor to S. Newman and J. Green, St. Louis, Mo. Gas-retort.	477,934	June 28	2579	645 646	59	1989
Coze, André, and A. Lencauchez, Paris, France, assignors to S. Newman and J. Green, St. Louis, Mo. Apparatus for charging gas-retorts	473,144	Apr. 19	1761	444 445	59	359
Coze, André, and A. Lencauchez, Paris, France, assignors to S. Newman and J. Green, St. Louis, Mo. Gas-retort	473,145	Apr. 19	1763	445 446	59	359
Coze, André, Rheims, and A. Lencauchez, Paris, France, assignor to S. Newman and J. Green, St. Louis, Mo. Apparatus for the manufacture of gas	478,571	July 12	784	192	60	170
Cozens, Lizzie C., Philadelphia, Pa. Trunk	485,612	Nov. 8	700	184	61	732
Crabbs, Cyrus. (See Carter, Herman, assignor.)						
Crabbs, John C. (See Milburn, Byrket, and Crabbs.)						
Crabbe, Augustus S. (See Cataricus and Crabbe.)						
Crabtree, Leonard T., Embarrass, Wis. Indicator-lock	471,956	Mar. 29	3549	907	58	1819
Crabtree, Leonard T., Embarrass, Wis. Train-order annunciator	480,073	Aug. 2	501	128	60	678
Craddock, Patrick H., Leadville, Colo. Snow-plow	466,694	Nov. 22	2406	628	61	1106
Craddock, Thomas F., et al. (See Winby, William E. and W. M., assignors.)						
Craft, Percy R. (See Farquhar, John F. C., assignor.)						
Crafts, Samuel L., Boston, Mass. Car-fender	488,386	Dec. 20	1906	477	61	1734
Craggy, Benjamin J., assignor of two-thirds to G. A. Olzendam and E. O. Wilson, Manchester, N. H. Waste-end conveyor for carding-machines	467,888	Jan. 26	2572	651	58	511
Craban, William, and T. Nesom, Indianapolis, Ind. Embossing-machine	483,247	Sept. 27	2150	545	60	1796
Craig, James D., Rogers Park, assignor to Keyless Lock Company, Chicago, Ill. Combination-lock	488,518	Dec. 20	2121	525	61	1776
Craig, James H., assignor of seven-sixteenths to V. R. Barley, Marion, Ind. Bag-holder	471,466	Mar. 22	2824	719	58	1673
Craig, John B. (See Purcell and Craig.)						
Craig, John N. (See Garland, Jeremiah B., assignor.)						
Craig, Warren H., Lawrence, Mass. Lubricator	479,116	July 19	1621	405 406	60	343
Craig, William, Brooklyn, N. Y. Valve for direct-acting engines	485,787	Nov. 8	961	258	61	786
Craig, William B. (See Walsh, William E., assignor.)						
Craighead, Horace, assignor to Craighead & Kintz Company, Ballard Vale, Mass. Central-draft lamp	471,507	Mar. 22	2879	733	58	1684
Craighead & Kintz Company. (See Craighead, Horace, assignor.)						
Craighead & Kintz Company. (See Hofmann, Emil, assignor.)						
Craighead & Kintz Company. (See Nehr, Herman F., assignor.)						
Craigie, Hugh H., Stamford, Conn. Basin strainer and stopper	469,513	Feb. 23	2509	643	58	1040
Craigie, Hugh H., Stamford, Conn. Flushing-tank	471,537	Mar. 29	2918	743	58	1700
Crain, E. H., et al. (See Taylor, Barnett, assignor.)						
Craire, Edwin W., Missouri Valley, Iowa. Check-valve	483,603	Oct. 4	129	32	61	27
Cramer, George P. (See Galloway and Cramer.)						
Craup, William M., et al. (See Batcheller, Birney C., assignor.)						
Crandall, Henry F., assignor to Milwaukee Harvester Company, Milwaukee, Wis. Grain-hinder	478,572	July 12	785	193 194	60	171
Crandall, Nathan W., assignor to G. W. Jopson, Meriden, Conn. Key-holder	480,712	Aug. 16	1552	387	60	905
Crandall, Willis A., Sturgis, Mich. Bed-pan	467,923	Feb. 2	29	7	58	532
Crane, Abbie T. (See Nichols and Crane.)						
Crane, Calvin D., Dayton, Ohio. Writing-tablet	479,632	July 26	2458	612	60	519
Crane Company. (See Doolittle, William W., assignor.)						
Crane Company. (See Hayden, James T., assignor.)						
Crane Company. (See Prentice, McLeod, Crane, and Pilkington, assignors.)						
Crane Elevator Company. (See Rountree, Harold, assignor.)						
Crane Elevator Company. (See Rountree and Veeder, assignors.)						
Crane, Frank. (See Jabroczyk, Adolph, assignor.)						
Crane, Fred A., Good Hope, Ill. Seeder	482,470	Sept. 13	924	225	60	1528
Crane, James B., assignor of one-half to J. L. Barrett, Newnan, Ga. Oil-filter	478,251	July 5	307	74	60	61
Crane, John S. (See Bagley, Martin J., assignor.)						
Crane, Joseph J., Summertown, Tenn. Metallic cross-tie and securing-plate for railway-rails	467,790	Jan. 26	2410	613	58	481
Crane, Moses G., and F. W. Cole, Newton, Mass. Repeater for electric circuits	468,473	Feb. 9	878	223 224	58	704
Crane, Richard T. (See Prentice, McLeod, Crane, and Pilkington.)						
Crane, Spencer C., Philadelphia, Pa. Trolley-support	476,367	June 7	220	54	59	1479
Crane, Sylvanus B., Oxford Junction, Iowa. Automatic car-indicator-operating device	471,233	Mar. 22	2474	628 629	58	1606
Crane, Thomas, assignor to Cornish, Curtis & Greene, Fort Atkinson, Wis. Folding table	468,791	Feb. 16	1384	350	58	815
Crane, Thomas R., Heathsville, Va. Grain-drill	484,630	Oct. 18	1706	433	61	369
Crane, Thomas R., Heathsville, Va. Fertilizer-distributor	487,719	Dec. 13	791	202	61	1494
Crane, Thomas R., Heathsville, Va. Feed device for seed-hoppers	487,720	Dec. 13	792	203	61	1495
Crane, Thomas S. (See Burnet and Crane.)						
Crane, Wade O., Canton, N. Y. Copy-holder	471,101	Mar. 22	2271	584	58	1568
Crane, Thomas, Bay City, Mich. Bag-filler	470,475	Mar. 8	1330	346	58	1361
Crane, Thomas, Bay City, Mich. Evaporating apparatus	470,476	Mar. 8	1331	346	58	1362
Crane, Thomas, Bay City, Mich. Electrolytic apparatus	482,724	Sept. 20	1325	324	60	1620
Crane, Thomas, Bay City, Mich. Electrolytic apparatus	487,996	Dec. 13	1218	311	61	1585
Crane, Thomas, Bay City, Mich. Condenser	487,997	Dec. 13	1250	311	61	1586
Crane, Thomas, Bay City, Mich. Electrolytic apparatus	488,708	Dec. 27	2420	600	61	1851
Cranmer, Otis P., Summitville, Ind. Core-planter	483,376	Sept. 27	2371	594	60	1836
Cranmer, William S., Sonoma, Cal. Bicycle	481,476	Aug. 23	2801	669	60	1158
Cranwell, Charles W., assignor of one-half to D. E. Grobe, Oberlin, Kans. Nailless horse-shoe	487,177	Nov. 29	3220	824 825	61	1284
Cranston, John A., Newport, Del. Folding blacking-stand	480,074	Aug. 2	506	128	60	679
Cranston, Otto G., Kincaid, Kans., assignor of two-thirds to W. F. Richards, Quincy, Ill. Elbow for facilitating the cleaning of stovepipes	480,173	Aug. 2	661	168	60	708
Crapo, Charles E. (See Parker and Crapo.)						
Crapson, Willie F., Chanute, Kans. Saw-set	467,159	Jan. 19	1414	361	58	285
Crary, Joseph M., Jersey City, N. J. Type-writing machine	477,353	June 21	1787	436 437 438 439	59	1817
Crary, Joseph M., Jersey City, N. J. Type-writing machine	477,404	June 21	1870	460 461	59	1834

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Crary, Joseph M., Jersey City, N. J. Type-writing machine	477,517	June 21	2048	{ 510 511 }	59	1869
Crary, Thomas F., assignor of one-half to F. W. McLean, Middleport, Ohio. Self-measuring store-case	476,610	June 7	579	138	59	1551
Cravath, Pitt, Whitewater, Wis. Electric-lighting system	481,785	Aug. 30	3316	810	60	1274
Craw, Joseph T., Jersey City, N. J. Smoking toy	484,180	Oct. 11	986	252	61	215
Crawford, Edwin G., assignor to N. O. Nelson Manufacturing Company, St. Louis, Mo. Locking device for chain-pumps	470,551	Mar. 8	1434	373	58	1383
Crawford, George W., Protection, Kans. Cultivator	470,234	Mar. 8	908	224	58	1284
Crawford, Harvey F., and R. C. Lambert, Brockton, Mass.; said Lambort assignor of one-third to said Crawford. Hydraulic engine	472,942	Apr. 12	1412	361	59	282
Crawford, James H., Atton, Iowa. Rack	473,825	Apr. 26	2885	723	59	597
Crawford, R. F. (See Scott, George W., assignor.)						
Crawford, Robert A., Allegheny, Pa. Pilot or guard for locomotives and cars	480,713	Aug. 16	1553	387	60	905
Crawford, Robert D., East Pepperell, Mass. Paper-cutting machine	482,228	Sept. 6	499	119	60	1433
Crawford, William H., Weatherford, Tex. Stirring-machine	470,407	Mar. 8	1221	312	58	1340
Crawley, Edwin, Sr., Newport, Ky. Mechanism for rounding and backing books	474,819	May 17	1498	{ 383 384 }	59	952
Creaser, Robert, Maryborough, Queensland, Australia. Machine for dressing flour, middlings, semolina, grain, seeds, &c	483,542	Oct. 4	39	10	61	11
Creclins, Louis J., assignor of one-half to C. E. Pearce, St. Louis, Mo. Wheel	473,728	Apr. 26	2742	{ 690 691 }	59	570
Creedy, David R., Jr. (See Calvert, Charles E., assignor.)						
Creery, Morgan R. B., Ebensburg, Pa. Clamp for dental flasks	478,312	July 5	395	95	60	79
Cregier, De Witt C. (See Cregier, Nathaniel B., assignor.)						
Cregier, Nathaniel B., assignor of one-half to D. C. Cregier, Chicago, Ill. Electric train-signal	476,873	June 14	992	241	59	1648
Creighton, Frederick L., Somerville, Mass. Presser foot or bar for molding-machines	485,153	Oct. 25	2558	657	61	555
Creighton, William G., Norwood Park, Ill. Closed conduit for electric railways	483,761	Oct. 4	360	90	61	76
Cremor, Eduard, Münster, Germany. Cock for casks	478,574	July 12	792	195	60	172
Cremonesi, Louis, New York, N. Y. Bracelet	482,229	Sept. 6	500	119	60	1433
Crepeau, Henry T., Portland, Me. Traveling lawn-sprinkler	485,532	Nov. 1	576	155	61	690
Crepeau, Henry T., Portland, Me. Traveling lawn-sprinkler	485,533	Nov. 1	578	155	61	691
Crepin, Ernest E., Chicago, Ill. Ore-washer	468,406	Feb. 9	785	195	58	686
Cresap, Homer. (See Martindale, Crystal, assignor.)						
Cress, Leonidas H., et al. (See Christy, Russ J., assignor.)						
Crews, Dayton H., Ladonia, Tex. Extension-ladder	475,935	May 31	3278	827	59	1326
Cribb, Ira P., Canandaigua, N. Y., assignor to Robinson Rea Manufacturing Company, Pittsburg, Pa., and T. A. Blake, New Haven, Conn. Elevator for stone-crushers	480,490	Aug. 9	1193	363	60	820
Cribbins, John W., Shelton, Conn. Bed-machine for printing-presses	485,458	Nov. 1	473	{ 125 126 }	61	669
Crichton, William, assignor to Kerr-Murray Manufacturing Company, Fort Wayne, Ind. Sliding gate-valve	467,369	Jan. 19	1729	442	58	345
Crichton, William, assignor of two-thirds to S. Swann and E. D. Rogers, Fort Wayne, Ind. Measuring-pump	486,596	Nov. 22	2219	{ 588 589 }	61	1073
Crimmel, Henry, Fostoria, Ohio. Bottle and stopper	482,230	Sept. 6	501	120	60	1433
Crippen, Ira W., Ypsilanti, Mich. Checkrein-spring	483,762	Oct. 4	361	90	61	76
Crippin, William. (See Young and Pearn, assignors.)						
Crisenberry, Benjamin F., Boyleston, Ind. Washing-machine	477,246	June 21	1625	{ 396 397 }	59	1786
Crisp, James E., assignor of one-half to W. W. Brooks, Brownwood, Tex. Nut-lock	488,472	Dec. 20	2038	507	61	1761
Crisp, Joseph E. (See Copeland and Crisp.)						
Criss, Julia A., Akron, Ohio. Marine roundabout	484,409	Oct. 18	1355	346	61	299
Crisson, George A., Tarrytown, N. Y. Friction-roller	471,467	Mar. 22	2825	720	58	1673
Crist, John J., Wichita, Kans. Store-service apparatus	481,346	Aug. 23	2594	{ 637 638 }	60	1118
Cristadoro, Charles, St. Paul, Minn. Dovetailing-machine	480,251	Aug. 9	803	206	60	747
Crisswell, Charles E., et al. (See Schaeffer, Henry, assignor.)						
Crisswell, Francis M., Washington, D. C., and J. A. E. Criswell, Brooklyn, N. Y.; said J. A. E. Criswell assignor to said Francis M. Criswell. Phonograph	470,477	Mar. 8	1333	347	58	1362
Crisswell, James A. E. (See Crisswell, Francis M. and J. A. E.)						
Crisswell, Joel T. (See Meloney and Crisswell.)						
Crisswell, Mary E., et al. (See Schaeffer, Henry, assignor.)						
Critchler, John M., Bolivar, Mo. Churn	475,848	May 31	3142	797	59	1300
Critchley, James S., Ilkley, I. Singer, Keighley, and H. A. A. Dombrain, Addingham, near Leeds, England. Machine for pressing and finishing fabrics	484,702	Oct. 18	1819	{ 462 463 }	61	393
Critchlow, Thomas, New York, N. Y. Tower	468,792	Feb. 16	1386	351	58	815
Crittenden, Alfred W. (See Plumtree, Charles E., assignor.)						
Crittenden, Parker. (See Newell, Charles E., assignor.)						
Crittenden, Parker, San Francisco, Cal. Can-labeling machine	481,896	Aug. 30	3496	856	60	1308
Crocker, George H., Campello, assignor of one-half to G. C. Hall, Greenfield, Mass. Sole	482,459	Nov. 1	475	126	61	669
Crocker, Henry, Fairfax, Vt. Resonator	482,786	Sept. 20	1431	354	60	1640
Crocker, John L., and C. L. Bridges, St. Joseph, Mo. Horseshoe with detachable ice-eals	473,384	Apr. 19	2180	548	59	440
Crocker, Matthias E. (See Thompson, William A., assignor.)						
Crocker-Wheeler Electric Company. (See Wheeler, Schuyler S., assignor.)						
Crockett, Charles H., and C. C. Allen, assignors to Boston Electric Company, Boston, Mass. Electric lock	473,061	Apr. 19	1620	413	59	334
Croes, Louisa D., E. Rodenhach-Mergaert, and J. Lapin, Roulers, Belgium. Spinning-machine	482,003	Sept. 6	129	31, 32	60	1360
Crofford, Warren K. (See Bardsley and Crofford.)						
Crofford, Warren K., New York, N. Y. Manual-power machine	480,452	Aug. 9	1141	285	60	810
Croft, Thomas J., Ellenville, Miss. Side harrow and cultivator	480,174	Aug. 2	662	169	60	708
Crogon, Henry, Washington, D. C. Feeding match-safe	483,543	Oct. 4	41	10	61	11
Crolius, Edwin R., Chicago, Ill. Electric-light fixture	482,339	Sept. 13	702	167	60	1487
Cromer, Harry I., Rapid City, S. D. Registering attachment for type-writers	476,735	June 7	762	188	59	1589
Crompton, Frederick, Toronto, Canada. Machine for drying garment-stays	476,252	June 7	38	9	59	1445
Crompton Loom Works. (See Coldwell, Joseph, assignor.)						
Crompton Loom Works. (See Wyman and Clark, assignors.)						
Crompton Loom Works. (See Wyman and Gordon, assignors.) (Reissue.)						
Cromwell, William A., New York, N. Y. Detachable exhaust-head	466,657	Jan. 5	545	141	58	105
Crone, Anthony W. (See Eckes and Crone.)						
Cronenberg, William L. (See Perkins and Cronenberg.)						
Cronin, Daniel W., Little Rock, Ark. Lantern	479,247	July 19	1824	458	60	382

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Cronkhite, Charles M., Kimball, Wis. Scraper for sawmills	477,518	June 21	2051	511	59	1870
Crook, Charles, Brooklyn, assignor to E. Baldwin, New York, N. Y. Fare register and recorder	483,102	Sept. 20	1917	485 486	60	1738
Crook, James E., assignor of one-half to S. W. Davis, Lincoln, Nebr. Axle-lubricator	469,966	Mar. 1	488	121	58	1193
Crook, John H. (See Williams and Crook.)						
Crook, William, Sr., Winnipeg, Canada. Auxiliary motor for cars	486,031	Nov. 8	1348	358	61	865
Crook, William G., et al. (See Armstrong, James P., assignor.)						
Crook, William H., Washington, D. C. Bicycle-brake	486,630	Nov. 22	2306	602	61	1086
Crooker, Alfred M., assignor, by mesne assignments, of one-half to D. J. Griffin, Boston, Mass. Saw cotton-gin	475,206	May 17	2108	532 533	59	1072
Crooker, William W., assignor, by mesne assignments, to Electric Boot and Shoe Finishing Company, Lynn, Mass. Dyeing and polishing parts of boots or shoes	469,385	Feb. 23	2308		58	1002
Crooker, William W., Lynn, Mass., assignor, by mesne assignments, to Electric Boot and Shoe Finishing Company, of Maine. Buffing-wheel	472,287	Apr. 5	439	113	59	83
Crooks, Thomas. (See O'Carroll, Patrick, assignor.)						
Croom, Wiley G., assignor of one-half to J. A. Brennan, Vicksburg, Miss. Hand-support for penholders and lead-pencils	478,787	July 12	1113	275	60	236
Cropper, Joseph C., Cedar Falls, Iowa. Axle-lubricator	474,652	May 10	1230	315	59	825
Crory, Samuel, Cambridge, Mass. Sand-box for cars	488,387	Dec. 20	1907	477	61	1734
Crosby, George S., Buffalo, N. Y. Kite	487,471	Dec. 6	400	103	61	1399
Crosby, George S., assignor to Pratt & Letchworth, Buffalo, N. Y. Toy	487,472	Dec. 6	401	103	61	1400
Crosby, George S., assignor to Pratt & Letchworth, Buffalo, N. Y. Bicycle-stand	487,473	Dec. 6	402	104	61	1400
Crosby, Mary A., Durand, Wis. Dish-washer	479,703	July 26	2578	642	60	541
Crosby, Oliver, St. Paul, Minn. Steam-boiler	482,787	Sept. 20	1432	355	60	1640
Crosby Steam Gage and Valve Company. (See Bosworth, Charles B., assignor.)						
Crosier, Charles, et al. (See Kendall, Francis B. and J. T., assignors.)						
Cross, Edward S., Elyria, Ohio. Knockdown slate-ruling apparatus	471,957	Mar. 29	3552	908	58	1819
Cross, Elroy F. (See Fuller and Perkins, assignors.)						
Cross, Frederick A., Cincinnati, Ohio. Stringed musical instrument	475,541	May 24	2641	671	59	1190
Cross, Gerome L., assignor of two-thirds to D. W. Mellen and W. D. McKenzie, Springfield, Mass. Smoke-consuming furnace	487,823	Dec. 13	960	243	61	1530
Cross, Jerome A., Fultonville, assignor of one-half to Lauer & Hagarman, Rochester, N. Y. Apparatus for excavating and laying sewers	487,517	Dec. 6	468	122 123	61	1413
Cross, Thomas, Taunton, Mass. Loom-shuttle	486,087	Nov. 15	1438	381	61	901
Cross, Thomas A., assignor of two-thirds to R. H. Webb and F. W. Trnk, Bardwell, Ky. Post-hole digger	471,767	Mar. 29	3260	834	58	1764
Cross, Thomas A., assignor of four-fifths to W. L. Mosby, S. Pollick, W. Webb, and R. J. Young, Bardwell, Ky. Trace-carrier	474,820	May 17	1505	384	59	953
Crossan, Bayard. (See Gooding and Crossan.)						
Crossland, McLain and D. Long, New Haven, Pa. Barrow-wheel	481,298	Aug. 23	2522	619	60	1105
Crossley, Arthur W., et al. (See Flint, Edward, Jr., assignor.)						
Crossley, Eli, Jr., Manchester, England, assignor to C. A. Goslett, Chicago, Ill. Pulley	486,631	Nov. 22	2307	602	61	1086
Crossley, Herbert. (See Marchetti and Crossley.)						
Crossley, Joseph, Trenton, N. J. Pug-mill	473,497	Apr. 26	2363	599 600	59	497
Crossley, Joseph, Trenton, N. J. Apparatus for molding earthenware, &c	474,496	May 10	983	253 254	59	837
Crossman, Alonzo G., Huntington, N. Y. Shallow-water indicator	474,221	May 3	521	127	59	738
Crossman, Milledge A., Hyde Park, assignor of one-half to G. W. Emerson, Boston, Mass. Apparatus for holding horses while being shod	472,917	Apr. 12	1374	352 353	59	276
Crotty, John S., New York, N. Y. Dress-stay	483,835	Oct. 4	471	117	61	97
Crouch, Joseph S., Centre Groton, Conn. Lifting-machine	481,224	Aug. 23	2382	587	60	1081
Crow, Samuel G., Toronto, Canada. Chart for drafting garments	480,453	Aug. 9	1142	285 286	60	810
Crow, William G. (See Turk, Thomas, assignor.)						
Crowds, Walter A., assignor to B. M. Stratton, Memphis, Tenn. Galvanic battery	485,319	Nov. 1	256	69	61	624
Crowe, Eugene T., Delray, Mich. Automatic windmill-regulator	480,399	Aug. 9	1048	203	60	792
Crowe, Frederick C., Chicago, Ill. Car-coupling	468,415	Feb. 9	796	198	58	688
Crowe, Frederick C., Chicago, Ill. Rotary observatory	474,220	May 3	519	126 127	59	737
Crowe, George W., and W. K. Massam, Hull, England. Pencil-case	485,261	Nov. 1	161	47	61	606
Crowell, Albert I., assignor of one-half to F. B. Goddard, New York, N. Y. Shoe-lace fastening	473,615	Apr. 26	2573	648	59	537
Crowell, Gilmer, Brooklyn, N. Y. Cylinder for rotary blowers or engines	475,301	May 24	2252	520	59	1117
Crowell, Gilmer, Brooklyn, N. Y. Rotary blower or engine	475,302	May 24	2253	581	59	1117
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Combined printing-press and folding-machine	471,102	Mar. 23	2272	584	58	1569
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding-machine	472,472	Apr. 5	722	184 185 186	59	137
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	477,045	June 14	1206	307 308 309	59	1704
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	477,200	June 21	1531	373 374 375	59	1770
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	477,738	June 23	2418	604 605	59	1961
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Machine for bending metal plates	478,090	July 5	23	7, 8	60	7
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	478,091	July 5	25	8, 9	60	8
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	478,573	July 12	789	194 195	60	172
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines	480,321	Aug. 9	925	234 235	60	770
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding machine	480,422	Aug. 9	1087	272	60	799
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Preventing fraud in the sale of newspapers and other publications	480,423	Aug. 9	1090	273	60	799
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Preventing fraud in the sale of newspapers and other publications	480,424	Aug. 9	1093	273	60	800

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines.....	480,454	Aug. 9	1143	286 287	60	810
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Meade, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines. (Reissue).....	11,272	Sept. 27	2581	646 647	60	1877
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Meade, and C. W. Carpenter, New York, N. Y. Bed-motion for cylinder printing-machines. (Reissue).....	11,273	Sept. 27	2585	648 649	60	1878
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Feeding mechanism.....	484,141	Oct. 11	919	236 237	61	202
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Folding mechanism.....	484,142	Oct. 11	924	238 239	61	203
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine.....	486,088	Nov. 15	1439	381 382 383 384	61	901
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Method of and means for feeding sheets from a pile.....	486,089	Nov. 15	1455	384	61	903
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Newspaper-wrapping machine.....	486,090	Nov. 15	1459	384 385 386	61	904
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Combined printing-press and folding mechanism.....	486,558	Nov. 22	2175	574 575	61	1060
Crowell, Luther C., Brooklyn, assignor to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Combined printing-press and folding mechanism.....	486,559	Nov. 22	2182	575 576	61	1061
Crowley, David, assignor of one-half to C. K. Nichols, Washington, D. C. Derrick.....	469,497	Feb. 23	2486	637	58	1035
Crowley, John S. (See Foster and Crowley.)						
Crown Electric Manufacturing Company. (See Smith and Foster, assignors.)						
Crown Pharmacal Company. (See Pray, Edward E., assignor.)						
Crown Wax Heel Machine Company. (See Sampson, Winslow F., assignor.)						
Crozier, John H., Bean's Station, Tenn. Hot-air evaporator or drier.....	473,452	Apr. 26	2287	578	59	483
Crozier, Thomas W., Roanoke, Va. Ice-cream freezer.....	480,714	Aug. 16	1556	387 388	60	905
Cruickshank, Arthur B., San Francisco, Cal. Fire-escape.....	481,849	Aug. 30	3421	839	60	1294
Crull, Solomon F. (See Moore and Crull.)						
Crumb, John H., Burlingame, Kans. Car-coupling.....	488,873	Dec. 27	2672	661	61	1903
Crumlie, William, assignor of one-half to J. G. Shea, Decatur, Ill. Brick-kiln.....	475,237	May 17	2158	547	59	1081
Crump, Samuel, Montclair, N. J. Food product and making the same.....	479,402	July 26	2086		60	448
Cruiser, George L. (See Randolph, John L., assignor.)						
Crutsinger, C. W. (See Smith, Albert D. and F. W., assignors.) (Reissue.)						
Crutsinger, C. W., et al. (See Smith, Frank W., assignor.)						
Cruttenden, Henry L., Northfield, Minn. Carburetor.....	473,498	Apr. 26	2365	600	59	497
Cruzan, Garrett H., Edinburg, Ill. Scrap-cabinet.....	474,904	May 17	1636	417	59	979
Cryer, Henry M., Goldthwaite, Tex. Post-hole auger.....	472,339	Apr. 5	526	136	59	99
Crystal Rice Milling Company. (See Donelson, Emory V., assignor.)						
Cubbage, Charles A., Pittsburg, Pa. Barrow-wheel.....	472,570	Apr. 12	873	225	59	180
Cudahy, Michael. (See Coleman, Arnold D., assignor.)						
Cudell, Adolph, et al. (See Bollentin, Adam, assignor.)						
Cudner, Gustavis L., New York, N. Y. Ore-concentrator.....	469,202	Feb. 16	2028	518	58	939
Cudner, Gustavis L., assignor of four-fifths to J. Ruppert, Jr., G. E. Metz, and A. E. Schatz, New York, N. Y. Ore-concentrator.....	470,781	Mar. 15	1775	457	58	1459
Cudner, Gustavis L., assignor of four-fifths to J. Ruppert, Jr., G. E. Metz, and A. E. Schatz, New York, N. Y. Ore triturating and amalgamating apparatus.....	471,103	Mar. 22	2277	585	58	1569
Cudner, Gustavis L., assignor of four-fifths to J. Ruppert, Jr., G. E. Metz, and A. E. Schatz, New York, N. Y. Ore-concentrator.....	473,449	Apr. 26	2283	577	59	482
Cudner, Gustavis L., assignor of four-fifths to J. Ruppert, Jr., G. E. Metz, and A. E. Schatz, New York, N. Y. Combined ore separator and amalgamator.....	473,450	Apr. 26	2284	577	59	482
Cudner, Gustavis L., assignor of four-fifths to J. Ruppert, Jr., G. E. Metz, and A. E. Schatz, New York, N. Y. Placer disintegrator and amalgamator.....	473,451	Apr. 26	2285	577	59	483
Cuendet-Develay Fils & Co. (See Cuendet, Samuel, assignor.)						
Cuendet, Samuel, assignor to Cuendet-Develay Fils & Co., Ste. Croix, Switzerland. Musical box.....	474,520	May 10	1024	263 264	59	845
Cuénod, Sautter & Company. (See Thury, René, assignor.)						
Culbertson, James C., Oakland, Pa. Hay-elevator.....	473,915	May 3	46	8	59	645
Cull, George T., Wickliffe, Ky. Sprout-puller.....	481,897	Aug. 30	3498	857	60	1308
Culley, James J., San Francisco, Cal. Cuff-holder.....	466,774	Jan. 12	754	196	58	153
Cullingworth, George R., Mount Vernon, N. Y. Grinding-mill.....	478,252	July 5	308	75	60	62
Cullison, James. (See Cullison, William R., assignor.)						
Cullison, William R., Englewood, Ill. Vehicle-shaft.....	482,471	Sept. 13	925	226	60	1528
Cullison, William R., assignor of one-third to J. Cullison, Englewood, Ill. Tire-heater.....	468,908	Feb. 16	1558	396	58	848
Culmer, John W. (See Abrahams, George E., assignor.)						
Culmer, John W. (See Lane, Howard, assignor.)						
Culmer, John W., New Brighton, Pa. Process of and apparatus for generating fuel-gas.....	477,354	June 21	1793	439 440	59	1819
Culmer, John W., New Brighton, Pa., assignor to Computing Scale Company, Dayton, Ohio. Computing-scale.....	486,663	Nov. 22	2356	617 618	61	1095
Culmer, John W., New Brighton, Pa., assignor to Computing Scale Company, Dayton, Ohio. Computing-scale.....	486,695	Nov. 22	2410	629	61	1106
Culmer, John W., New Brighton, Pa., assignor to Computing Scale Company, Dayton, Ohio. Computing scale-poise.....						
Culpin, Arthur, Worcester, England. Reversible window-sash.....	487,824	Dec. 13	961	243	61	1530
Cultra, Thomas B., Omaha, Nebr. Vehicle-pole.....	469,079	Feb. 16	1842	471	58	904
Culver, Eliab, Grand Rapids, Mich., and C. A. Hascall, Hurley, Wis. Shirt.....	486,857	Nov. 29	2683	702	61	1178
Culver, John P., Los Angeles, Cal. Machine for making asphalted sheet-metal pipe.....	485,490	Nov. 1	518	137	61	677
Culver, Lucius L., St. Louis, Mo. Water-heater.....	472,984	Apr. 19	1499	382	59	312
Culver, Moses M., Glidden, Iowa. Machine for spooling and unspooling barbed fence-wire.....	470,989	Mar. 15	2097	536 537	58	1522
Culver, Orris, Grand Rapids, Minn. Road-rut cutter.....	477,185	June 14	1496	366	59	1750
Culver, William K., Chicago, Ill. Pencil-sharpener.....	488,185	Dec. 20	1573	394	61	1669
Cumberbatch, Isaac, Newark, N. J. Fluid-pressure regulator.....	472,161	Apr. 5	236	63	59	45
Cuming, Alfred A., Hingham, Mass. Feeding mechanism for sewing-machines.....	468,129	Feb. 2	337	83, 84	58	589
Cummer, Eliza E. (See Cummer, Franklin D., assignor.)	485,175	Nov. 1	31	11	61	579
Cummer, Franklin D., assignor to E. E. Cummer, Cleveland, Ohio. Drying and disintegrating clay, &c.....	485,176	Nov. 1	33	11, 12	61	579
	482,823	Sept. 30	1471	366	60	1649

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Cummer, Herbert H., Cadillac, Mich. Clothing-form	479,248	July 19	1826	458	60	382
Cummer, Jones & Co., et al. (See Abbott, Leonard G., assignor.)						
Cumming, James G., assignor to Scottish Inventions Company, Limited, Edinburgh, Scotland. Coin-freed apparatus	469,127	Feb. 16	1899	486	58	916
Cummings, Adelbert W., Dunkirk, N. Y. Machine for forming collars	483,139	Sept. 27	1976	501	60	1761
Cummings, Charles A., and W. H. Hill, Worcester, Mass. House-door letter-box	474,949	May 17	1708	434	59	993
Cummings, Edward J., Quincy, Mass. Trunk-tray	482,753	Dec. 27	2482	617	61	1864
Cummings, Edward N., Lynn, Mass. Toilet or wrapping paper	487,026	Nov. 29	2985	769	61	1236
Cummings, George K., Chicago, Ill. Rheostat	477,247	June 21	1626	397	59	1786
Cummings, George L., New York, N. Y. Clock-chime	474,371	May 10	791	206	59	800
Cummings, George W. (See Winsor and Cummings.)						
Cummings, George W., Cohoes, N. Y. Staud, presser, and guide for circular-knitting machines	467,534	Jan. 26	2007	508	58	406
Cummings, George W., Cohoes, N. Y. Presser for bobbins	467,535	Jan. 26	2011	509	58	407
Cummings, Henry H., Malden, Mass. Pump	483,666	Oct. 4	218	54	61	45
Cummings, John M. (See Burr and Cummings.)						
Cummings, John R., New York, N. Y., assignor to American Press Association, Chicago, Ill. Stereotype-casting apparatus	472,473	Apr. 5	729	186	59	138
Cummings, John R., New York, N. Y., assignor to American Press Association, Chicago, Ill. Stereotype plate and base	472,474	Apr. 5	730	186	59	138
Cummings, John R., assignor to American Press Association, Chicago, Ill. Stereotyper's casting apparatus	472,475	Apr. 5	731	187	59	138
Cummings, John R., assignor to American Press Association, Chicago, Ill. Stereotype plate and base	483,544	Oct. 4	43	11	61	11
Cummings, Uriah, New Haven, Conn. Pulverizing-machine	478,253	July 5	309	75	60	62
Cummins, Benjamin F., assignor to B. F. Cummins Company, Chicago, Ill. Perforating-stamp	486,858	Nov. 29	2684	702	61	1178
Cummins, Benjamin F., and J. Stenwall, Jr., assignors to B. F. Cummins Company, Chicago, Ill. Perforating, dating, and receiving stamp	475,440	May 24	2473	631	59	1158
Cummins, Lawson C., Montpelier, Vt. Telescopic rifle-sight	476,874	June 14	995	241	59	1648
Cummins, William G., McMinnville, Tenn. Jar-holder	470,846	Mar. 15	1888	483	58	1480
Cunningham, Fieldon B., Burlington, Kans. End-gate for wagons	469,903	Mar. 1	377	95	58	1174
Cunneock, Robert L., Henderson, Ky. Trunk for use with cotton-pickers, &c	478,990	July 19	1423	352	60	306
Cunneock, Robert L., and P. J. Marrs, Henderson, Ky. Automatic stationary fire-extinguisher	466,658	Jan. 5	546	142	58	105
Cunningham, Christopher, Jr., Brooklyn, N. Y. Circular-roofed structure	481,347	Aug. 23	2397	638	60	1118
Cunningham, Horace E., Brockton, Mass. Attachment for stapling-machines	481,786	Aug. 30	3318	810	60	1275
Cunningham, James, et al. (See Shaw, Henry R., assignor.)						
Cunningham, James, Dushore, Pa. Steam-generator	476,611	June 7	580	138	59	1552
Cunningham, James, Dushore, Pa. Hot-air furnace	477,519	June 21	2053	511	59	1870
Cunningham, James F. (See Gennert and Cunningham.)						
Cunningham, James F., Sr., Anson, Tex., and W. W. Duggee, assignors to J. I. Case Threshing Machine Company, Racine, Wis., and J. F. Cunningham, Sr., Anson, Tex. Cotton-harvester	471,074	Mar. 15	2225	570	58	1547
Cunningham, John, Jr., et al. (See Weaver and Manypenny, assignors.)						
Cunningham, Patrick, assignor to American Carrier Rocket Company, New Bedford, Mass. Dynamite rocket	479,738	July 26	2646	656	60	553
Cunningham, Peter N., Newcastle, assignor of one-half to R. Gray, Pittsburg, Pa. Ingot-manipulator	483,644	Oct. 4	188	47	61	39
Cunningham, Robert H., et al. (See Zimmermann, Peter, Jr., assignor.)						
Cunningham, Thomas M., Nashville, Tenn. Excess-baggage stamp or check for railway-tickets	478,923	July 12	1309	326	60	274
Cunny, Alexander D., Cincinnati, Ohio. Machine for stamping cigars	474,163	May 3	426	102	59	721
Cunny, Alexander D., Cincinnati, Ohio. Metallic casing	488,601	Dec. 27	2253	559	61	1819
Cupler, Jacob C., Chicago, Ill. Adjustable pattern for drafting garments	487,237	Nov. 29	3345	851	61	1805
Cupples, Samuel. (See West, James, assignor.)						
Cupples, Samuel, et al. (See Boyer, Joseph, assignor.)						
Curley, Thomas, Troy, N. Y. Steam-pipe coupling for railway-cars	478,991	July 19	1424	353	60	307
Curlin, Seth, assignor of one-half to J. E. Beck, Union City, Tenn. Air bed or pillow	486,696	Nov. 22	2415	629	61	1108
Curran, Frank M., St. Paul, Minn. Steam chime-whistle	468,793	Feb. 16	1333	351	58	815
Curran, John J., Toledo, Ohio. Filter	479,403	July 26	2087	523	60	448
Curran, John W., Marshall, Tex. Spark-arrester	477,995	June 23	2-36	707	59	2039
Curran, Martin, Jr., Deering, Me. Hoisting-machine	473,655	Apr. 26	2633	664	59	549
Currau, Patrick, Hoquiam, Wash. Swimming equipment	470,039	May 31	3431	867	59	1358
Currau, Patrick, Hoquiam, Wash. Leg attachment for swimmers' use	470,040	May 31	3432	867	59	1359
Curran, William, assignor of four-fifths to R. Bertelsen, H. Lorenz, F. Roehl, and A. C. Clover, Chicago, Ill. Journal-bearing	484,143	Oct. 11	927	239	61	204
Currey, George H., Evans, Tex. Bedstead	482,725	Sept. 20	1327	324	60	1620
Currey, Isaac F., Flint, Mich. Snow-plow	466,328	Jan. 5	29	7	58	9
Currie, Jesse W. (See Currie, John A., Jr., and J. W.)						
Currie, John A., Jr., and J. W., Pipe Creek, Tex. Pickle-lifter	481,691	Aug. 30	3146	767	60	1240
Currie, Joseph P., Marcus, Wash. Machine for sawing wood	469,734	Mar. 1	102	28	58	1119
Currie, Stanley C. C., assignor to United Gas Improvement Company, Philadelphia, Pa. Obtaining insoluble chlorides by electrolysis	466,720	Jan. 5	661	170	58	126
Currier, Anna W., and G. Clark, Malden, Mass. Button-fastener	482,621	Sept. 13	1166	282	60	1576
Currier, Jacob B., Lowell, Mass. Apparatus for arranging and counting votes	469,039	Feb. 16	1788	456	58	894
Currier, John W., North Troy, Vt. Device for cooling and graining maple-sugar	469,058	Feb. 16	1815	464	58	899
Currier, John W., North Troy, Vt. Sap-spout	469,232	Feb. 23	2074	533	58	956
Curriu, John, assignor to American Optical Company, Southbridge, Mass. Eyeglasses	479,907	Aug. 2	196	49	60	621
Curry, Alexander D., Istachatta, Fla. Road-cart	487,998	Dec. 13	1251	311	61	1586
Curry, David, New York, N. Y. Furnace-door opener	477,888	June 28	2668	667	59	2006
Curry, Henry B., Troy, W. Va. Bolt and nut fastening device	469,993	Mar. 1	529	132	58	1201
Curry, James P. (See Beach, Oscar W., assignor.)						
Curry, John F. (See Warner and Curry.)						
Curry, William, Brooklyn, N. Y. Flue-protector and wind-guard	474,057	May 3	283	68	59	692
Curtis, A. W., et al. (See Abbott, George F., assignor.)						
Curtis, Albert B., Worcester, and A. Perkins, Chicopee, Mass.; said Perkins assignor to said Curtis. Velocipede-treadle	471,075	Mar. 15	2227	571	58	1547

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Curtis, Andrew J., East Williamson, N. Y. Washing-machine	488,543	Dec. 27	2156	532	61	1798
Curtis, Andrew J., East Williamson, N. Y., assignor of one-half to H. H. and W. Pound. Wrench	486,697	Nov. 22	2417	630	61	1108
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Paper-pulp digester	484,999	Oct. 25	2328	601	61	508
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Paper-pulp digester	485,000	Oct. 25	2330	601	61	508
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Paper-pulp digester	485,808	Nov. 8	986	265	61	791
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Paper-pulp digester	485,809	Nov. 8	987	265	61	792
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Paper-pulp digester	485,810	Nov. 8	989	265	61	792
Curtis, Charles G., New York, N. Y., assignor to Curtis Electric Manufacturing Company, of West Virginia. Commutator connection for electric motors or generators	473,567	Apr. 26	2493	630	59	522
Curtis, Charles G., New York, N. Y., assignor to Curtis Electric Manufacturing Company, of West Virginia. Armature for dynamo-electric machines or motors	473,568	Apr. 26	2494	630	59	522
Curtis, Charles R., Farland, Mich. Hook for checkreins	480,715	Aug. 16	1557	388	60	906
Curtis & Curtis. (See Curtis, Roderick P., assignor.)						
Curtis & Curtis. (See Curtis, Roderick P. and L. B., assignors.)						
Curtis Electric Manufacturing Company. (See Andrews, Joseph D. F., assignor.)						
Curtis Electric Manufacturing Company. (See Curtis, Charles G., assignor.)						
Curtis, Frank C., New York, N. Y. Apparatus for propelling vessels	472,307	Apr. 5	316	81	59	59
Curtis, Frederick A., and H. J. Sautter, Muskegon, Mich. Plaut-holder for windows	477,355	June 21	1797	440	59	1819
Curtis, George H., New York, N. Y., assignor to Singer Manufacturing Company of New Jersey. Sewing-machine guide	488,186	Dec. 20	1575	395	61	1670
Curtis, George H., New York, N. Y., assignor to Singer Manufacturing Company of New Jersey. Sewing-machine guide	488,187	Dec. 20	1576	395	61	1670
Curtis, George S., assignor to Chicago Foundation Pavement Company, Chicago, Ill. Street-pavement	475,724	May 24	2923	742	59	1244
Curtis, George W., assignor to Unique Table Company, New York, N. Y. Wall-table	481,008	Aug. 16	2002	500	60	994
Curtis, Gilbert, Crown Point, N. Y. Blind-stile-boring machine	474,222	May 3	524	127	59	739
Curtis, Greely S., Jr., Boston, and J. M. Hallowell, West Medford, Mass. Mechanical ball game	487,825	Dec. 13	966	243	61	1531
Curtis, Havilah M. (See Bushaw, George W., assignor.)						
Curtis, Howard J. (See Cowdery, Curtis, and Liedke.)						
Curtis, James B., et al. (See Riuderkecht, Charles J., assignor.)						
Curtis, John D., Worcester, Mass. Manufacture of barbed fence-wire	470,746	Mar. 15	1721	443	58	1450
Curtis, John D., Worcester, Mass. Barbed wire	470,747	Mar. 15	1724	444	58	1450
Curtis, John D., Worcester, Mass. Barbed wire	484,890	Oct. 25	2148	551	61	473
Curtis, John H., et al. (See Bangs, Edwin D., assignor.)						
Curtis, Lewis B. (See Curtis, Roderick P. and L. B.)						
Curtis, Lewis E., Chicago, assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Can-heading machine	479,135	July 19	1646	412	60	348
Curtis, Nelson. (See Webb, Edward, assignor.)						
Curtis, Roderick P., Southport, assignor to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	477,297	June 21	1703	417	59	1801
Curtis, Roderick P. and L. B., Southport, assignors to Curtis & Curtis, Bridgeport, Conn. Pipe-threading machine	477,296	June 21	1702	417	59	1801
Curtis, Theodore H., Cleveland, Ohio. Device for salting meats	466,659	Jan. 5	547	142	58	106
Curtis, Wallace B., Pomeroy, and C. Himrod, Jackson, Ohio. Lamp-shade	470,371	Mar. 8	1161	298	58	1330
Curtis, Wallace B., and E. Long, Pomeroy, Ohio. Lubricator	476,253	June 7	39	9	59	1445
Curtis, William, assignor of one-third to S. R. Engle, Sullivan, Ind. Gate	469,514	Feb. 23	2511	643	58	1040
Curtis, William A., et al. (See Weaver, William, assignor.)						
Curtis, Winfield, Oakland, assignor of one-half to E. F. May, San Francisco, Cal. Rail-joint	483,993	Oct. 11	710	179	61	160
Curtiss, John L., Grand Rapids, Mich. Incandescent electric lamp	467,276	Jan. 19	1592	406	58	319
Cushing, Alvin M., et al. (See Holly, Edgar P., assignor.)						
Cushing, George W., Evanston, Ill., assignor to American Steel Wheel Company, Jersey City, N. J. Car-wheel	486,326	Nov. 15	1832	483	61	979
Cushing, George W., Evanston, Ill., and J. W. Rampe, Boston, Mass., assignors to American Steel Wheel Company, Jersey City, N. J. Mold for casting car-wheels	486,327	Nov. 15	1833	483	61	979
Cushing, Ira B., Brookline, Mass. Process of and apparatus for purifying and maturing liquors or distilled spirits	485,341	Nov. 1	292	78, 79	61	631
Cushman, Calvin B., and H. G. Canfield, Akron, Ohio. Fare-register	472,035	Apr. 5	37	7, 8	59	9
Cushman, Henry D., Three Rivers, Mich. Inhaler	476,131	May 31	3586	905	59	1389
Cushman, Henry D., Three Rivers, Mich. Inhaler	476,132	May 31	3587	905	59	1389
Cushman, Henry D., Three Rivers, Mich. Inhaler	488,427	Dec. 20	1972	492	61	1746
Cushman, Henry S., Milford, Mass. Whip	472,918	Apr. 12	1378	353	59	277
Cushman, Henry S., Milford, Mass. Whip	472,919	Apr. 12	1378	353	59	277
Cushman, Joseph W. (See Denison, Sylvester P., assignor.)						
Cushman, Joseph W., New York, N. Y. Oil-can holder for bicycles	478,092	July 5	28	9	60	8
Cushman, Modestus J., Waterloo, Iowa. Apparatus for testing milk	478,737	July 12	1030	253	60	220
Cushman Paper Box Machine Company. (See Taylor, Eugene H., assignor.)						
Cuson, Michel, Spring Lake, Mich. Swing	488,602	Dec. 27	2253	559	61	1819
Cussen, William J., Richmond, Va. Tobacco-pouch	475,676	May 24	2839	718	59	1229
Cussen, William J., assignor of three-fifths to M. Milhiser & Co., Richmond, Va. Tobacco-bag	467,108	Jan. 12	1317	333	58	259
Cussen, William J., assignor of three-fifths to M. Milhiser & Co., Richmond, Va. Tobacco-pouch	467,129	Jan. 12	1357	346	58	266
Cussen, William J., assignor of three-fifths to M. Milhiser & Co., Richmond, Va. Machine for packing tobacco	477,186	June 14	1498	367	59	1750
Custer, George, Bremond, Tex. Horseshoe	469,547	Feb. 23	2571	659	58	1051
Custer, George, Bremond, Tex. Horseshoe	477,926	June 28	2724	682	59	2018
Custer, William F., Summitville, Ind. Bolt-holder and wrench	466,329	Jan. 5	31	7	58	9
Custis, J. B. Gregg. (See Diver, Jerome B., assignor.)						
Cuthbert, Arthur, Maidenhead, England. Electrical-wire stripper	470,318	Mar. 8	1067	271	58	1313
Cuthbert, Arthur, London, England. Nozzle-holder	479,249	July 19	1827	458	60	383
Cuthbert, George. (See Cuthbert, John, G., and J., Jr.)						
Cuthbert, John, G., and J., Jr., Philadelphia, Pa. Heddle or harness frame for looms	467,733	Jan. 26	2327	591	58	465
Cutler, Alexander M., et al. (See Cutler, William R., assignor.)						
Cutler, Henry H., Newton, Mass. Meter for electric translating devices	467,669	Jan. 26	2216	564	58	445
Cutler, Henry H., Waltham, Mass. Electric-arc lamp	482,435	Sept. 13	864	207	60	1518

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Cutler, William P., <i>et al.</i> (See Cutler, William R., assignor.)						
Cutler, William R., assignor of two-thirds to A. M. Cutler, Bath, Me., and W. P. Cutler, Baltimore, Md. Cringle for sails	479,404	July 26	2089	523	60	449
Cutmore, Hahnemann A., London, England. Speaking-tube	484,516	Oct. 18	1531	388 389	61	333
Cutten, Elisha B., New York, N. Y. Electrolytically producing potassium chlorate	480,492	Aug. 9	1196	300	60	821
Cutten, Elisha B., New York, N. Y. Electrolytically producing potassium chlorate	480,493	Aug. 9	1197		60	821
Cutten, Elisha B., New York, N. Y. Electric fan	483,545	Oct. 4	44	11	61	11
Cutten, Elisha B., New York, N. Y., assignor, by mesne assignments, to Union Chemical Company, of New Jersey. Electrolytic cell	480,491	Aug. 9	1194	300	60	821
Cutter, Charles, <i>et al.</i> (See Rice, Joel T., assignor.)						
Cutter Electric and Manufacturing Company. (See Stanley, Lucius T., assignor.)						
Cutter, George, Chicago, Ill. Safety device for electric circuits	487,002	Nov. 29	2949	760	61	1230
Cutter, Martin A., Allegheny, Pa. Caster	474,576	May 10	1118	286	59	863
Cutter, Martin A., Allegheny, Pa. Street-railway switch	477,046	June 14	1274	309	59	1705
Cutter, Solomon M., assignor to W. A. Marsh, Quebec, Canada. Shoe-slugging machine	487,040	Dec. 6	285	74	61	1377
Cutter, William T., assignor of two-thirds to C. J. Luce, East Lynne, Conn. Extracting fat from wool	482,995	Sept. 20	1754	443	60	1704
Cutting, James R. (See Turcott, Gédéon L., assignor.)						
Cuttriss, Charles, New York, N. Y. Telegraphic relay	475,441	May 24	2476	631	59	1159
Cuttriss, Charles, New York, N. Y. Sealing device	475,442	May 24	2478	632	59	1159
Cuttriss, Charles, New York, N. Y., assignor to Knudson-Cuttriss Wire Company, Limited, of New York. Insulating electric conductors	488,141	Dec. 13	1491	375	61	1636
Cutts, Charles D., Fort Fairfield, Me. Fertilizer-distributor	469,370	Feb. 23	2284	587	58	997
Cuyas, Arthur. (See Assorati, Antonio, assignor.)						
Cuyas, Arturo. (See Assorati and Cuyas.)						
Cwerdinski, Alphonse T., Chicago, Ill. Paper can	485,158	Oct. 25	2570	659	61	557
Cyclone Pulverizer Company. (See Sahlin, Axel, assignor.)						
D. C. & H. C. Reed & Company. (See Reed and Clark, assignors.)						
D. M. Osborne & Company. (See Sharp, Charles S., assignor.)						
D'Arcy-Irvine, John, Howth, Ireland. Apparatus for saving life at sea	483,667	Oct. 4	219	54, 55	61	45
D'Heureuse, Rudolph, New York, N. Y. Safety device for window-cleauers	482,865	Sept. 20	1538	333	60	1663
D'Huny, Paul R. D., Liverpool, England. Driving-belt	469,778	Mar. 1	182	47	58	1136
D'Unger Long Distance Telephone Company. (See D'Unger, Paul H., assignor.)						
D'Unger, Paul H., assignor to D'Unger Long Distance Telephone Company, Chicago, Ill. Telephone	478,692	July 12	951	236	60	205
Da Rozir Levi, assignor of one-half to L. P. Coté, West Somerville, Mass. Balance	488,142	Dec. 13	1492	375	61	1636
Daab, Jacob. (See Borneman and Daab.)						
Dacus, Robert H., assignor to himself and R. E. Cole, Dardanelle, Ark. Stirrup	482,996	Sept. 20	1757	443	60	1705
Daggett, Byron H., Buffalo, N. Y. Surgical table	488,649	Dec. 27	2325	575	61	1833
Daggett, Frank B., St. Joseph, Mo. Brush-holder for dynamo-electric machines and motors	476,368	June 7	223	55	59	1479
Daggett, Henry S., Monument, Colo. Animal-shears	483,904	Oct. 4	572	144	61	119
Daggett, John C., Boston, Mass. Shoe-upper	481,299	Aug. 23	2324	620	60	1105
Dagron, James G. (See Durand, Arthur H., assignor.)						
Dagry, Alphonse, assignor to La Société Dagry & Arnault, Paris, France. Dough kneader or mixer	483,430	Sept. 27	2446	615 616	60	1851
Dahl, Charles A., Lynn, Mass., assignor to Globe Buttonhole Machine Company, Kittery, Me. Buttonhole stitching and barring machine	469,008	Feb. 16	1750	445 446	58	885
Dahl, Ole, Muskegon, Mich. Carpet-stretcher	470,039	Mar. 1	592	147	58	1214
Dahlem, Charles, New York, N. Y. Window-frame	476,612	June 7	583	139	59	1552
Dahlgren, Carl G. and J. H. Svensson, Göteborg, Sweden. Lathe	469,813	Mar. 1	238	60	58	1147
Dahlman, Henry, Cambridge, Minn. Stringed musical instrument	469,548	Feb. 23	2572	659	58	1052
Dahlman, Henry, Cambridge, and T. Blomgren, Stanchfield, Minn. Capo tasto	468,193	Feb. 2	434	107	58	609
Dahlstrom, Charles A., Chicago, Ill. Car-brake	481,163	Aug. 23	2284	563	60	1061
Dahmer, August G., Alameda, Cal. Door-hanger	477,739	June 28	2421	605	59	1961
Daily, Ambrose, <i>et al.</i> (See Spielman, William, assignor.)						
Daily, Joseph L., <i>et al.</i> (See Spielman, William, assignor.)						
Daily, Charles T., <i>et al.</i> (See Lincoln, David B., assignor.)						
Daily, Ethan W., Kansas City, Kans. Door-closer	483,140	Sept. 27	1976	501	60	1761
Daily, Hiram, assignor of one-half to D. F. Kline, Lancaster, Pa. Railway-tie	473,999	May 3	179	42	59	673
Daily, John W., Denver, Colo. Endoscopic instrument	471,990	Mar. 29	3594	918	58	1827
Daily, William E., Morristown, Tenn. Screw-driver	484,654	Oct. 18	1754	446	61	379
Daimler Motor Company. (See Wattles, Cyra B., assignor.)						
Dain, Albert E., Pittsburg, Pa. Newspaper-vender	482,824	Sept. 20	1473	366 367	60	1649
Dain, Joseph, Jr., Carrollton, Mo. Rake-tooth	479,789	Aug. 2	23	6	60	586
Dake, Charles W., Grand Haven, and E. B. Dake, Muskegon, Mich. Reciprocating rotary engine	476,369	June 7	227	56	59	1480
Dake, Edward B. (See Dake, Charles W. and E. B.)						
Dake, George W., and E. U. Loose; said Dake assignor to said Loose; said Loose assignor of one-half to A. B. Robbins, Minneapolis, Minn. Gang lawn-mower	488,669	Dec. 27	2361	584	61	1840
Dalbey, William H., Indianapolis, assignor of one-half to E. D. Kingsbury, Irvington, Ind. Sash-holder	482,710	Sept. 13	1299	318	60	1603
Dale, Charles H., New York, N. Y., assignor to Empire Car Coupler Company, Weehawken, N. J. Car-coupling	481,930	Sept. 6	15	4, 5	60	1337
Dale, David E., Syracuse, N. Y. Device for transporting materials	476,787	June 14	847	209	59	1619
Dale, Robert G., and W. S. Weightman, Durango, Colo. Egg-carrying package	478,934	July 12	1310	326	60	274
Daleiden, John P., Chicago, Ill. Candlestick	481,325	Aug. 23	2384	588	60	1081
Dalenberg, William, and C. Verduin, South Holland, Ill. Car-step extension	481,009	Aug. 16	2003	501	60	994
Daler, Christian, Nuremberg, Germany. Receptacle for mucilage, &c.	476,254	June 7	41	9	59	1446
Dallmann, William F. (See Momburg and Dallmann.)						
Dalsheimer, Simon. (See Lindemeyer, Philip, assignor.)						
Daly, Frank A., Lowell, Mass. Photographic-printing frame	476,041	May 31	3433	867	59	1359
Daly, John E., Glendora, and A. A. Neil, Covina, Cal. Orchard-cultivator	482,081	Sept. 6	261	63	60	1387
Daly, Marcus. (See Stalman, Otto, assignor.)						
Daly, Samuel W., Metropolis City, Ill. Machine for holding saws	471,168	Mar. 22	2375	606 607	58	1588
Dalzell, Samuel S. (See Gard, Dalzell, and Shafer.)						
Dani, Charles A., Lowell, Mass. Cotton-spinning mule	478,738	July 12	1031	253	60	220
Dani, Charles A., Lowell, Mass. Cotton-spinning mule	483,301	Sept. 27	2365	570	60	1816
Damm, Frederick C. (See Eaton and Damm.)						
Damm, Frederick C., Findlay, assignor to Cleveland Target Company, Cleveland, Ohio. Target-trap	477,927	June 28	2725	682	59	2018

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Damm, John, New York, N. Y. Street-sweeper.....	472,437	Apr. 5	669	171	59	125
Damon, Frank A., Fitchburg, Mass. Dental engine.....	478,992	July 19	1425	353	60	307
Damon, Frank A., Fitchburg, Mass. Dental engine.....	481,164	Aug. 23	2286	563	60	1061
Damon, George L., Cambridge, and G. W. Adams, Malden, Mass. Safe.....	470,818	Mar. 15	1843	474	58	1472
Damon, Lorenzo, West Chester, Pa. Sash-holder.....	477,103	June 14	1369	333	59	1724
Damns, Benno, Cincinnati, Ohio. Wood-cutting machine.....	477,201	June 21	1536	375	59	1771
Dana, Arthur L., Colorado Springs, Colo. Ore washer and concentrator.....	481,550	Aug. 30	2925	719	60	1199
Dancyger, Simon, Dayton, Ohio. Marking-tag.....	486,208	Nov. 15	1640	431	61	939
Danforth, Edwin H., Akron, Ohio. Wall-paper-pasting machine.....	471,958	Mar. 29	3354	908	58	1820
Danforth, Eugene H., Colebrook, N. H. Horse-blanket fastener.....	473,916	May 3	47	9	59	645
Danforth, Oscar L., Mansfield, Ohio. Fruit-gatherer.....	469,880	Mar. 1	343	88	58	1167
Dangerfield, Henry. (See Potter and Dangerfield.)						
Dangler Stove and Manufacturing Company. (See Ruppel, Henry, assignor.)						
Daniel, George E., Thompson, Mo. Wagon-seat.....	473,211	Apr. 19	1881	473	59	381
Daniel, Gustav. (See Landwehr, John, assignor.)						
Daniel, Joseph S., Kansas City, Mo. Automatic valve-operator for water closets.....	480,494	Aug. 9	1197	301	60	821
Daniel Pratt Gin Company <i>et al.</i> (See Beckwith, William G., assignor.)						
Daniel, William H. (See Palmer and Daniel.)						
Daniels, Charles T., and G. O. Wickers, Lawrence, Mass. Cloth-napping machine.....	474,334	May 3	724	189	59	776
Daniels, David B., Lake Charles, La. Nut-lock.....	467,002	Jan. 12	1126	285	58	232
Daniels, David G., Grand Tunnel, Pa. Broadcast seeder.....	477,325	June 21	1749	428	59	1810
Daniels, Etta B. (See Donne, Leon, assignor.)						
Daniels, Henry E. C., Chicago, Ill. Slate-frame.....	487,554	Dec. 6	523	135	61	1424
Daniels, Henry H., Cincinnati, Ohio. Combination-padlock.....	481,551	Aug. 30	2926	720	60	1199
Daniels, Levi B., Jr., <i>et al.</i> (See Nelson and Henett, assignors.)						
Daniels, Philander F., Waltham, Mass. Hose-supporter.....	471,104	Mar. 22	2278	585	58	1570
Daniels, Robert E., Youngstown, Ohio. Holdback for vehicles.....	470,834	Mar. 15	1874	480	58	1478
Daniels, Robert E., Youngstown, Ohio. Metal railway-tie.....	482,997	Sept. 20	1757	444	60	1705
Danielson, Frank W., Portsmouth, N. H. Shoemaker's tool.....	488,728	Dec. 27	2448	608	61	1857
Danielson, John W., Ogden, Utah Ter. Ironing-board.....	467,084	Jan. 12	1263	320	58	248
Dankworth, William J., Gatesville, Tex. Trace-iron.....	473,299	Apr. 19	2023	508	59	410
Danley, Robert J. M., Columbus, Ohio. Railway-crossing protector.....	482,422	Sept. 13	847	203	60	1514
Danley, Robert J. M., Columbus, Ohio. Railway-crossing protector.....	482,423	Sept. 13	848	203	60	1514
Dannenber, Edward, Chicago, Ill. Tobacco-pipe.....	473,212	Apr. 19	1882	474	59	381
Danner, Frederick. (See Bugbee and Danner.)						
Danner, Friedrich, Tarentum, assignor of one-half to Pittsburgh Plate Glass Company, Creighton, Pa. Regenerative gas-furnace.....	482,117	Sept. 6	318	75, 76	60	1397
Dante, Charles J., Hillsborough, Oreg. Wood-splitting machine.....	470,104	Mar. 1	689	169	58	1233
Danz, William, Detroit, Mich. Thill-coupling.....	486,436	Nov. 22	2010	533	61	1028
Danzer, Albert, Hagerstown, Md. Water-tight skylight.....	472,438	Apr. 5	670	172	59	125
Darbee, William W., Oneonta, N. Y. Recorder for cash-tills.....	472,860	Apr. 12	1386	330	59	257
Darby, Edward. (See Blakey, William J., assignor.)						
Darby, John H., Brymbo, near Wrexham, England. Basic-lined furnace.....	484,181	Oct. 11	987	252	61	215
Darby, John O. (See Woodbury, Amasa O., assignor.)						
Darby, Thomas C., Chelmsford, and J. E. Stevenson, King's Lynn, England. Implement for cultivating land.....	466,663	Jan. 5	559	144	58	108
Darche, George C., Chicago, Ill. Electric alarm-clock.....	478,155	July 5	124	32	60	27
Dare, Lee, Lagro, Ind. Headstall.....	466,330	Jan. 5	32	7	58	9
Darkin, Frank, Passaic, N. J. Machine for extracting fiber.....	473,826	Apr. 26	2886	723	59	598
Darley, Alfred E. (See Tichborne, Darley, Purcell, and Geoghegan.)						
Darley, John W., Jr., Baltimore, Md. Electric motor.....	467,924	Feb. 2	30	7, 8	58	532
Darling, Alfred B. (See Massey, Gideon B., assignor.)						
Darling, Brown & Sharpe. (See McLane, George D., assignor.)						
Darling, D. H. (See Harrington, George W., assignor.)						
Darling, E. L. (See Darling, William H., assignor.)						
Darling, Robert F., assignor to E. C. Stearns & Co., Syracuse, N. Y. Velocipede.....	485,839	Nov. 8	1030	277	61	800
Darling, Samuel, Providence, R. I. Key-seat rule.....	470,864	Mar. 15	1909	488	58	1485
Darling, Samuel, Providence, R. I. Caliper rule.....	477,101	June 14	1370	334	59	1724
Darling, Samuel, Providence, R. I. Caliper-rule.....	477,105	June 14	1371	334	59	1724
Darling, Welcome B. (See Mason, John, assignor.)						
Darling, William H., assignor of one-third to E. L. Darling, Bryan, Ohio. Car-replacer.....	487,864	Dec. 13	1034	259	61	1544
Darnelle, P. A., <i>et al.</i> (See Webb, Samuel D., assignor.)						
Darr, William A. (See Fridley, Jacob, assignor.)						
Darrow, Charles E., <i>et al.</i> (See Hale, Fred H., assignor.)						
Darrow, Samuel C., Traverse City, Mich. Deep-water fishing-tackle.....	481,165	Aug. 23	2283	564	60	1062
Darrow, Wilton E., Amador, Cal. Amalgamator.....	473,385	Apr. 19	2181	545	59	440
Dart, Isaac, Swazzy, Mich. Ice-velocipede.....	471,959	Mar. 29	3556	908	58	1820
Dash and Carriage Goods Company. (See Hawes, William L., assignor.)						
Dasha, John F. (See Hanb and Dasha.)						
Dashell, Robert B., Washington, D. C. Breech-loading ordnance.....	468,331	Feb. 9	670	166	58	663
Danby, Arthur H., San Diego, Cal. Valve and faucet.....	485,828	Nov. 8	1016	273	61	797
Dandeteau, Louis M. R., Vannes, France. Repeating firearm.....	473,827	Apr. 26	2889	724	59	598
Dangherty, James D., Kittanning, Pa. Type-writing machine.....	470,990	Mar. 15	2100	538	58	1523
Dangherty, James D., Kittanning, Pa. Type-writing machine.....	478,925	July 12	1311	326	60	275
Dangherty, James D., Kittanning, Pa. Type-writing machine.....	431,477	Aug. 23	2803	690	60	1158
Dangherty, Joseph M., Uhrichsville, Ohio. Oil-cup.....	475,387	May 21	2395	612	59	1144
Danmas, Louis C., Paris, France. Process of and apparatus for treating ores of gold.....	486,698	Nov. 22	2418	630	61	1108
Davenport, Charles F. (See Tripold and Davenport.)						
Davenport, Franklin E., Anburn, Ind. Copy-press.....	470,105	Mar. 1	690	169	58	1233
Davenport, Louie E., New York, N. Y. Illuminating-tile.....	472,639	Apr. 12	1072	275	59	215
Davenport, Louie E., New York, N. Y. Illuminating-lens.....	478,739	July 12	1033	253	60	220
Davenport, Rufus, <i>et al.</i> (See Brand, Henry, assignor.)						
Davenport, Taylor, and M. M. Doyle, Brazil, Ind. Dumping-wagon.....	468,794	Feb. 16	1389	352	58	815
David, Isaac, Bladeu, Nehr. Car-coupling.....	477,047	June 14	1276	309	59	1705
Davidson, Alexander, Springfield, Mass., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine.....	487,047	Nov. 29	3016	775	61	1242

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Davidson, Alexander, Springfield, Mass., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine.....	487,066	Nov. 29	3042	781	61	1248
Davidson, Frank B. (See Howe and Davidson.)						
Davidson, Harry, New York, N. Y. Construction of checkers.....	477,248	June 21	1627	397	59	1787
Davidson, Herbert E., Boston, Mass. Drawer for holding index-cards.....	470,884	Mar. 15	1946	496	58	1492
Davidson, John, Wick, Scotland. Memorandum-clock.....	466,712	Jan. 5	647	166	58	123
Davidson, Robert M., <i>et al.</i> (See Koontz, John P., assignor.)						
Davidson, Solomon J., Vinita, Indian Ter. Tool-holder.....	486,664	Nov. 22	2361	618	61	1096
Davidson, Wayland F. (See Carel and Davidson.)						
Davies, Albert T., Morriston, England. Apparatus for coating tin plates.....	478,051	June 28	2914	728	59	2054
Davies Brothers & Company. (See Bayliss, Moses, assignor.)						
Davies, David E. (See Williams and Davies.)						
Davies, Edward, Gravelly Hill, near Birmingham, England. Clock-case.....	472,162	Apr. 5	237	63	59	45
Davies, James R. (See Huber and Kneuper, assignors.)						
Davies, John. (See Myers and Davies.)						
Davies, John P. (See Dean, John, assignor.)						
Davies, John R., Woodlawn Park, Ill. Car-wheel.....	469,681	Mar. 1	17	7	58	1102
Davies, Preston, London, England. Elastic tire.....	486,542	Nov. 22	2154	569	61	1056
Davies, Preston, London, England. Attachment for rims of wheels.....	488,670	Dec. 27	2363	5-4	61	1840
Davies, Robert, Birkenhead, England. Boiler.....	476,700	Nov. 22	2421	631	61	1109
Davies, Walter D., Brooklyn, assignor to Ansonia Clock Company, New York, N. Y. Clock.....	474,053	May 3	284	68	59	692
Davis, Adolphus, London, England. Elevated railway.....	476,982	June 14	1174	284	59	1684
Davis, Albert J., Mount Tabor, N. J. Frictional hoisting-wheel.....	470,905	Aug. 16	1843	458	60	964
Davis, Albert J., Perth Amboy, N. J. Friction-wheel.....	482,788	Sept. 20	1433	355	60	1641
Davis, Andrew. (See Parsons and Davis.)						
Davis, Augustus G., Baltimore, Md. Fire-alarm apparatus.....	488,388	Dec. 20	1908	477 478	61	1734
Davis, Benjamin F., deceased, (M. L. Davis, administratrix,) assignor of one-half to R. Beaton, Corsicana, Tex. Hoisting apparatus.....	469,355	Feb. 23	2260	5-0	58	993
Davis, Benjamin F., deceased, (M. L. Davis, administratrix,) assignor of one-half to R. Beaton, Corsicana, Tex. Hoisting apparatus.....	471,468	Mar. 22	2837	720	58	1674
Davis, Charles, Easton, Pa. Attachable blotter for use in bank-books, &c.....	472,700	Apr. 12	1673	276	59	215
Davis, Charles C., Mercer, S. C. Washing-machine.....	482,341	Sept. 13	766	168	60	1488
Davis, Charles E., Chicago, Ill. Electric switch.....	476,613	June 7	584	139	59	1572
Davis, Charles E., Boston, Mass. Chair.....	477,106	June 14	1371	334	59	1724
Davis, Charles E., assignor to J. W. Norris, Chicago, Ill. Seal-lock.....	466,396	Jan. 5	133	7	58	27
Davis, Charles L., New York, N. Y. Instrument for drawing geometrical curves.....	486,699	Nov. 22	2420	630	61	1168
Davis, Clarence L., New York, N. Y. Ticket case or holder.....	476,005	May 31	3382	852	59	1318
Davis, Daniel V., Fork Church, N. C. Tobacco-hanger.....	473,861	Apr. 12	1288	330	59	257
Davis, Dewitt, Chicago, Ill. Washing-machine.....	468,317	Feb. 2	638	159	58	648
Davis, Edgar C., Earlville, Ill. Cistern-cleaning device.....	485,092	Oct. 25	2470	635	61	537
Davis, Edward W., Indianapolis, Ind. Hook.....	478,313	July 5	396	95	60	80
Davis, Edwin G. (See Davis, William M., assignor.)						
Davis, Emry, New York, N. Y. Suspenders.....	485,123	Oct. 25	2509	644	61	545
Davis, Emry, New York, N. Y. Combined inkstand-support and pen-rack.....	486,278	Nov. 15	1765	464	61	966
Davis, Emry, New York, N. Y. Combined inkstand-support and pen-rack.....	486,279	Nov. 15	1766	464	61	966
Davis, Francis G., Watertown, N. Y. Device for packing vehicle-wheels.....	476,522	June 7	449	167	59	1525
Davis, Francis G., Watertown, N. Y. Device for packing vehicle-wheels.....	478,954	July 12	1352	335	60	283
Davis, Francis G., assignor to H. H. Babcock Company, Watertown, N. Y. Spring-vehicle.....	488,690	Dec. 27	2398	594	61	1846
Davis, Frederick C., Austin, Tex. Side guide for printing and lithographic presses.....	475,677	May 24	2640	719	59	1229
Davis, George H., Washington, D. C. Pillow.....	470,819	Mar. 15	1845	474	58	1473
Davis, George H., Washington, D. C. Pillow-sham holder.....	472,036	Apr. 5	38	8	59	9
Davis, George R., St. John, Canada. Umbrella-stand.....	480,657	Aug. 9	1461	363	60	873
Davis, George W., Denver, Colo. Flushing-tank.....	470,782	Mar. 15	1776	457	58	1460
Davis, Henry J., assignor of one-fourth to Z. D. and B. A. McCord, Good Water, Ala. Plow-stock.....	462,909	Feb. 16	1559	396	58	848
Davis, Henry O., Annisquam, Mass. Adjustable bit.....	476,614	June 7	586	139	59	1553
Davis, Herbert L., Washington, D. C. Puzzle.....	488,974	Dec. 27	2837	699	61	1939
Davis, Hiram B., Denver, Colo. Rotating window-washer.....	481,140	Aug. 10	2236	551	60	1038
Davis, James, San Francisco, Cal. Pocket cash-accountant.....	473,676	Apr. 26	2634	664	59	549
Davis, James E., Milwaukee, Wis. Machine for hulling oats, barley, and other grains.....	474,164	May 3	428	103	59	721
Davis, Jephtha P., and G. B. Harwell, Mansfield, Ark. Flour bin and sifter.....	484,780	Oct. 25	1963	500	61	435
Davis, John, Albany, N. Y. Feed-roller for woodworking-machines.....	483,711	Oct. 4	281	70	61	59
Davis, John B., Moline, assignor of one-half to L. Rosenstein, Rock Island county, Ill. Pipe clamp and holder.....	484,410	Oct. 18	1357	346	61	300
Davis, John H., <i>et al.</i> (See Sleno, Leonard, assignor.)						
Davis, John H., assignor to Electrical Fiber-Carbon Company, Detroit, Mich. Galvanic battery.....	470,552	Mar. 8	1435	374	58	1383
Davis, John O., Goodhue, Minn. Cattle-tie.....	470,523	June 7	450	107	59	1525
Davis, John R., Chicago, Ill. Apparatus for drilling wells and for other purposes.....	467,277	Jan. 19	1593	406	58	319
Davis, John R., Chicago, Ill. Apparatus for drilling wells, &c.....	479,059	July 19	1527	381	60	327
Davis, John T., assignor of one-half to C. J. Moffett, St. Louis, Mo. Type-writer letter-copier.....	488,143	Dec. 13	1493	376	61	1637
Davis, John W., Lynn, Mass. Trolley.....	478,410	July 5	543	132	60	107
Davis, Jordan G., Waco, Tex. Clothes-pounder.....	474,223	May 3	525	128	59	739
Davis, Joseph, San Francisco, Cal. Water-filter.....	486,859	Nov. 29	2690	703	61	1179
Davis, Joseph, San Francisco, Cal. Water-filter.....	486,860	Nov. 29	2693	703	61	1180
Davis, Lydia A., Atwood, Ill. Corset-steel clasp.....	479,492	July 26	2258	566	60	482
Davis, Lydia L., Mendon, Mass. Tent.....	487,319	Dec. 6	136	40	61	1348
Davis, Mason W., Southbridge, Mass. Spectacles.....	481,552	Aug. 30	2934	720	60	1200
Davis, Matilda L., administratrix. (See Davis, Benjamin F.)						
Davis, Miles L. (See Singer and Davis.)						
Davis, Nathan II. and T. C., Philadelphia, Pa. Car-spring.....	488,754	Dec. 27	2484	617	61	1864
Davis, Orin C., assignor of one-half to T. Smurthwaite, Manistee, Mich. Holdback.....	473,569	Apr. 26	2496	631	59	523
Davis, Robert, Modesto, Cal. Combined wash-bench and wringer.....	469,833	Mar. 1	269	70	58	1153
Davis, Robert C., and D. A. Ripley, assignors of one-third to B. C. Graham, Columbus, Ohio. Tramway-switch.....	486,769	Nov. 22	2531	661	61	1131
Davis, Robert E., Greene, Ala. Wagon-brake.....	469,994	Mar. 1	530	132	58	1201
Davis, Sophia W. (See Crook, James E., assignor.)						
Davis, Thomas C. (See Davis, Nathan H. and T. C.)						
Davis, Thomas J. (See Inglesby and Davis.)						
Davis, Thomas L., Azalia, Ind. Weeder.....	472,749	Apr. 12	1139	292	59	228
Davis, Walter L., Chicago, Ill. Car starter and brake.....	469,776	Mar. 1	176	47	58	1135

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Davis, Walter L., Chicago, Ill. Motor for propelling cars	472,524	Apr. 12	812	209	59	167
Davis, Warren, Crawfordsville, Ind. Rubber-tread horseshoe	479,790	Aug. 2	24	6	60	586
Davis, Whitney C., Waterloo, N. Y. Bicycle	478,187	July 5	183	47	60	39
Davis, William, <i>et al.</i> (See Phillips, John H., assignor.)						
Davis, William H., Fond du Lac, Wis. Grain-drill	477,520	June 21	2055	512	59	1871
Davis, William H., assignor of one-half to W. T. and M. F. Armstrong, Chapel Hill, Tex. Car-coupling	480,866	Aug. 16	1780	445	60	952
Davis, William H., Oakfield, Mich. Device for cementing wells and cisterns	474,828	Apr. 26	2892	725	59	599
Davis, William M., Racine, assignor of one-half to E. G. Davis, Milwaukee, Wis. Tool for rubbing down vehicle-bodies, &c.	470,991	Mar. 15	2104	539	58	1523
Davis, William W., Ashland Centre, Mich. Plow	482,994	Oct. 11	711	179	61	166
Davison, Augustine C., London, England. Lamp for velocipedes	488,626	Dec. 27	2291	567	61	1826
Davison, Charles C., assignor of three-fourths to J. A. Harris, Moncton, Canada. Nut-lock	467,925	Feb. 2	35	8	58	532
Davison, George B., assignor to Eureka Mower Company, Utica, N. Y. Cultivator	467,660	Jan. 26	2201	560	58	441
Davison, George J., Richmond, Va. Sole or heel plate	481,478	Aug. 23	2810	691	60	1160
Davy Clay Ballast Company. (See Butler, Henry G. and W., assignors.)						
Davy, William, Kenosha, Wis. Sewer-excavating apparatus	478,254	July 5	311	76	60	62
Daw, Albert W. and Z. W., Laurvig, Norway. Construction of stands or tripods for rock-drills, &c.	487,256	Dec. 6	27	8, 9	61	1326
Daw, Zacharias W. (See Daw, Albert W. and Z. W.)						
Dawe, Thomas R. (See Brown, Julius C., assignor.)						
Dawes, Robert, Philadelphia, Pa. Traverse-motion for spinning and twisting machines	481,787	Aug. 30	3319	{ 810 811 }	60	1275
Dawson, Chalkley. (See Jones, Dawson, and Stanton.)						
Dawson, Edward, assignor of one-half to G. Burt, Terre Haute, Ind. Loose-pulley lubricator	487,257	Dec. 6	28	9	61	1327
Dawson, George W., Chicago, Ill. Hydraulic pumping-engine	478,314	July 5	397	96	60	80
Dawson, Henry T., Salcombe, England. Gas-engine	466,331	Jan. 5	33	{ 8 9 10 }	58	9
Dawson, John, Huddersfield, England. Water-heater	488,709	Dec. 27	2421	{ 600 601 }	61	1851
Day, Benjamin F., Norristown, Pa. Gas-regulator	469,464	Feb. 23	2430	623	58	1025
Day, Calvin K. (See Rossman, William W., assignor.)						
Day, Charles S., <i>et al.</i> (See Morrell, Robert, assignor.)						
Day Elevated Railway Plant Company. (See Day, St. John V., assignor.)						
Day, Henry L., Minneapolis, Minn. Dust-collector	476,524	June 7	451	107	59	1526
Day, Henry L., Minneapolis, Minn. Fuel-feeder	482,424	Sept. 13	850	{ 203 204 }	60	1515
Day, Herbert L., Cherryfield, Me. Spring-bed	473,729	Apr. 26	2744	691	59	570
Day, James R. M., and L. Moore, assignors of one-third to J. Lawrence and S. Compton, Winfield, Kans. Grain-drill	487,258	Dec. 6	30	9, 10	61	1327
Day, Jonathan W., Crystal Springs, Miss. Boring-machine	482,231	Sept. 6	503	120	60	1433
Day, Quintis V. P., Dinuba, Cal. Harness-hook	472,863	Apr. 12	1292	332	59	258
Day, Quintis V. P., Dinuba, Cal. Draft device for whiffletrees	482,622	Sept. 13	1167	282	60	1576
Day, Randall B., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Day, Richard H., Philadelphia, Pa. Pressing and drying plants and press adapted therefor	484,301	Oct. 11	1188	{ 302 303 }	61	254
Day, Samuel J., Burden, Kans. Trough for poultry	466,397	Jan. 5	135	37	58	58
Day, St. John V., assignor to Day Elevated Railway Plant Company, Chicago, Ill. Elevated railway	472,862	Apr. 12	1289	331	59	253
Day, St. John V., Terre Haute, Ind., and C. D. Moody, Webster Groves, Mo. Elevated-railway plant	470,992	Mar. 15	2106	{ 539 540 541 }	58	1524
Day, Willard G., Baltimore, Md. Automatic heat-signaling device	470,478	Mar. 8	1335	347	58	1362
Dayton Farm Implement Company. (See Nauman, William H., assignor.)						
Dayton Manufacturing Company. (See Kirby, John, Jr., assignor.)						
Dayton Manufacturing Company. (See Silvey, William L., assignor.)						
Dayton Paper Novelty Company. (See Schmidt, Theodore F. W., assignor.)						
Dayton Printing and Manufacturing Company. (See Reynolds, Lewis G., assignor.)						
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Swaging-machine	474,548	May 10	1071	275	59	854
Dayton, William H., assignor to Excelsior Needle Company, Torrington, Conn. Temper-ing-furnace	487,944	Dec. 13	1162	290	61	1568
De Bann, Frederick. (See Demarest, Harvey V., assignor.)						
De Camp, Alfred H., Boonton, N. J. Aerial tramway	469,908	Mar. 1	386	97	58	1175
De Camp, Alfred H., Boonton, N. J. Cable-grip	469,909	Mar. 1	389	98	58	1176
De Camp, Eliphalet, Newark, N. J. Folding square	488,544	Dec. 27	2157	533	61	1798
De Camp, Eliphalet, Newark, N. J. Folding square	488,545	Dec. 27	2158	533	61	1799
De Canio, Felix. (See Pagliughi and De Canio.)						
De Estenoz, Francisco R., Philadelphia, Pa. Clapper	482,570	Sept. 13	1091	264	60	1562
De Fernelmont, Henry H. (See De Fernelmont, Leonard H. and H. H.)						
De Fernelmont, Henry H., assignor of one-half to S. T. Douglas, Detroit, Mich. Oil-burner	467,736	Jan. 26	2329	592	58	465
De Fernelmont, Leonard H. and H. H., Detroit, Mich., assignors, by mesne assignments, of one-third to said Leonard H. De Fernelmont. Brick	483,105	Sept. 20	1922	487	60	1740
De Ford, Franklin, Stuart, assignor of one-third to L. H. De Ford, Valley Junction, Iowa. Car-coupling	485,736	Nov. 8	902	242	61	774
De Ford, L. H. (See De Ford, Franklin, assignor.)						
De Forest, Lockwood. (See Baynes, John, assignor.)						
De Forest, Wyatt F., St. Louis, Mo. Pressure-recorder for air-brakes, &c.	484,411	Oct. 18	1357	347	61	300
De Forest, Wyatt F., assignor of two-thirds to H. O'Hara and S. Irving, St. Louis, Mo. Automatic fluid-pressure brake mechanism	468,240	Feb. 2	497	122	58	622
De Frehn, Edward D., Monnt Union, Pa. Mandrel and adjustable bit-socket for mortis-ing-machines	469,025	Feb. 16	1771	452	58	890
De Golyer, E. W., administrator. (See De Golyer, Norman T.)						
De Golyer, Everard W. (See De Golyer, Norman T., assignor.)						
De Golyer, Norman T., deceased, (E. W. De Golyer, administrator,) assignor of one-half to E. W. De Golyer, Beaver Dam, Wis. Steam-boiler	487,696	Dec. 6	743	190	61	1467
De Graff, James W., Plainfield, N. J., assignor to Howard Manufacturing Company, of Massachusetts. Razor-strop	487,826	Dec. 13	968	244	61	1531
De Graff, William L. (See Maret and De Graff.)						
De Graffenried, William C. (See McMullin and De Graffenried.)						
De Grow, Samuel. (See Hopkins, Edwin F., assignor.)						
De Haven, Isaac, Allegheny, Pa. Stove	481,226	Aug. 23	2386	588	60	1081

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
De Kalb, Courtenay, assignor to S. Brentano, New York, N. Y., and L. E. De Kalb, Boston, Mass. Adjustable connection for machinery.....	487,721	Dec. 13	794	203	61	1495
De Kalb, L. Engenie, <i>et al.</i> (See De Kalb, Courtenay, assignor.)						
De La Mare, Thomas, and J. Mechem, Tooele, Utah Ter.; said Mechem assignor to said De La Mare. Apparatus for drilling wells.....	488,116	Dec. 13	1454	366	61	1629
De La Matyr, Fred, Fremont, Nebr. Guard for vehicle-shafts.....	482,726	Sept. 20	1328	324	60	1620
De La Vergue Refrigerating Machine Company. (See Ruemmel and Bauer, assignors.)						
De Land, Frank A., Memphis, Mich. Fence.....	486,632	Nov. 22	2308	603	61	1086
De Lany, Ellsworth, Syracuse, and J. Dooley, Jr., Camillus, N. Y. Drier.....	485,911	Nov. 8	1152	305	61	824
De Lassus, John F. (See Tong, James H., assignor.)						
De Less, Joseph V. (See Badgley, Edwin L., assignor.)						
Do Long, Allen P., Imlay City, Mich. Type-writing machine.....	466,332	Jan. 5	37	10	58	10
De Marr, Joseph J. (See Hall and De Marr.)						
De Mars, Joseph, assignor of one-fourth to F. E. McKinley, Albuquerque, N. Mex. Ter. Bottle-stopper.....	485,093	Oct. 25	2471	635	61	538
De Moulin, Edmund, Greenville, Ill. Camera attachment.....	420,808	Aug. 16	1694	422	60	934
De Neut, John H., assignor of one-half to J. H. Colleton, Grand Rapids, Mich. School-slate	487,178	Nov. 29	3222	895	61	1284
De Puydt, Albert, Liege, Belgium. Electric-arc lamp.....	488,329	Dec. 20	1812	454	61	1715
De Rycke, Jules J. J., Brooklyn, N. Y. Exhaust-head.....	487,723	Dec. 13	796	203	61	1495
De Rycke, Jules J. J., Brooklyn, N. Y. Feed-water heater and purifier.....	487,724	Dec. 13	797	204	61	1496
De Sheppard, Albert C., Bloomsburg, Pa. Beef-tenderer.....	480,178	Aug. 2	666	170	60	709
De Shon, Allen L., Steele, N. D. Poison-receptacle.....	478,691	July 12	951	236	60	205
De Sloovere, Louis C., Salem, Mass. Fare-register.....	470,373	Mar. 8	1164	298 299	58	1330
De Sylvia, Daniel W., Richmond, Va. Hitching device.....	480,179	Aug. 2	667	170	60	709
De Vault, William N. (See Miller and De Vault.)						
De Vault, William N., assignor of one-half to G. N. Spangler, Peoria, Ill. End-gate	466,845	Jan. 12	869	222	58	175
De Vos, Arie, Des Moines, Iowa, assignor to Dexter Folder Company, Fulton, N. Y. Grip- per for printing-presses.....	470,637	Mar. 8	1556	405	58	1408
De Vries, John, Passaic, N. J. Feed-water heater.....	478,315	July 5	399	96	60	80
De Witt, James M., Rutherford, N. J. Car-check.....	468,061	Feb. 2	231	57	58	569
De Witt, Melville L., Easton, Me. Crank-axle for forward wheels of wagons.....	485,492	Nov. 1	521	138	61	678
De Witt, William H., Wilkes-Barré, Pa. Bicycle.....	472,528	Apr. 12	824	210	59	170
De Witt, William H., Wilkes-Barré, Pa. Bicycle.....	478,415	July 5	548	134	60	108
De Wolfe, Edward R., New York, N. Y. Valve for pneumatic tires.....	480,400	Aug. 9	1050	263	60	793
De Wolfe, Edward R., assignor to himself and G. R. Bidwell, New York, N. Y. Inflatable rubber tire for bicycles.....	466,556	Jan. 5	397	101	58	76
De Wolfe, Edward R., assignor to himself and G. R. Bidwell, New York, N. Y. Rubber tire for bicycles.....	471,813	Mar. 29	3355	854	58	1780
Deacon, Samuel, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Con- necticut. Electric switch.....	470,748	Mar. 15	1725	444	58	1450
Deal, Charlie T. (See Mitchell and Deal.)						
Deal, Josiah J., Canton, Ohio. Permutation-padlock.....	486,665	Nov. 22	2362	618	61	1097
Deal, Josiah J., Canton, Ohio. Combination-padlock.....	486,666	Nov. 22	2364	618	61	1097
Dean, Cyrus S., Fort Erie, Canada. Car-heater.....	474,225	May 3	527	129	59	739
Dean, Cyrus S., Fort Erie, Canada, assignor of two-thirds to C. O. Rano, Buffalo, N. Y. Gas- burner.....	485,910	Nov. 8	1150	305	61	824
Dean, Dannial J., Bird Island, Minn. Mechanical motor.....	483,046	Sept. 20	1833	466	60	1722
Dean, Francis W., Cambridge, Mass. Intercepting-valve for compound engines.....	474,000	May 3	181	43	59	674
Dean, Francis W., Cambridge, Mass., assignor to J. N. Gamble, Daytona, Fla. Safety at- tachment for engine-governors.....	482,404	Sept. 13	813	195	60	1509
Dean, George A., Ranger, Tex. Wire-stretcher.....	474,224	May 3	526	128	59	739
Dean, James C. A., assignor of one-half to W. R. Mahan, Chicago, Ill. Truck.....	485,202	Nov. 1	163	47	61	606
Dean, James H., assignor of one-half to B. Cloutier, Minneapolis, Minn. Station-indica- tor.....	474,001	May 3	183	43	59	674
Dean, John, assignor to J. P. Davies, Racine, Wis. Bridle-bit.....	483,103	Sept. 20	1921	486	60	1739
Dean, John, assignor to J. P. Davies, Racine, Wis. Bridle-bit.....	483,104	Sept. 20	1922	486	60	1740
Dean, John A., assignor of one-half to I. S. Whiting, Worcester, Mass. Rope-grip.....	466,736	Jan. 5	683	176	58	130
Dean, John A., assignor of one-half to I. S. Whiting, Worcester, Mass. Elevator.....	472,012	Mar. 29	3626	927	58	1834
Dean, Kate M., assignor of one-third to A. H. Douglass, Memphis, Tenn. Rein-support.....	472,013	Mar. 29	3628	927	58	1835
Dean, Mark L., Centerville, Tenn. Apparatus for handling freight.....	466,890	Jan. 12	955	214	58	191
Dean, Seward A., Minneapolis, Minn. Type-writing machine.....	477,521	June 21	2057	512 514	59	1871
Deane, Ezra L., Holyoke, Mass. Square with adjustable heads.....	472,525	Apr. 12	819	209	59	169
Deane, Frank H., assignor of one-half to C. P. Tatem & Co., Baltimore, Md. Basket.....	478,411	July 5	544	132 133	60	107
Deane, Herbert C., North Raynham, assignor to E. Sawtelle, Brockton, Mass. Caster.....	472,254	Apr. 5	389	101	59	72
Deane, Robert, Brooklyn, N. Y. Hinge-lock.....	485,613	Nov. 8	701	184	61	732
Dearborn, Gilbert K., assignor, by mesne assignments, to W. A. Muzzy, Somerville, Mass. Water- supply apparatus for water-closets.....	474,372	May 10	792	206	59	801
Dearborn, Richard J., Boston, Mass., assignor of one-half to Trimont Manufacturing Com- pany, Portland, Me. Screw-threading die.....	480,175	Aug. 2	663	169	60	708
Dearborn, Wymann, assignor of one-half to C. Riply, Boston, and A. W. Mann, Malden, Mass. Roller cotton-gin.....	471,076	Mar. 15	2228	571 572	58	1547
Deardorff, Benton, Hagerstown, Ind., assignor of two-thirds to J. H. Kidwell and W. G. Mar- thews. Corn-planter.....	475,266	May 17	2199	561	59	1090
Deardorff, Jesse S., Canal Dover, Ohio. Dental clamp.....	481,479	Aug. 23	2811	691	60	1160
Deardorff, Theodore H., and A. U. Betts, Toledo, Ohio. Pneumatic seat for bicycles.....	467,352	Jan. 19	1708	437	58	341
Dearing, James W., Brooklyn, N. Y. Lock-hinge.....	485,460	Nov. 1	476	126	61	669
Death, Ephraim, Leicester, England. Machine for scutching and cleaning fibrous stems or leaves.....	483,984	Oct. 4	695	174	61	143
Deats, Wallen S., and D. Brown, Laredo, Tex. Blind-stop.....	472,985	Apr. 19	1503	383	59	312
Deavs, Charles, assignor to Archer & Pancoast Manufacturing Company, New York, N. Y. Extension- electroliter.....	469,895	Mar. 1	366	92	58	1171
Debes, Roman. (See Wilson, John, assignor.)						
Dechant, William H., Reading, Pa. Pipe-wrench.....	481,257	Aug. 23	2448	603	60	1093
Dechaux, Frank W., Defiance, Ohio. Level and plumb.....	477,405	June 21	1874	461	59	1834
Deck, Frederick R., assignor to Prahar & Brother, Brooklyn, N. Y. Lock for the frames of bags, purses, and pocketbooks.....	486,701	Nov. 22	2423	631	61	1109
Deck, Henry. (See Braun and Deck.)						
Deckebach, Henry E., Cincinnati, Ohio. Apparatus for cooling and aerating malt liquors.....	474,630	May 10	1197	304	59	878
Decker, Alexander C., Keokuk, Iowa. Currycomb.....	476,189	May 31	3681	930	59	1407
Decker, Alexander C., Keokuk, Iowa. Currycomb.....	484,848	Oct. 25	2082	535	61	459

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Decker, Alexander C., Keokuk, Iowa. Currycomb	484,849	Oct. 25	2083	536	61	459
Decker, Herman L., assignor of one-half to J. W. Smith, Del Norte, Colo. Siphon-module.	468,596	Feb. 9	1079	276	58	744
Decker, Mark M., New York, N. Y. Car-coupling	486,091	Nov. 15	1467	387	61	905
Decker, Oscar R., Rochester, Ind. Watchcase	478,412	July 5	545	133	60	107
Decker, Peter, Norwalk, Conn. Electric insulator for boilers	467,085	Jan. 12	1264	320	58	248
Decker, Ward, Owego, N. Y. Dynamo-electric machine	473,547	Apr. 26	2443	618	59	512
Decker, Ward, and J. P. Bell, Owego, N. Y. Furnace	472,738	Apr. 12	1105	284	59	222
Decker, William M., Kingston, N. Y. System and apparatus for heating, cooling, and ventilating buildings	468,645	Feb. 9	1151	293	58	758
Deckert, James W., assignor to American Leather and Membranoid Company, Newark, N. J. Membranoid	487,067	Nov. 29	3044	781	61	1248
Decorah Windmill Company. (See Beard and Westaway, assignors.)						
Decorah Windmill Company. (See Westaway, Walter C., assignor.)						
Decorah Windmill Company. (See Westaway and Beard, assignors.)						
Decrow, William E., Boston, Mass. Electric indicator	478,274	July 5	341	82	60	68
Decrow, William E., Boston, Mass. Successive non-interference signal box	486,702	Nov. 22	2424	632	61	1109
Dederick, Ezra, Milwaukee, Wis. Street-locomotive	477,889	June 28	2670	668	59	2006
Dederick, Peter K., Loudonville, N. Y. Baling-press	480,176	Aug. 2	664	169	60	708
Dederick, Peter K., Loudonville, N. Y. Baling-press	480,177	Aug. 2	665	169	60	708
Dedernick, Coulter C., Nashville, Tenn. Whiffletree-hook	486,280	Nov. 15	1767	465	61	966
Deegan, J. L. (See Jobling, Lance L., assignor.)						
Deeley, Patrick F. (See Yarrington, Charles H., assignor.)						
Deems, John H., et al. (See Murray, Stephen D., assignor.)						
Deere & Company. (See Moore, Gilpin, assignor.)						
Deere & Company. (See Waterman, Lewis E., assignor.)						
Deering, James E., Chicago, Ill. Harvester	473,300	Apr. 19	2025	508	59	410
Deering, William. (See Ellis, Lucien W., assignor.)						
Deering, William. (See Stone, John A., assignor.)						
Deering, William, Louisville, Ky. Feed-regulator for mills	467,278	Jan. 19	1596	407	58	320
Deffenbaugh, Benjamin, Wichita, Kans. Door-check	475,388	May 24	2396	612	59	1144
Deffler, John B., Johnstown, Pa. Apparatus for elevating bags, barrels, &c.	474,653	May 10	1232	315	59	885
Defiance Machine Works. (See Seymour, Charles, assignor.)						
Deflector Safety Lamp and Miner's Appliance Company. (See Howat, Andrew, assignor.)						
Deines, George, assignor of three-fourths to N. Deines, J. T. and P. C. Larsen, Friend, Nebr. Fence-rod	466,775	Jan. 12	755	196	58	153
Deines, Nicolaus, et al. (See Deines, George, assignor.)						
Deininger, August, assignor to Firm of H. M. D. Deininger, Berlin, Germany. Malting apparatus	469,851	Mar. 1	297	77	58	1158
Deininger, Firm of H. M. D. (See Deininger, August, assignor.)						
Deininger, Michael F., Brooklyn, N. Y. Hub-attaching device	482,571	Sept. 13	1091	265	60	1562
Deitz, Henry, Denver, Colo. Baling-press	476,954	June 14	1135	273	59	1676
Deitz, Henry, Denver, Colo. Baling-press	482,303	Sept. 6	625	149	60	1457
Deitz, Henry, Denver, Colo. Car-coupling	487,662	Dec. 6	689	176	61	1458
Deitz, Henry, Denver, Colo. Car-coupling	487,663	Dec. 6	690	176	61	1458
Deitz, Henry, Denver, Colo. Car-coupling	487,664	Dec. 6	691	176	61	1458
Deitz, Henry, Denver, Colo. Car-coupling	487,665	Dec. 6	693	177	61	1459
Deitz, Henry, Denver, Colo. Car-coupling	487,666	Dec. 6	694	177	61	1459
Deknatel, Frederick H., Evanston, Ill. Curling-iron	481,348	Aug. 23	2599	638	60	1118
Del Valle, Eliseo, assignor of three-tenths to G. Martens, Brooklyn, N. Y. Cash register and indicator	486,825	Nov. 22	2622	684	61	1150
Delancy, Elmer A., Warren, Pa. Weather-strip	483,995	Oct. 11	712	179	61	160
Delaney, Charles W., Hammond, Ind. Toy	481,931	Sept. 6	16	5	60	1398
Delaney, Charles W., Hammond, Ind. Watchmaker's tweezers	482,232	Sept. 6	504	120	60	1443
Delaney, John, and A. D. Reaume, Trenton, Mich. Rail-joint	485,862	Nov. 8	1068	284	61	807
Delaney, Thomas A., and R. E. Hills, Chicago, Ill. Low-water alarm	474,631	May 10	1199	305	59	878
Delano, Charles H., Woburn, Mass. Push-button	470,372	Mar. 8	1162	298	58	1330
Delano, Charles H., Woburn, Mass. Circuit-closer	473,499	Apr. 26	2366	600	59	498
Delaney, Alfred G., assignor of one-half to J. E. McKay, New York, N. Y. Garbage or refuse crematory	479,405	July 26	2090	524	60	449
Delany, Charles W., Columbus, Tex. Quilting attachment for sewing-machines	480,252	Aug. 9	805	207	60	747
Delany, Patrick B., South Orange, N. J. Electric battery	466,664	Jan. 5	561	145	58	109
Delany, Patrick B., South Orange, N. J. Electrical signaling apparatus	467,651	Jan. 26	2189	556	58	439
Delaware Hard Fibre Company. (See Frist, Robert P., assignor.)						
Delaware Hard Fibre Company. (See Frist and Rupert, assignors.)						
Delbridge, George W., Oxford, Miss. Wite-stretcher	470,106	Mar. 1	691	170	58	1234
Delia, Eugene, Chicago, Ill. Bridge-gate	488,755	Dec. 27	2484	618	61	1864
Dellinger, John, Buffalo, N. Y. Lead trap	473,062	Apr. 19	1623	414	59	334
Dellwik, Carl. (See Fahnehjelm and Dellwik.)						
Deloe, Edward G., Knox, Pa. Boat-propeller	472,526	Apr. 12	822	209	59	169
Delug, Alois, Munich, Germany. Clip for use in photographic copying	485,758	Nov. 8	935	248	61	779
Delvaux, Georges, Montigny-on-the-Loing, assignor to A. Huillard, Suresnes, Seine, France. Purifying tannic extracts	483,141	Sept. 27	1978	.....	60	1761
Demange, August V., and J. M. R. Hervieu, Paris, France. Glove-fastening	476,736	June 7	764	188	59	1589
Demarest, Harvey V., assignor of one-half to F. De Baun, Nyack, N. Y. Shutter-bower	469,834	Mar. 1	270	70	58	1153
Demarest, John, assignor to J. L. Mott Iron Works, New York, N. Y. Urinal	469,009	Feb. 16	1752	446	58	866
Demarest, John, assignor to J. L. Mott Iron Works, New York, N. Y. Flushing cistern or tank for water-closets	475,459	May 24	2556	651	59	1174
Demarest, Zachariah, Paterson, N. J. Waist	485,001	Oct. 25	2331	601	61	508
Demaro, Thomas O., et al. (See Sennett, Leonidas, assignor.)						
Demary, George T., Boston, Mass., assignor to National Heeling Machine Company, Portland, Me. Last or support	474,335	May 3	727	190	59	777
Demaurez, Charles, Portland, Me. Car-coupling	486,826	Nov. 22	2628	686	61	1152
Demaurez, Charles, Greenville, assignor of one-half to H. Soule and D. W. Schwarz, Portland, Me. Car-coupling	466,713	Jan. 5	649	167	58	124
Demaurez, Charles, assignor to H. Soule, D. W. Schwarz, and C. S. Cook, Portland, Me. Car-coupling. (Reissue)	11,265	Aug. 23	2912	715	60	1181
Deming, Eugene W., New Orleans, La. Apparatus for clarifying sugar solutions	479,250	July 19	1829	459	60	383
Deming, John L., Bentonville, Ark. Newspaper-file	468,795	Feb. 16	1390	352	58	815
Deming, William B., and H. C. Fuller, Bentonville, Ark. Paint-pot	482,082	Sept. 6	262	63	60	1387

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Demmick, George W., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Incandescent-lamp guard.....	479,791	Aug. 2	25	6, 7	60	587
Dempsey, James E., Chicago, Ill. Locker for cars.....	478,740	July 12	1033	254	60	221
Dempsey, Louis H., (See Folk, Nairn, and Dempsey.)						
Dempsey, Louis H., and L. I. Folk, Dubuque, Iowa. Vehicle-wheel.....	471,960	Mar. 29	3557	909	58	1820
Denfeld, Frank F., <i>et al.</i> (See Dolloff, Orville C., assignor.)						
Dengolesky, August, <i>et al.</i> (See Williams, William E., assignor.)						
Denham, Benjamin F., assignor of one-third to R. Belt, Sanford, Ind. Automatic snow plow and scraper.....	469,682	Mar. 1	18	7	58	1102
Denham, Perry, Sandford, Ind. Granite-hammer.....	469,040	Feb. 16	1790	457 458	58	894
Dennam, William G., Monticello, Fla. Sponge-dredger.....	476,920	June 14	1072	258	59	1664
Denio, Preston T., Hyde Park, Vt. Sled-brake.....	481,480	Aug. 23	2812	691	60	1160
Denio, William L., assignor to Standard Electric Signal Company, Rochester, N. Y. Electrical thermostat.....	478,788	July 12	1113	275	60	236
Denio, William L., assignor to Standard Electric Signal Company, Rochester, N. Y. Electric signaling apparatus.....	478,789	July 12	1114	275 276	60	236
Denis, Henry, New Orleans, La. Envelope-seal.....	479,975	Aug. 2	317	78	60	642
Denison, Charles A. (See Lines, Thomas D., assignor.)						
Denison, Charles L., Corning, N. Y. Wall-plaster.....	485,177	Nov. 1	37		61	580
Denison, Mary J., Johnsville, Ohio. Culinary article.....	472,527	Apr. 12	823	209	59	170
Denison, Sylvester P., Brooklyn, assignor of one-half to J. W. Cushman, New York, N. Y. Paper-fastener.....	487,440	Dec. 6	352	90	61	1391
Deniston, Thomas B., Peru, Ind. Trawl-line.....	488,874	Dec. 27	2673	662	61	1903
Dennan, Peter, Sr., Montagne, Mich. Axle-lubricator.....	480,765	Aug. 16	1628	408	60	921
Dennett, Fred A., Sheboygan, Wis. Chair.....	482,167	Sept. 6	410	97	60	1415
Denney, David P. (See Coffman and Denney.)						
Denney, Harmer, New York, N. Y. Valve for steam-engines.....	483,996	Oct. 11	713	179	61	161
Denney, Joseph W., and T. M. Hilsabeck, Manning, Iowa. Cultivator.....	467,400	Jan. 19	1776	453	58	353
Dennis, Adolphus S., assignor to Dennis Duplex Writing Machine Company, Des Moines, Iowa. Device for inking type-writing machines.....	479,351	July 19	1991	498	60	416
Dennis, Adolphus S., assignor to Dennis Duplex Writing Machine Company, Des Moines, Iowa. Line-spacing mechanism for type-writing machines.....	479,352	July 19	1992	498	60	416
Dennis Duplex Writing Machine Company. (See Dennis, Adolphus S., assignor.)						
Dennis, Edson B., <i>et al.</i> (See Dowling, Robert H., assignor.)						
Dennis, George S., Kalamazoo, Mich. Hand cultivator-hoe.....	485,372	Nov. 1	347	93	61	643
Dennis, Joseph L., assignor of one-half to T. F. Brewster, Atlanta, Ga. Bindery pasting-machine.....	481,258	Aug. 23	2449	603	60	1093
Dennis, Richard M., and C. E. Claggott, Louisville, Ky. Riding-saddle.....	474,226	May 3	529	129	59	740
Dennison, Charlie R., <i>et al.</i> (See Cole, Dexter, assignor.)						
Denny, Ernest R., Spokane, Wash. Case for exhibiting needles.....	479,117	July 19	1923	406	60	344
Dénoyelle, Léon, assignor to Compagnie Anonyme des Forges de Chatillon et Commeny, Paris, France. Apparatus for moderating the recoil of guns.....	481,647	Aug. 30	3075	750 751	60	1227
Densmore, Alexander. (See Harlin, George C., assignor.)						
Densmore, Amos. (See Barron, Wagner, and Densmore.)						
Densmore, Amos, New York, N. Y. Type-writing machine.....	475,443	May 24	2479	632	59	1159
Densmore, Edwin, Coronado, Cal. Surgical splint.....	485,178	Nov. 1	37	12	61	580
Densmore, Edwin R., Painesville, Ohio. Eaves or roof gutter.....	472,014	Mar. 29	3628	927	58	1835
Dent, Richard, Grand Rapids, Mich. Holder for telephone receivers.....	467,160	Jan. 19	1415	362	58	286
Denton, Charles C. (See Gellenbeck, Frank C., assignor.)						
Denton, Charles E., assignor to I. M. Denton, Attica, Kans. Button-setting machine.....	479,704	July 26	2579	643	60	541
Denton, Charles E., assignor to I. M. Denton, Attica, Kans. Button-attaching machine.....	479,705	July 26	2582	643	60	542
Denton, Daniel T., Duluth, Minn. Clutch.....	481,010	Aug. 16	2004	501	60	995
Denton, Daniel T., Lakeview, Minn. Counterbalancing mechanism for chutes.....	481,011	Aug. 16	2006	501	60	995
Denton, David J., W. L. Simpson, and S. W. Denton, Bronwood, Ga. Bagging-measuring machine.....	485,491	Nov. 1	519	138	61	678
Denton, Ida M. (See Denton, Charles E., assignor.)						
Denton, Richard A. and W. B., La Cygne, Kans. House-door letter-box.....	466,665	Jan. 5	562	145	58	109
Denton, Samuel W. (See Denton, Simpson, and Denton.)						
Denton, William B. (See Denton, Richard A. and W. B.)						
Dény, Charles E., Paris, France. Lock.....	487,945	Dec. 13	1163	290 291	61	1568
Depp, William E., Brookville, Pa. Churn.....	471,334	Mar. 22	2617	664	58	1635
Deprez, Marcel, Paris, France. Armature for dynamo-electric machines.....	469,080	Feb. 16	1844	472	58	905
Deprez, Marcel, and J. Carpentier, Paris, France; said Carpentier assignor to said Deprez. Transmission of electrical energy to a distance.....	470,865	Mar. 15	1910	489	58	1485
Depue, James E., Oakland, Cal. Ledger, sales, and billing book.....	469,549	Feb. 23	2573	659	58	1052
Depuy, Frank and L. S., Portland, Pa. Bag-lock.....	466,159	Nov. 15	1575	417	61	927
Depuy, Lewis S. (See Depuy, Frank and L. S.)						
Derbhow, John, New York, N. Y. Machine for removing water-hairs from pelts.....	483,142	Sept. 27	1979	501	60	1762
Derby, Charles G., Laona, N. Y. Trellis.....	485,912	Nov. 8	1156	305	61	825
Derby, John N., Brooklyn, assignor to Hayden & Derby Manufacturing Company, New York, N. Y. Steam-injector.....	484,302	Oct. 11	1191	303	61	254
Derby, John N., Brooklyn, assignor to Hayden & Derby Manufacturing Company, New York, N. Y. Steam-injector.....	484,303	Oct. 11	1194	304	61	255
Derbyshire, Ralph, and C. H. Mullen, Fall River, Mass. Weft-hammer for looms.....	478,413	July 5	546	133	60	107
Derham, Samuel G., assignor of one-half to D. Weiskopf, Cincinnati, Ohio. Bushing and venting apparatus for barrels.....	475,756	May 31	2975	755	59	1268
Derham, Samuel G., assignor of one-half to H. Verbage, Cincinnati, Ohio. Filter.....	478,093	July 5	29	9	60	9
Derickx, Paul D., Detroit, Mich. Harness.....	468,796	Feb. 16	1391	352	58	816
Derlon, Arthur C., Paris, France, assignor, by mesne assignments, to National Manufacturing Company, of Pennsylvania. Universal-jointed brace.....	481,526	Aug. 23	2884	708	60	1175
Dernell, Herman F., Athens, N. Y. Combined clod-crusher and land-roller.....	487,722	Dec. 13	795	203	61	1495
Deroin, Frank X. (See Fontaine, Isaac, assignor.)						
Derr, Fuller S., and G. W. Hess, Watsontown, Pa. Wheel.....	477,740	June 28	2423	605	59	1961
Derr, John P., Greenville, Pa. Car-coupling.....	488,875	Dec. 27	2675	662	61	1904
Derr, William R., Baltimore, Md. Blacking-brush.....	476,449	June 7	345	79	59	1504
Derriek, Franklin R., Brodhead, Wis. Rope trunk-binder.....	468,542	Feb. 9	1001	262	58	728
Derry, John D., Horsham, Victoria. Dam, weir, or retaining wall.....	474,988	May 17	1777	449	59	1066
Des Chapelles, Joseph O., Havana, Cuba. Reversing-gear for engines.....	487,115	Nov. 29	3126	801	61	1206
Des Georges, Jules, Lyons, France. Vehicle-brake.....	469,013	Feb. 16	1758	448	58	887
Des Rivières, Joseph A., and J. P. Prud'homme, Ottawa, Canada. Document-file.....	472,920	Apr. 12	1379	353	59	277
Desant, William F. Z., New York, N. Y. Electric railway-signal.....	467,478	Jan. 19	1899	485	58	378

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
Desisle, Leonard H. (See Palmer and Desisle.)						
Desisle, Leonard H. (See Pierce, Desisle, and Oliver.)						
Desjardin, Joseph, and W. J. Stewart; said Desjardin assignor to L. S. Hogeboom, Minneapolis, Minn. Grader and scalper	473,500	Apr. 26	2367	600	59	493
Desmond, George E., Brule, Wis. Tree-felling saw	471,810	Mar. 29	3351	853	58	1779
Despres, Stanislaus C., Traverse City, Mich. Feed-water heater and circulating system	483,905	Oct. 4	574	144	61	119
Desvernine, Edward L. (See Assorati, Antenor, assignor.)						
Désy, Alexina M., et al. (See Désy, Louis A., assignor.)						
Désy, Louis A., assignor to H. A. A. Brault, A. Labrecque, and A. M. Désy, Montreal, Canada. Ditching-machine	470,107	Mar. 1	692	{ 170 171 311 312 }	{ 58 59 59 59 }	{ 1234 242 1190 1191 1906 }
Detrick, Jacob S., Baltimore, Md. Metal-planer	472,804	Apr. 12	1212	{ 171 311 312 }	{ 58 59 59 }	{ 1234 242 1190 1191 1906 }
Detrick, Jacob S., Baltimore, Md. Metal-planer	475,542	May 24	2642	672	59	1190
Detrick, Jacob S., Baltimore, Md. Metal-planer	475,543	May 24	2643	672	59	1191
Detrick, Jacob S., Baltimore, Md. Universal joint	477,625	June 21	2238	560	59	1906
Detroit Electrical Works. (See Rae, Frank B., assignor.)						
Detroit Paper Package Company. (See Thomson, William B., assignor.)						
Detroit Plumbers' Supply Company. (See Uridge, George R., assignor.)						
Detroit Plumbers' Supply Company. (See Wayson, Samuel W., assignor.)						
Deuel, Jacob. (See Lane and Deuel.)						
Deuel, Marion A., Rochester, N. Y. Electrical indicator	468,597	Feb. 9	1080	276	58	744
Densing, Eduard, assignor of one-half to G. Zieres, Rochester, N. Y. Vehicle running-gear	482,234	Sept. 6	507	121	60	1434
Denss, Joseph, Gladbach, Germany. Oil-filter	478,264	Dec. 20	1702	425	61	1694
Deutsch, William M., Elizabeth, N. J. Filter	471,811	Mar. 29	3352	853	58	1779
Deutsch, William M., Elizabeth, N. J. Filter	482,436	Sept. 13	869	208	60	1518
Deutsch, William M., Elizabeth, N. J. Filter	484,781	Oct. 25	1964	501	61	435
Deutsch, William M., Elizabeth, assignor, by mesne assignments, to New York Filter Company, Newark, N. J. Filter	476,737	June 7	765	188	59	1590
Devantery, Joseph A., Brooklyn, assignor to H. W. Harris, New York, N. Y. Making game-counters, &c.	469,344	Feb. 23	2242	575	58	989
Devantery, Joseph A., Brooklyn, assignor to E. Saeltzer, New York, N. Y. Mold for forming game-counters	469,345	Feb. 23	2244	575	58	989
Devenish, Eliza A. (See Carpenter, Frank W., assignor.)						
Devenish, Eliza A. (See Paschal, Ezekiel F., assignor.)						
Deverall, Edwin R., New York, N. Y. Pouring-spout	471,961	Mar. 29	3558	909	58	1821
Devereaux, John, Doniphan, Nebr. Umbrella-supporter	481,481	Ang. 23	2813	691	60	1161
Devine, Charles E. (See La Chapelle, George, assignor.)						
Devine, Charles E. (See La Chapelle and Devine.)						
Devine, Charles E., and G. La Chapelle, Williamsport, Pa. Horseshoe	481,932	Sept. 6	17	5	60	1338
Devine, James E., assignor of one-half to F. H. Saunstag, Baltimore, Md. Composition for cleaning wall-paper and for other purposes	476,788	June 14	850	.....	59	1620
Devine, William P., assignor of one-half to W. D. Donovan, Newark, N. J. Automatic device for feeding blanks	488,389	Dec. 20	1909	478	61	1734
Devlin & Co., Thomas. (See Finnegan, John, assignor.)						
Devlin, Francis H. A., Manch Chonk, Pa. Valve-gear	486,437	Nov. 22	2011	533	61	1028
Devlin, Frank X. (See Lafean and Devlin.)						
Devlin, James C., Hernando, Miss., assignor of four-fifths to D. M. Dockery, J. P. Meredith, and S. W. McLaughlin. Car-coupling	478,993	July 19	1427	{ 353 354 }	{ 60 60 }	{ 307 307 }
Devlin, Thomas, et al. (See Buehler, Rudolph R., assignor.)						
Devlin, William H. (See Watkins, Richard, assignor.)						
Devold, John F., deceased, (T. Devold and O. B. Ray, administrators,) and G. Monrath, Chicago, Ill. Power-transmission	471,812	Mar. 29	3354	854	58	1780
Devold, Theodore, et al., administrators. (See Devold and Monrath.)						
Devoll, Orian, St. Clere, Kans. Hame	470,993	Mar. 15	2108	542	58	1524
Devore, John A. (See Lang, Evans, and Devore.)						
Devore, Levi M., assignor of one-half to M. H. Wilcoxon, Freeport, Ill. Damper	475,079	May 17	1910	485	59	1032
Devore, Levi M., assignor of one-half to M. H. Wilcoxon, Freeport, Ill. Spring-hinge	475,080	May 17	1912	485	59	1032
Devore, Levi M., assignor of one-half to M. H. Wilcoxon, Freeport, Ill. Stovepipe-damper	478,414	July 5	547	133	60	108
Devore, Levi M., and C. E. Forry, Freeport, Ill. Bicycle	488,603	Dec. 27	2254	559	61	1819
Dewald, Edward G., Cincinnati, Ohio. Roller-mill	470,235	Mar. 8	910	225	58	1285
Dewar, Hector, assignor to A. W. Rounds, Boston, Mass. Electric-arc lamp	471,234	Mar. 22	2478	629	58	1607
Dewar, James. (See Lunge and Dewar.)						
Dewey, Alvin P., Gilbert's, Ill. Ticket-holder	485,002	Oct. 25	2332	601	61	508
Dewey Corporation. (See Dewey, Mark W., assignor.)						
Dewey, Deniston D., North East, Pa. Vineyard weed-cutter	477,298	June 21	1704	417	59	1801
Dewey, Francis O., Reading, Mass. Lamp-holder	474,082	May 3	319	76	59	699
Dewey, Franklin S., Alpena, Mich. Index	479,206	July 19	1760	441	60	369
Dewey, Frederic P., Washington, D. C., assignor to Chemical Supply Company, of New York. Obtaining alumina and acetic acid	485,461	Nov. 1	477	.....	61	669
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Converter system for electric railways	473,253	Apr. 19	1947	{ 489 490 }	{ 59 59 }	{ 394 394 }
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electric railway	479,493	July 26	2258	566	60	482
Dewey, Mark W., assignor to Dewey Corporation, Syracuse, N. Y. Electrical refrigeration	484,182	Oct. 11	9-8	253	61	215
Dewhurst, Simon, St. Joseph, Mo. Brick-kiln	480,561	Aug. 9	1297	325	60	842
Dewitt, David M., Bee Branch, Ark. Railway-gate	476,738	June 7	767	189	59	1590
Dexter, Avelyn I., Whitewater, Wis. Refrigerator	479,633	July 26	2460	612	60	519
Dexter, Charles H., Annapolis, Md. Combined steam and hot-air cooking apparatus	475,678	May 24	2842	719	59	1230
Dexter Folder Company. (See De Vos, Arie, assignor.)						
Dexter, George N., Jr., Ellaville, Ga. Plow	479,706	July 26	2586	644	60	542
Dexter, Mark, Glendale, Mont. Table	471,077	Mar. 15	2231	572	58	1548
Dexter, Pardon N., Jr., Salmon Falls, N. H. Spinning-mule	483,906	Oct. 4	576	{ 144 145 }	{ 61 61 }	{ 119 119 }
Dexter, Simon B., Glendale, Mont. Water-cooled damper	474,227	May 3	530	129	59	740
Dexter, Simon B., Glendale, Mont. Slag-car	474,228	May 3	531	130	59	740
Dexter, Talbot C., Des Moines, Iowa. Automatic counter and alarm	470,290	Mar. 8	1014	259	58	1305
Dexter, Talbot C., Fulton, N. Y. Paper folding and pasting machine	488,271	Dec. 20	1713	{ 431 432 416 417 }	{ 61 61 58 58 }	{ 1696 1696 862 862 }
Dez, Harry E., Brooklyn, N. Y., assignor of one-half to F. B. Griswold, Hartford, Conn. Electrically-propelled car	468,948	Feb. 16	1635	{ 416 417 }	{ 58 58 }	{ 862 862 }
Dez, Harry E., assignor to P. H. Alexander, New York, N. Y. Secondary battery	473,146	Apr. 19	1764	446	59	360
Dez, Harry E., assignor to P. H. Alexander, New York, N. Y. Secondary battery	473,147	Apr. 19	1766	446	59	360
Dev, Harry E., Brooklyn, N. Y., and F. B. Griswold, Hartford, Conn. Bicycle	485,094	Oct. 25	2472	635	61	538
Diack, Hannah S., Detroit, Mich. Lid-strainer	481,166	Aug. 23	2289	564	60	1062

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Dial, Wilbur F., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Loop-taker for sewing-machines	480,180	Aug. 2	668	170	60	709
Dial, Wilbur F., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine	480,181	Aug. 2	670	171	60	710
Dial, Wilbur F., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine loop-taker	480,182	Aug. 2	674	171	60	710
Diamond, James, Aston, near Birmingham, assignor to R. E. King, Birmingham, England. Bicycle	473,829	Apr. 26	2893	72	59	599
Diamond Paper Bag Company. (See Baker, Frank L., assignor.)						
Diamond Paper Bag Company. (See Stevens, Arthur L., assignor.)						
Diamond Prospecting Company. (See Mitchell, Jonas L., assignor.)						
Diamond Suspender Company. (See Springer, William A., assignor.)						
Dibble, Fernando J., Peabody, Mass., assignor to Telemeter Company, of New York. Thermometer	474,771	May 10	1413	360	59	921
Dibble, Orlando V. (See James, David and T., assignors.)						
Dibble, Wesley, Middleburg, N. Y. Bee-swarmers	474,115	May 3	361	86	59	707
Dice, Satoru J. (See Brown and Collins, assignors.)						
Dick, Albert B., Chicago, Ill. Duplicating type-written work	466,557	Jan. 5	398	101	58	77
Dick, Angelo D. (See Houghton and Dick.)						
Dick, Joseph, Canton, Ohio. Driving mechanism for endless-apron carriers	471,743	Mar. 29	3237	824	58	1757
Dick, Joseph, Canton, Ohio. Animal-power	478,575	July 12	792	195	60	172
Dick, Joseph C. F., Chicago, Ill. Registering money-box	482,004	Sept. 6	131	32	60	1360
Dick Kerr & Company. (See Colan, William N., assignor.)						
Dick, William H., Dausville, N. Y. Propelling mechanism for boats	470,108	Mar. 1	695	171	58	1234
Dickens, Samuel T., Eureka Springs, Ark. Display-stand	476,133	May 31	3587	905	59	1389
Dickenson, Charles, Portland, Oreg. Mail-bag	467,681	Jan. 26	2235	569	58	447
Dickenson, Charles, Portland, Oreg. Paper-weight	471,508	Mar. 22	2880	733	58	1684
Dickerman, Benjamin, et al. (See Miller, George E., assignor.)						
Dickerman & Co., George H. (See Scott, James A., assignor.)						
Dickerman, Frances S. (See Dickerman and Ellacott assignors.)						
Dickerman, George A., and J. P. Ellacott, Chicago, Ill.; said George A. Dickerman assignor to F. S. Dickerman. Hay-loader	479,353	July 19	1993	499	60	416
Dickerson, Edward N., Jr. (See Weiss and Dickerson.)						
Dickerson, Edward N., Jr., New York, N. Y. Apparatus for turning on and off and lighting gas	468,131	Feb. 2	339	84	58	590
Dickerson, Edward N., New York, N. Y., assignor to Thermo Electric Company, of West Virginia. Thermo-electric element	472,037	Apr. 5	39	8	59	10
Dickerson, Freeman B. (See Shawhan, Jabez F., assignor.)						
Dickerson, Malcolm, Fort Wayne, Ind. Lightning-arrester	474,469	May 10	944	243	59	829
Dickerson, Simeon, Franklin, La. Stubble shaver and cultivator	474,336	May 3	728	190	59	777
Dickerson, Simeon K., and C. D. Kee, Roanoke, Va. Means for securing collars to crank-pins	479,406	July 26	2093	524	60	450
Dickey, Aaron F. (See Stahl and Dickey.)						
Dickey, Aaron F., Friedens, Pa. Wire-twisting tool	471,419	Mar. 22	2756	704	58	1661
Dickey Automatic Car Coupler Company. (See Dickey, George W., assignor.)						
Dickey, David. (See Bull, Dickey, and Hutton.)						
Dickey, Foster, assignor to himself, H. C. Wright, N. W. Wells, H. W. Nieman, and C. Abbott Schnyler, Nebr. Car-coupling	484,412	Oct. 18	1361	347 348	61	300
Dickey, George W., assignor to Dickey Automatic Car Coupler Company, Des Moines, Iowa. Car-coupling	468,598	Feb. 9	1082	276	58	744
Dickey, James A., et al. (See Wiley, Edgar C., assignor.)						
Dickey, John S., Blanket, Tex. Quilting attachment for sewing-machines	468,350	Dec. 20	1847	462	61	1732
Dickey, Osbert D., Mountain Grove, Mo. Fanning-mill	480,809	Aug. 16	1695	423	60	934
Dickie, Edward W., Clyde, N. Y. Composition of matter for plastering	479,060	July 19	1529		60	327
Dickinson, Austin R., assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Hose-clamp	483,302	Sept. 27	2266	570	60	1816
Dickinson, Charles H., Coldwater, Mich. Wire-stretching device	488,739	Dec. 27	2449	608	61	1857
Dickinson, Daniel A., St. Paul, Minn. Steam or hot-water generator	473,109	Apr. 19	1705	432	59	348
Dickinson, Dwight L., et al. (See Hupp, George N., assignor.)						
Dickinson, Henry C., assignor to Springfield Specialty Manufacturing Company, Springfield, Mass. Die	479,354	July 19	1995	499	60	416
Dickinson, J. C., et al. (See Merry, George G., assignor.)						
Dickinson, Newton A., Essex, Conn. Shoe-born	470,109	Mar. 1	697	171	58	1235
Dickinson, Richard S., Columbus, Nebr. Fence-wire reel	467,498	Jan. 26	1932	493	58	393
Dickinson, Silas C., Corning, Iowa. Electric striking mechanism for clocks	471,210	Mar. 22	2439	621	58	1600
Dickman, Peter. (See Travis, William C., assignor.)						
Dicks, James T., et al. (See Wood, William T., assignor.)						
Dicks & Wiggine. (See Eckert, John C., assignor.)						
Dickson, Charles H., and M. S. Hopkins, Washington, D. C. Manufacture of gas-governors.	473,063	Apr. 19	1623	414	59	334
Dickson, Frank C. (See Bradburn, Robert E., assignor.)						
Dickson, Gilbert J., assignor to G. J. Dickson Manufacturing Company, Albany, N. Y. Transom lifter	460,233	Feb. 23	2075	533	58	957
Dickson, William D., Peoria, Ill. Dry closet	483,997	Oct. 11	715	180	61	161
Didion, Auguste, Chicago, Ill. Latch	468,040	Feb. 2	202	49	58	564
Didisheim, Arthur, Chaux-de-Fonds, Switzerland. Stop-watch	466,558	Jan. 5	400	101	58	77
Diebel, William, Philadelphia, Pa., assignor to F. Buckhalter and V. C. Driesbach. Circular-knitting machine	483,954	Oct. 4	640	161 162	61	131
Diebel, William, Philadelphia, Pa., assignor to F. Buckhalter and V. C. Driesbach. Knitting stockings	483,955	Oct. 4	650	162	61	135
Diederich, Charles W., Concord, N. H. Car-coupling	487,916	Dec. 13	1120	279	61	1560
Dieffenbacher, William, et al. (See Potter, Francis A., assignor.)						
Diehl, Henry A., San Francisco, Cal. Production and manufacture of pure asphaltum, &c., from natural asphalt	469,777	Mar. 1	181	47	58	1136
Diehl, John, assignor of one-half to J. F. Bickel, Racine, Wis. Vehicle-spring	476,921	June 14	1074	259	59	1665
Diehl, John H., Queen City, Mo. Saw-filing machine	468,221	Feb. 2	468	116	58	617
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Needle-bar for sewing-machines	478,576	July 12	794	196	60	173
Diehl, Philip, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Overseaming sewing-machine	478,994	July 19	1429	354	60	308
Diek, Henry W., Baltimore, Md. Light for Christmas-trees	484,304	Oct. 11	1196	304	61	256
Diel, Joseph H., Stockton, Cal. Conveyor	474,002	May 3	186	44	59	674
Dienelt & Eisenhardt. (See Eisenhardt, George F., assignor.)						
Diesterweg, Charles L. (See Weller, Gustavus A., assignor.)						
Dieter, Peter, Brooklyn, N. Y. Valve for gas-compressors	471,787	Mar. 29	3316	845	58	1773
Dieterich, Karl, Brooklyn, N. Y. Wainscoting	468,192	Feb. 2	341	85	58	590

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Des.	Vol.	Page.
Dietrich, John, Yellow Creek, Ill. Wire-stretcher	486,221	Nov. 15	1661	439	61	944
Dietrich, Oscar S., assignor of one-half to A. G. Swartz, Weatherly, Pa. Stump or rock extractor	479,974	Aug. 2	315	77	60	642
Dietz, Charles, Philadelphia, Pa. Show-box	470,885	Mar. 15	1941	496	58	1492
Dietz, Charles, Chicago, Ill. Bridge-gate	472,208	Apr. 5	317	82	59	60
Dietz, Emil, Indianapolis, Ind. Corner structure for trucks	480,716	Aug. 16	1558	388	60	906
Dietz, Emil, Indianapolis, Ind. Box-fastener	487,667	Dec. 6	696	178	61	1459
Dietz, Frederick C., assignor to Blandy Machine Company, Zanesville, Ohio. Governor for steam-engines	481,141	Aug. 16	2238	551 552	60	1038
Diffey, Alexander A., Brinkley, Ark., assignor to American Cotton Oil Company, of New Jersey. Horizontal telescopic press	468,302	Feb. 2	616	153 154	58	642
Dikeman, Henry E., Berkeley, Cal. Track-brake	487,555	Dec. 6	524	135	61	1424
Dill, Frank S. (See Felsberg and Dill.)						
Dill, Thomas, <i>et al.</i> (See Armitage, Edwin, assignor.)						
Dillie, George W. (See Lee, Patrick, assignor.)						
Dillenbeck, Noah and N. E., Syracuse, N. Y. Cash-carrier	487,048	Nov. 29	3019	775	61	1243
Dillenbeck, Norman E. (See Dillenbeck, Noah and N. E.)						
Dillingburg, Michel, San Francisco, Cal. Air-compressor	481,850	Aug. 30	3422	840	60	1294
Dillingham, Edward, Chelsea, Mass. Hand-trunk or valise	475,977	May 31	3346	843	59	1339
Dillingham, James W. (See Oerther and Dillingham.)						
Dillion, William R., and A. C. Carr, Dillon, Ky. Hay-boom	486,438	Nov. 22	2012	534	61	1028
Dillman, William C., Brooklyn, assignor to O. Walsh, New York, N. Y. Annunciator	472,439	Apr. 5	671	172	59	126
Dillman, William C., Brooklyn, assignor to O. Walsh, New York, N. Y. Annunciator	472,440	Apr. 5	672	172	59	126
Dillon, Frank J. (See Cameron and Dillon.)						
Dillon, Peter, assignor of one-half to J. H. Horne, Lawrence, Mass. Paper-calendering machine	485,534	Nov. 1	579	156	61	691
Dillon, Thomas, assignor of one-half to J. Caven, Indianapolis, Ind. Mast-arm switch for electric lamps	471,730	Mar. 29	3217	819	58	1754
Dillon, Thomas, assignor of one-half to J. Caven, Indianapolis, Ind. Mast-arm electric switch	477,890	June 28	2673	668	59	2007
Dillon, Thomas, assignor of one-half to J. Caven, Indianapolis, Ind. Suspension-bar for electric lamps	478,275	July 5	343	82	60	69
Dillon, Thomas, assignor of one-half to J. Caven, Indianapolis, Ind. Suspension-bracket for electric lamps	482,727	Sept. 20	1329	325	60	1620
Dillon, William S., assignor to North Pacific Indicator Company, Portland, Oreg. Automatic station-indicator	486,543	Nov. 22	2155	570	61	1056
Dills, Elbert, Sprague, Wash. Electric-lamp hanger	474,003	May 3	187	44	59	675
Dilworth & Poling. (See Nester, Herschel M., assignor.)						
Dimick, Augustus D., Wakefield, Mass. Piano-action	472,109	Apr. 5	157	43	59	30
Dimick, Charles. (See Long and Dimick.)						
Dimmick, Albert M., assignor of one-half to J. T. Morgan, Wilkes-Barré, Pa. Steam-boiler	475,850	May 31	3145	797 798	59	1301
Dimmick, Albert M., and J. T. Morgan, Wilkes-Barré, Pa. Radiator	475,849	May 31	3143	797	59	1300
Dimmick, Jacob K., <i>et al.</i> (See Marty, Frank, assignor.)						
Dimock, Lucius, Leeds, Mass. Skein-twisting machine	481,227	Aug. 23	2387	588 589	60	1082
Dimock, Lucius, Leeds, Mass. Silk-manufacturing machinery	483,284	Sept. 27	2238	562 563	60	1811
Dimond, George H., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Tension-releasing device for sewing-machines	473,869	Apr. 26	2959	746	59	612
Dimond, George H., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine	479,739	July 26	2647	656 657	60	554
Dimond, George H., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Sewing-machine	479,740	July 26	2650	657	60	554
Dimovich, Ivanich. (See Scandraco and Dimovich.)						
Dimpfi, Anton, Munich, Germany, assignor to A. Poletti, West Hoboken, N. J., and J. Kohn, New York, N. Y. Brick-kiln	475,267	May 17	2201	562	59	1090
Dingee, William W. (See Cunningham and Dingee.)						
Dingee, William W., Racine, Wis. Thrashing-machine	488,730	Dec. 27	2450	609	61	1857
Diiniuni, Ferral C., Jr. (See Calkins, Almon B., assignor.)						
Dinkel, James S., Longwood, Fla. Fruit clipping and holding shears	486,560	Nov. 22	2187	576	61	1062
Dinsmore, Adriance S., <i>et al.</i> (See Molloy, Frank, assignor.)						
Dinsmore, John B. (See Little, Frank J., assignor.)						
Dinwiddie, Frank, Kansas City, Mo. Current-motor	478,316	July 5	400	96.97	60	80
Dion, Charles J., St. Paul, Minn. Drying-kiln	480,253	Aug. 9	806	207	60	747
Dion, Charles J., St. Paul, Minn. Drying brick	487,827	Dec. 13	969	244	61	1532
Dion, Léon O., Natick, Mass. Egg-preserving apparatus	466,333	Jan. 5	39	10	58	10
Dion, Léon O., Natick, Mass. Closed conduit for electric railways	488,351	Dec. 20	1849	462 463	61	1722
Dirkes, Henry A., New York, N. Y. Ventilator for cars	475,389	May 24	2397	612	59	1144
Disbrow, Frank H., Glendora, Cal. Stoning-knife	409,550	Feb. 23	2574	659	58	1052
Disc Wheel Company. (See Hide, Arthur C., assignor.)						
Diss, Albert B., Brooklyn, N. Y. Caster-wheel	484,305	Oct. 11	1197	304	61	256
Diss, Charles J. (See Kennedy and Diss.)						
Diss, Charles J. (See Kennedy, Diss, and Cannan.)						
Diss, Louis P., Ilion, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine	481,750	Aug. 30	3257	793	60	1262
Dissinger, Castor H. A., Wrightsville, Pa. Metal-seaming tool	487,320	Dec. 6	137	40	61	1348
Dissinger, Michael, Lebanon, Pa. Washing-machine	478,094	July 5	30	10	60	9
Disston, Thomas S., assignor to Henry Disston & Sons, Incorporated, Philadelphia, Pa. Saw-filing-machine	482,572	Sept. 13	1092	265	60	1562
Ditchfield, John P. (See Shaw and Ditchfield.)						
Dittenhoefer, Myer, New York, N. Y. Atomizer	483,546	Oct. 4	46	11	61	12
Dittmer, Albert, Berlin, Germany. Apparatus for dressing stone	467,305	Jan. 19	1634	416	58	327
Dittrich, Julius C., and F. M. Grumbacher, New York, N. Y., assignors to Ozone Manufacturing Company, of New Jersey. Still	487,027	Nov. 29	2987	769	61	1236
Dittrich, Julius C., and F. M. Grumbacher, New York, N. Y., assignors to Ozone Manufacturing Company, of New Jersey. Treating liquids with ozone	487,089	Nov. 29	3083	782	61	1257
Diver, Jerome B., assignor of one-half to J. B. G. Custis, Washington, D. C. Apparatus for applying paper-fastenings	486,190	Nov. 15	1611	428	61	934
Divine, Anna E., Devon, Pa. Safety-pin	485,263	Nov. 1	165	48	61	606
Divine, Fred D., Utica, N. Y. Fishing-rod	476,370	June 7	229	56	59	1481
Dix, Henry S., assignor to S. B. Huieley, Chelsea, Mass. Machine for cutting lath-yarns	482,917	Sept. 20	1631	409	60	1679

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Disg.	Vol.	Page.
Dixon, Annie. (See Bell, Robert E., assignor.)						
Dixon, Frederic N., Philadelphia, Pa. Salt container and sprinkler	470,421	Mar. 8	1241	317	58	1345
Dixon, Frederic N., Philadelphia, Pa. Salt container and sprinkler	470,422	Mar. 8	1243	317	58	1345
Dixon, George E., Beacon, Iowa. Wire reel and stretcher	476,525	June 7	453	108	59	1526
Dixon, George E., assignor of one-half to R. W. Caldwell, Sr., Chicago, Ill. Boiler	481,898	Aug. 30	3499	857	60	1309
Dixon, George E., assignor of one-half to R. W. Caldwell, Chicago, Ill. Pipe-insulator	481,899	Aug. 30	3501	857	60	1309
Dixon, George E., assignor of one-half to R. W. Caldwell, Chicago, Ill. Shield for radiators	481,900	Aug. 30	3502	858	60	1309
Dixon, Ezra, Bristol, R. I. Saddle for top rolls	482,789	Sept. 20	1434	355	60	1641
Dixon, Henry, Kidderminster, England. Loom for weaving tufted fabrics	482,446	Sept. 13	885	213	60	1521
Dixon, Henry J., assignor of one-half to W. P. Mulholland and J. Ainslie, Livingston, Mont. Clock-pendulum	467,161	Jan. 19	1416	362	58	286
Dixon, James, Cincinnati, Ohio. Car-coupling	471,843	Mar. 29	3396	866	58	1789
Dixon, Maynard L., assignor to F. H. La Pierre, New York, N. Y. Cigar-cutter	477,249	June 21	1628	397	59	1787
Dixon, Robert H., Santa Rosa, Cal. Pruning implement	466,879	Jan. 12	939	240	58	188
Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating and Lighting Company, New York, N. Y. Pipe-coupling	467,880	Jan. 26	2561	649	58	509
Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating and Lighting Company, of New York. Steam-trap	477,855	June 28	2613	{ 654 655 }	59	1995
Dixon, Robert M., East Orange, N. J., assignor to Safety Car Heating and Lighting Company, of New York. Apparatus for charging car gas-lighting tanks from gas-mains	483,106	Sept. 20	1923	487	60	1740
Dixon, Robert W., Springfield, Ohio. Wheel	478,577	July 12	795	196	60	173
Dixon, William O., Newark, N. J. Mandrel	479,634	July 26	2461	613	60	519
Dixon-Woods Company. (See Lubbers, John H., assignor.)						
Doane, Samuel E. (See Burnett and Doane.)						
Doane, William H., Cincinnati, Ohio. Planing-machine	477,928	June 28	2726	{ 683 684 }	59	2018
Dobbel, Frederick W., Purissima, Cal. Wagon-brake	486,245	Nov. 15	1700	449	61	951
Dobbie, Robert S., Jersey City, N. J. Electric-arc lamp	469,041	Feb. 16	1791	458	58	894
Dobbie, Robert S., Brooklyn, N. Y. Electric search-light	470,638	Mar. 8	1557	405	58	1408
Dobbie, Robert S., Brooklyn, assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	475,544	May 24	2645	673	59	1191
Dobbie, Robert S., Brooklyn, assignor to Edison General Electric Company, New York, N. Y. Reflector for arc lights	479,183	July 19	1727	433	60	363
Dobbins, Charles E., Chicago, Ill. Shackle for coupling springs	481,107	Aug. 16	2174	538	60	1026
Dobbs, Andrew B., New Haven, Conn., assignor to Scovill & Adams Company, New York, N. Y. Camera	470,783	Mar. 15	1777	457	58	1460
Dobeck, Frank H., assignor of two-thirds to J. T. Robinson and G. E. Stokes, Omaha, Nebr. Cloth-piling machine	481,933	Sept. 6	18	5.6	60	1338
Dobelman, John, Chicago Lawn, Ill. Spirit-level	478,848	July 12	1206	299	60	251
Dobson, Alexander, Beaverton, Canada. Reel	483,907	Oct. 4	578	145	61	120
Dobson & Barlow. (See Dobson and Bromiley, assignors.)						
Dobson, Benjamin A., and W. I. Bromiley, assignors to Dobson & Barlow, Bolton, Eng-land. Carding-engine	466,846	Jan. 12	869	{ 222 223 }	58	175
Dobson, Benjamin A., and W. I. Bromiley, assignors to Dobson & Barlow, Bolton, Eng-land. Mechanism for grinding the traveling flats of carding-engines	473,187	Apr. 19	1847	465	59	374
Dobson, Benjamin A., Bolton, England, and E. Appenzeller, Alost, Belgium. Carding-engine	469,835	Mar. 1	271	70, 71	58	1153
Dobson, James, et al. (See Gidley, Samuel H., assignor.)						
Dobson, James, et al. (See Leach, Heaton, and Bentley, assignors.)						
Dobson, John, et al. (See Gidley, Samuel H., assignor.)						
Dobson, John, et al. (See Leach, Heaton, and Bentley, assignors.)						
Dockery, Don M., et al. (See Devlin, James C., assignor.)						
Dockstader, Dennis S., Meadville, Pa. Wrecking-frog	484,703	Oct. 18	1820	462	61	393
Docter, Adolph. (See Bassford, Isaac F., assignor.)						
Docter, Albert M., assignor to S. C. Rosenberg, Chicago, Ill. Vending-machine	477,356	June 21	1799	441	59	1819
Dodd, Alvin H., Denver, Colo. Vacuum-pump	470,847	Mar. 15	1888	4-4	58	1481
Dodd, Charles E., assignor to G. Stiger, Williamsport, Pa. Clothes-drier	474,950	May 17	1710	435	59	994
Dodd, Charles E., assignor to G. Stiger, Williamsport, Pa. Curtain-shade holder	487,211	Nov. 29	3270	835	61	1293
Dodd, John A., Galva, Ill. Seed-planter	482,650	Dec. 27	2328	576	61	1833
Dodd, Levi A. (See Read, Harry P., assignor.)						
Dodd, West, Sac City, and A. T. Martin, Clinton, Iowa. Drive-chain	478,416	July 5	549	134	60	108
Doddrell, Thomas, Slough, England. Clamp for drawing together wooden joints	482,546	Dec. 27	2158	533	61	1799
Doddridge, James M., Milton, Ind. Harvester	476,226	May 31	3754	948	59	1421
Dodds, James H., assignor of one-half to J. H. Roberts, Eau Claire, Wis. Hot-water heater	476,526	June 7	454	108	59	1526
Dodds, John B., Newcastle-on-Tyne, and J. R. Fothergill, West Hartlepool, England. Incrustation preventive	477,357	June 21	1801	.....	59	1819
Dodge, Benjamin S., Minneapolis, Minn. Coin-operated lock	469,294	Feb. 23	2172	537	58	974
Dodge, Carroll W. (See Fowler, Lingley, and Dodge.)						
Dodge, Charles, Jr., Fort Bayard, N. Mex. Ter. Blanket-roll support for soldiers	486,370	Nov. 15	1900	502	61	992
Dodge Coal Storage Company. (See Dodge, James M., assignor.) (Reissue.)						
Dodge, Henry B., Chicago, Ill., assignor to Monroe Manufacturing and Lumber Company, Lima, Ohio. Window-screen	480,562	Aug. 9	1299	325	60	842
Dodge, Isaac F., assignor of one-half to V. C. Thompson, Gowin, Mich. Potato-coverer	486,861	Nov. 29	2695	703	61	1180
Dodge, James M. (See Caskey and Dodge.)						
Dodge, James M. (See Ewart and Dodge.)						
Dodge, James M., Philadelphia, Pa. Grip-pulley	473,254	Apr. 19	1953	490	59	396
Dodge, James M., Philadelphia, Pa. Conveying mechanism	476,615	June 7	587	140	59	1553
Dodge, James M., Philadelphia, Pa. Conveying mechanism	476,616	June 7	588	{ 140 141 }	59	1553
Dodge, James M., Philadelphia, Pa., assignor to Dodge Coal Storage Company, Naugatuck, Conn. Machine for handling coal. (Reissue.)	11,258	Aug. 9	1533	381	60	827
Dodge, James M., assignor to Link-Belt Engineering Company, Philadelphia, Pa. Gato for conveyer-troughs	485,913	Nov. 8	1157	306	61	825
Dodge, Miles B., San Francisco, Cal. Engine	473,657	Apr. 26	2635	664	59	550
Dodge, Philip T., et al. (See Freeman, James P., assignor.)						
Dodge, Philip T., Washington, D. C. Type-casting machine	466,666	Jan. 5	564	146	58	109
Dodge, Richard S., et al. (See Gilman, Willard H., assignor.)						
Dodge, S. D. (See Mehling, John A., assignor.)						
Dodge, Wallace H., and R. D. O. Smith, Mishawaka, Ind. Woolen boot	479,251	July 19	1830	459	60	383
Dodge, Walter E., Everett, Mass. Injector	478,741	July 12	1034	254	60	221
Dodge, Walter E., Everett, assignor to National Tube Works Company, Boston, Mass. In-jector	478,317	July 5	404	97	60	81
Doebler, Charles F., and C. K. Bryant, Hartford, Conn. Knob attachment	477,836	June 28	2582	646	59	1990
Doebler, Charles F., and C. K. Bryant, Hartford, Conn. Knob attachment	485,154	Oct. 25	2560	657	61	555
Doehring, Carl F. W., New York, N. Y. Fireproof partition or ceiling	478,318	July 5	405	97	60	81

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Doelger, Charles, and O. Kirsten, Milwaukee, Wis. Sprinkler	486,667	Nov. 22	2365	619	61	1097
Doering, Edman, <i>et al.</i> (See Fisher, James W., assignor.)						
Doering, Frederick, St. Louis, Mo. Coffee-urn	481,851	Aug. 30	3424	840	60	1294
Doering, Herman, Reedsburg, Wis. Stitching-horse	474,041	May 3	254	62	59	686
Doerr, Henry C., Macksville, Kans. Trace-carrier	473,830	Apr. 25	2895	726	59	599
Doersom, Philip, Columbia, assignor to J. A. Livers, Gettysburg, Pa. Car-coupling	487,885	Dec. 13	1067	268	61	1510
Dobaney, Mary L., Chicago, Ill. Hook and eye	467,638	Jan. 26	2169	551	58	435
Doherty, Thomas, Sarnia, Canada. Sectional water-boiler	479,873	Aug. 2	149	36, 37.	60	611
Doig, Edwin M. (See Blake, Smith, and Doig.)						
Doig, Edwin M., assignor of one-fourth to W. J. McKerley, Denver, Colo. Lubricator for trolleys	466,737	Jan. 5	685	176	58	130
Dolan, Lyons A., Alexandria, Va. Hand-stamp	474,734	May 10	1347	342	59	908
Doland, Timothy, Wellington, Ohio. Carriage-gearing	469,735	Mar. 1	104	28	58	1119
Dolby, Ernest R. (See Allam, Edwin P., assignor.)						
Dole, Charles P., West Superior, Wis., assignor of one-half to C. R. Heneage, St. Paul, Minn. Automatic latch-opener for buckets	484,782	Oct. 25	1967	{ 501 502 }	61	436
Dolese, John, <i>et al.</i> (See Patnoc, George W., assignor.)						
Dolf, George R., Iron Mountain, Mich. Metallic rod-packing	477,741	June 28	2424	606	59	1962
Dolge, Alfred. (See Millet, John W., assignor.)						
Dolivo-Dobrowolsky, Michael von, assignor to Allgemeine Electricitats-Gesellschaft, Berlin, Germany. Electric machine	469,515	Feb. 23	2512	{ 644 645 646 }	58	1040
Doll, Louis, Danbury, Conn. Clamp for finishing shades	473,917	May 3	49		59	645
Dollo, Louis J. (See Shipley, Thomas, assignor.)						
Dolloff, Orville C., Chelsea, assignor of two-thirds to J. Goettel, Boston, and F. F. Denfeld, Westborough, Mass. Sewing-machine	488,964	Dec. 27	2820	{ 695 696 }	61	1935
Dolphin, Matthew J., Brooklyn, N. Y. Delivery apparatus for postmarking-machines	467,682	Jan. 26	2236	569	58	448
Dombraun Henry A. A. (See Critchley, Singer, and Dombraun.)						
Domeier, Albert, and O. C. Hagemann, London, England, assignors, by mesne assignments, to J. S. Kirk & Co., Chicago, Ill. Recovering glycerine and salt from spent soap-lye	475,757	May 31	2976		59	1268
Domeier, Albert, and O. C. Hagemann, London, England, assignors, by mesne assignments, to J. S. Kirk & Co., Chicago, Ill. Recovering crude glycerine from spent soap-lye	475,758	May 31	2977		59	1268
Domestic Water Purifier Company. (See Way, Frank K., assignor.)						
Domestifroid Company. (See Ballantine, Alexander T., assignor.)						
Donnau, Emanuel, <i>et al.</i> (See Monday, Robert, assignor.)						
Donahoe, John F., Paola, Kans. Radiator	488,756	Dec. 27	2486	{ 618 619 }	61	1865
Donahoo, Peter B., Fresno, Cal. Street-sweeper	469,551	Feb. 23	2575	660	58	1052
Donahue, Daniel, New York, N. Y. Car-coupling	474,373	May 10	793	206	59	801
Donahue, Daniel, New York, N. Y. Car-coupling	476,450	June 7	346	79	59	1504
Donahue, Daniel, New York, N. Y. Steam-boiler	479,252	July 19	1831	459	60	384
Donahue, Michael J., Boston, Mass. Letter-box	474,229	May 3	532	130	59	740
Donald, R. A., <i>et al.</i> (See Taylor, Alfred, assignor.)						
Donaldson, David H., Buffalo, N. Y. Sewer-trap	471,105	Mar. 22	2279	585	58	1570
Donaldson, John, Chiswick, England. Apparatus for bending tubes	472,969	Apr. 12	1456	372	59	291
Donaldson, John E., Montezuma, Ind. Die for roofing-tiles	472,189	Apr. 5	279	73	59	53
Donaldson, Richard A., <i>et al.</i> (See Hipperling, William, assignor.)						
Donaldson, William W., and R. Macrae, Baltimore, Md. Storage-battery plate and making the same	471,538	Mar. 29	2921	743	58	1701
Donally, Amalia M., New York, N. Y. Bottling apparatus	467,086	Jan. 12	1265	{ 320 321 }	58	249
Donally, Amalia M., New York, N. Y. Bung for bottlers	468,437	Feb. 9	823	207	58	693
Donavin, G. B., <i>et al.</i> (See Lugenbell, Peter, assignor.)						
Donavin, J. W., <i>et al.</i> (See Lugenbell, Peter, assignor.)						
Donavin, L. K., <i>et al.</i> (See Lugenbell, Peter, assignor.)						
Doneghy, Alexander. (See Bates, James P., assignor.)						
Donelson, Emory V., Baltimore, Md., assignor to Crystal Rice Milling Company, Marion, Ind. Treating cereals and products	470,140	Mar. 1	739		58	1243
Donisthorpe, George E., and T. Burrows, London, England. Machine for combing fibrous materials	482,960	Sept. 20	1697	{ 427 428 }	60	1693
Donlon, William, Hopkins, Minn. Attachment for ax-helves	483,248	Sept. 27	2152	545	60	1796
Donnaden, Clement H. J. (See Kuess, Victor J., assignor.)						
Donnan, Nathan W., Amsterdam, N. Y. Pulley-coupling for clothes-lines	466,458	Jan. 5	239	61	58	46
Donne, Leon, assignor of one-half to E. B. Daniels, Chicago, Ill. Testing-machine	468,763	Feb. 9	1330	{ 336 337 }	58	794
Donne, Leon, Chicago, Ill., assignor to L. Ingersoll, Denver, Colo. Coin-controlled lung-testing machine	469,936	Mar. 1	430	108	58	1183
Donnell, Charles K., Webster, Me. Combined burglar-alarm and door-fastener	472,340	Apr. 5	527	137	59	99
Donnelly, Ellen, New York, N. Y. Bust-form	488,876	Dec. 27	2676	662	61	1904
Donnelly, John, Brockley, England. Car-axle box	488,877	Dec. 27	2677	{ 662 663 }	61	1904
Donnelly, John R. (See Neal and Donnelly.)						
Donner, Jacob H., Aurora, Nebr. Listed-corn cultivator	487,612	Dec. 6	600	154	61	1441
Donoho, William C., <i>et al.</i> (See Wise, Benjamin F., assignor.)						
Donohoe, William F., assignor of one-half to E. R. Springman, Philadelphia, Pa. Fastening for shoes, &c.	466,738	Jan. 5	686	176	58	131
Donovan, Dennis. (See Reed and Donovan.)						
Donovan, John E., Cincinnati, Ohio. Vapor-burner	469,443	Feb. 23	2398	614	58	1019
Donovan, William D. (See Devine, William P., assignor.)						
Doolan, Thomas, Chicago, Ill. Feed-trough	487,003	Nov. 29	2951	760	61	1230
Dooley, James, Jr. (See De Lany and Dooley.)						
Dooley, Mason B., Decatur, Mo. Lifting-jack	484,655	Oct. 18	1755	446	61	379
Doolling, Patrick J., Folsom, Cal. Strength-testing device	482,623	Sept. 13	1168	282	60	1576
Doolittle, George W., Chicago, Ill. Street-crossing	488,117	Dec. 13	1455	367	61	1629
Doolittle, Irvin P., Redlands, Cal. Coupling	484,656	Oct. 18	1756	447	61	379
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Collapsible tap	481,648	Aug. 30	3077	751	60	1228
Doolittle, William W., assignor to Crane Company, Chicago, Ill. Back-pressure valve	486,950	Nov. 29	2872	742	61	1215
Doran, Charles H., Olean, N. Y. Sectional horseshoe	480,563	Aug. 9	1300	325	60	842
Doran, William, Skowhegan, Me. Device for raising or lowering electric lamps	488,878	Dec. 27	2678	663	61	1904
Dorchester, Edward G., Geneva, N. Y. Bicycle-tire	468,560	Feb. 9	1034	263	58	735
Dorchester, Edward G., Geneva, N. Y. Bicycle-tire	472,786	Apr. 12	1189	305	59	238
Dorchester, Edward G., Geneva, N. Y. Bicycle-tire	477,048	June 14	1277	310	59	1705
Dorchester, Ernest D., Malden, Mass. Truck for railway-cars	480,495	Aug. 9	1199	301	60	822
Dore, Herman R., Ossipee, N. H. Car-coupling	473,213	Apr. 19	1883	474	59	381

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drawings	Vol.	Page.
Dore, William, and J. P. Tapley, assignors of one-third to J. H. Parr, Manchester, England.} Wringing and mangling machine.....	486,222	Nov. 15	1662	{ 439 440	{ 61	944
Doremus, Victor E., assignor of one-half to P. P. Todd, New York, N. Y. Lock-nut.....	478,742	July 12	1036	254	60	221
Doremus, William T., Flatbush, N. Y. Check, draft, or other money order or instrument.....	472,864	Apr. 12	1292	332	59	258
Doren, Dennis, New York, N. Y. Insulator-support.....	472,529	Apr. 12	825	210	59	170
Dorgan, John W., Columbus, Ohio. Valve-register.....	477,742	June 28	2425	606	59	1962
Dorman, George E., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Dynamo-electric machine.....	468,416	Feb. 9	799	199	58	689
Dorman, George E., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Field-magnet for dynamos.....	470,749	Mar. 15	1727	445	58	1450
Dorman, George E., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Dynamo-electric machine.....	472,943	Apr. 12	1413	361	59	283
Dorn, Charles A., assignor of one-half to R. Betz, Canton, Ohio. Permutation-lock.....	470,110	Mar. 1	698	172	58	1235
Dorn, Christian, Philadelphia, Pa. Apparatus for refining oils.....	469,498	Feb. 23	2488	638	58	1035
Dorney, George S. (See Shull and Dorney.).....						
Dornfeld, John F., Watertown, Wis. Malt-kiln.....	467,747	Jan. 26	2351	595	58	469
Dorr, Arthur L., Wilmington, Del. Fastening for shoes.....	470,183	Mar. 8	829	204	58	1269
Dorr, George W., Chicago, Ill. Bicycle-wheel tire.....	469,516	Feb. 23	2515	646	58	1041
Dorrance, Albert A. (See Bassett, Judson L., assignor.).....						
Dorsey, William A. (See Franklin, Elhanan H., assignor.).....						
Dorton, Robert E., Minneapolis, Minn. Support for band-cutters and feeders.....	482,676	Sept. 13	1238	302	60	1590
Dorton, Robert E., Minneapolis, Minn. Band-cutter and feeder.....	482,677	Sept. 13	1239	{ 302 303	{ 60	1590
Dorward, David, assignor to Risdon Iron and Locomotive Works, San Francisco, Cal. Tubular metallic pole.....	470,153	Mar. 1	757	188	58	1246
Dorward, David, assignor to Risdon Iron and Locomotive Works, San Francisco, Cal. Tubular metallic pole.....	484,144	Oct. 11	928	239	61	204
Dorwart, Benjamin K., Scotch Plains, N. J., assignor of one-half to G. A. Colby, New York, N. Y. Fountain-pen.....	469,499	Feb. 23	2490	638	58	1036
Doss, John. (See Sullivan and Doss.).....						
Dossmann, John, and P. G. Ober, Cincinnati, Ohio. Ticket-punch.....	466,847	Jan. 12	872	223	58	175
Doty, Harry A., New Haven, Conn. Game.....	471,666	Mar. 29	3102	789	58	1733
Doty, James, assignor of one-half to A. Trossen and A. S. McDonald, Marion, Wis. Cover for kettles, &c.....	485,095	Oct. 25	2474	636	61	538
Doty, Joseph W., Lockport, N. Y. Fruit-evaporator.....	477,856	June 28	2614	655	59	1996
Doubler, John W. H., assignor of one-half to R. W. Raymond, Rockford, Ill. Rocking-chair.....	474,314	May 3	680	176	59	768
Dougan, Kennedy, assignor to Montana Vote Registering Machine Company, Missoula, Mont. Ballot-holder for voting-machines.....	488,937	Dec. 27	2772	{ 684 685	{ 61	1924
Dougan, Kennedy, assignor to Montana Vote Registering Machine Company, Missoula, Mont. Vote-registering machine.....	488,938	Dec. 27	2773	685	61	1924
Dougherty, Harvey H., assignor of one-half to A. F. Brown, Waverly, Ill. Corn-planter.....	481,852	Aug. 30	3424	840	60	1294
Dougherty, Joseph F., Hale, Mo. Gate.....	480,008	Aug. 2	391	97	60	656
Doughten, Henry W., Moorestown, N. J. Furrower and coverer.....	484,581	Oct. 18	1625	412	61	353
Doughty, Philander M., Campbellsville, Ky. Horse-detaching mechanism.....	477,358	June 21	1802	441	59	1819
Dougine, James T., Chicago, Ill. Excavating apparatus.....	477,837	June 28	2584	{ 647 648	{ 59	1990
Douglas, Alexander S. (See Minton and Douglas.).....						
Douglas, Charles, Detroit, Mich. Shaper.....	469,852	Mar. 1	300	78	58	1159
Douglas, Charles L., et al. (See Cook, Herbert F., assignor.).....						
Douglas, Frank, Chicago, Ill. Saddle for bicycles.....	467,342	Jan. 19	1695	434	58	338
Douglas, Frank, Chicago, Ill. Crank-securing device for bicycles.....	467,343	Jan. 19	1696	434	58	339
Douglas, Frank, Chicago, Ill. Foot-rest for bicycles.....	467,344	Jan. 19	1697	435	58	339
Douglas, Frank, Chicago, Ill. Bicycle-pedal.....	469,295	Feb. 23	2174	557	58	975
Douglas, Frank, Chicago, Ill. Bicycle.....	469,339	Feb. 23	2235	573	58	987
Douglas, Frank, Chicago, Ill. Bicycle.....	469,627	Feb. 23	2672	637	58	1073
Douglas, Frank, Chicago, Ill. Saddle for bicycles.....	469,628	Feb. 23	2673	637	58	1073
Douglas, Frank, Chicago, Ill. Bicycle-saddle.....	469,629	Feb. 23	2674	{ 687 688	{ 58	1073
Douglas, Frank, Chicago, Ill. Bicycle.....	469,630	Feb. 23	2675	688	58	1074
Douglas, Frank, Chicago, Ill. Vehicle-tire.....	472,341	Apr. 5	598	137	59	99
Douglas, James. (See Hunt and Douglas.).....						
Douglas, John, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Presser-foot for sewing-machines.....	478,095	July 5	31	10	60	9
Douglas, John, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Plaiting attachment for sewing-machines.....	488,547	Dec. 27	2159	{ 533 534	{ 61	1799
Douglas, Pendleton G., assignor of one-fourth to P. M. Bradley, Gainesville, Va. Wrench.....	468,241	Feb. 2	500	122	58	623
Douglas, Samuel T. (See De Fernemont, Henry H., assignor.).....						
Douglas, William B., Phenix, R. I. Spindle-bearing.....	473,214	Apr. 19	1885	475	59	382
Douglas, William G., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator.....	473,172	Apr. 19	1818	458	59	369
Douglas, William H., Stourbridge, England. Stop-watch.....	488,710	Dec. 27	2424	601	61	1851
Douglas, William M., Galveston, Tex. assignor of one-half to Bucyrus Steam Shovel and Dredge Company, Bucyrus, Ohio. Hydraulic excavator.....	475,936	May 31	3281	828	59	1327
Douglass, Addison H. (See Dean, Kate M., assignor.).....						
Douglass, Edwin T., Brooklyn, N. Y. Indexed book.....	472,441	Apr. 5	673	172	59	126
Douglass, J. Walter. (See Farrel, John H., assignor.).....						
Douglass, J. Walter. (See Stevens, Henry A., assignor.).....						
Douglass, Joseph H. (See Evans and Douglass.).....						
Douglass, Leon F., assignor to E. D. Easton, Washington, D. C. Method of and means for duplicating or transferring phonographic records.....	475,490	May 24	2558	651	59	1174
Douglass, Robert, Tara, Canada. Bob-sled.....	477,743	June 28	2426	606	59	1962
Douglass, Samuel W. (See Bullock and Douglass.).....						
Douglass, Samuel W., assignor to M. C. Bullock, Chicago, Ill. Water-swivel for drilling apparatus.....	473,918	May 3	50	9	59	645
Douglass, Samuel W., Fort Collins, Colo., assignor to M. C. Bullock Manufacturing Company, Chicago, Ill. Core-barrel for rock-drills.....	474,337	May 3	729	190	59	777
Donlin, William, Wheeling, W. Va. Curtain-fixture.....	471,962	Mar. 29	3560	909	58	1821
Douthit, Albert G., Elkhart, Tex. Seal-press.....	487,321	Dec. 6	138	40	61	1348
Douthit, Albert G., Elkhart, Tex. Toy wagon.....	487,613	Dec. 6	601	{ 154 155	{ 61	1441
Douty, Harry W. (See Barrett, Cornelius T., assignor.).....						
Dover, Joseph, Souderton, Pa. Apparatus for aerating milk.....	469,500	Feb. 23	2491	638	58	1036
Dover, Samuel B., Adairsville, Ga. Car-coupling.....	479,635	July 26	2463	613	60	590

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Dovey, Albert A., Newark, N. J. Reversible latch	477,929	June 28	2730	684	59	2019
Dow, Albert F. (See Buffinton, Elisha W., assignor.)						
Dow, Alexander, Elgin, Ill. Regulator for dynamo-electric machines	486,417	Nov. 15	1974	524	61	1007
Dow, Alonzo, Wooster, assignor of one-half to S. J. Spalding, Canton, Ohio. Inhaler	476,190	May 31	3683	930	59	1408
Dow, Andrew. (See Flagg, Frank E., assignor.)						
Dow, Charles H., Ellensburg, assignor of one-sixth to J. Garvey and H. L. Smith, Tacoma, Wash. Air dump-car	479,253	July 19	1832	460	60	384
Dow, George B. N., Manchester, N. H. Filler attachment for lamp-burners	488,164	Dec. 13	1538	385 386	61	1645
Dow, Herbert H., Midland, Mich., assignor to Midland Chemical Company, Midland, Mich., and Cleveland, Ohio. Extracting bromine. (Reissue)	11,232	Apr. 12	1459	372 373	59	291
Dow, Herbert H., Midland, Mich., assignor of two-thirds to A. H. Smith and J. C. Hale, Cleveland, Ohio. Galvanic battery	480,384	Aug. 9	1025	257	60	788
Dow, John D., St. Paul, Minn. Stock-car	468,646	Feb. 9	1152	294	58	758
Dow, Lorenzo, and D. Powers, Boston, Mass. Type-distributing machine	467,087	Jan. 12	1269	321 322	58	249
Dowd, Peter A., and T. Long, Boston, Mass. Track-cleaning apparatus	471,814	Mar. 29	3356	854	58	1780
Dowdall, James B., Manchester, England. Automatic safety-extinguisher for lamps	486,439	Nov. 22	2013	534	61	1029
Dowdin, Robert C. (See Gaigens and Dowdin.)						
Dowler, Charlie M. (See Dowler, Libbie M., assignor.)						
Dowler, Libbie M., Tyler, Tex., assignor of one-third to C. M. Dowler. Stovepipe drying-rack.	480,658	Aug. 9	1461	363	60	873
Dowling, John, Altoona, Pa. Seal-lock	476,617	June 7	591	141	59	1554
Dowling, John, Altoona, Pa. Seal-lock	482,118	Sept. 6	320	76	60	1398
Dowling, John A. (See Walsh and Dowling.)						
Dowling, Robert H., assignor of two-thirds to C. and C. H. Follett, Newark, Ohio. Car-coupling.	467,463	Jan. 19	1868	477	58	372
Dowling, Robert H., assignor of seven-twelfths to C. H. Stimson and E. B. Dennis, Newark, Ohio. Car-coupling	474,772	May 10	1417	361	59	922
Dowling, William H., assignor of one-half to J. B. Nelbach, Utica, N. Y. Coffin fastener and hinge	470,291	Mar. 8	1016	259	58	1306
Downard, James A., et al. (See Cox, Jacob R., assignor.)						
Downes, James F., New York, N. Y. Fire-escape	485,914	Nov. 8	1158	306	61	825
Downes, William A., assignor to Penberthy Injector Company, Detroit, Mich. Lubricator.	467,734	Jan. 26	2328	591	58	465
Downey, Silas C., Chicago, Ill., assignor of one-half to Richards & Ruthauser. Bevel and try square	475,390	May 24	2399	613	59	1145
Downey, William K. (See Judge, James L., assignor.)						
Downie, Robert M., New Brighton, assignor to Keystone Driller Company, Beaver Falls, Pa. Rope-clamp	480,810	Aug. 16	1697	423	60	934
Dowling, Fremont O. (See Lewis, Andrew T., assignor.)						
Downing, George, Jr., and W. F. Hall; said Hall assignor to T. Ryan, Lincoln, Nebr. Rocker-tooth grate	488,548	Dec. 27	2161	534	61	1800
Downing, William C., San Francisco, Cal. Ticket-punch	477,107	June 14	1372	335	59	1725
Downs, Eugene, assignor of one-half to J. T. Christie, Vinton, Iowa. Windmill	476,875	June 14	996	242	59	1649
Downs, John, San Francisco, Cal. Sewer-gate	468,985	Feb. 16	1707	435	58	877
Downs, Taylow W., et al. (See Haller, William A., assignor.)						
Dowse, William B. H., trustee. (See Mead, Albert G., assignor.)						
Dowse, William B. H., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove-fastening	476,255	June 7	41	9	59	1446
Doxford, Charles D., Sunderland, England. Construction of hulls of vessels	485,462	Nov. 1	479	126 127	61	669
Doyère, George L., Paris, France. Board for winding cloth	467,286	Jan. 19	1608	410	58	322
Doyle, Albert T., Pendleton, Oreg. Slide-valve	481,013	Aug. 16	2008	502	60	995
Doyle, John H., Gainesville, Fla., assignor of one-half to J. E. Dozier and W. S. Shields, Atlanta, Ga. Surgeon's chair	467,479	Jan. 19	1901	486	58	379
Doyle, Michael M. (See Davenport and Doyle.)						
Doyle, Patrick J., F. E. Thrall, and M. B. Wilkinson, Asheville, N. C. Sawmill-dog	473,658	Apr. 26	2637	664 665	59	550
Doyle, William. (See Flanagan, Michael, assignor.)						
Doyle, William J. C., assignor of one-half to T. Buckley, Aspen, Colo. Fuse-ignitor	481,012	Aug. 16	2007	501	60	995
Dozier, John E., et al. (See Doyle, John H., assignor.)						
Dozier, Lewis D., St. Louis, Mo. Traveler's combined collar and cuff case	470,553	Mar. 8	1436	374	58	1383
Dozier, Lewis D., and E. W. Hawley, St. Louis, Mo.; said Hawley assignor to said Dozier. Collar and cuff portfolio	470,554	Mar. 8	1438	374	58	1383
Dr. Jaeger's Sanitary Woolen System Company. (See Green, John, assignor.)						
Drabble, Ralph, Lonsdale, R. I. Nosing-motion for self-acting mules	470,479	Mar. 8	1336	347	58	1363
Drader, Joseph, and A. B. McKay, London, Canada; said McKay assignor to said Drader. Spade-barrow	487,322	Dec. 6	139	40, 41	61	1349
Drake, Ambrose F., and W. Wonn, Audubon, Iowa. Gravity-motor	483,645	Oct. 4	190	47, 48	61	39
Drake, Charles E., et al. (See Tyler, Harry L., assignor.)						
Drake, Francis E., Columbus, Ohio. Helmet attachment	488,188	Dec. 20	1577	395	61	1670
Drake, Francis J., Belleville, Canada. Machine for sharpening saws	472,865	Apr. 12	1295	332	59	259
Drake, Francis J., Belleville, Canada. Saw-setting machine	482,624	Sept. 13	1169	283	60	1576
Drake, Francis M., Waldo, Ohio. Grain-scourer	487,259	Dec. 6	31	10, 11	61	1327
Drake, George W., et al. (See Tyler, Harry L., assignor.)						
Drake, Howard B. (See Drake, James H., assignor.)						
Drake, James H., St. Paul, Minn., assignor to H. B. Drake. Filter	468,294	Feb. 2	596	148	58	639
Drake, John E., Quincy, Mass. Boot or shoe shaping device	475,679	May 24	2844	719	59	1230
Drake, John H. (See Stratton and Drake.)						
Drake, Nathaniel S., Pittsfield, N. H. Heel for boots or shoes	479,560	July 26	2354	587	60	500
Drake, Thomas, Huddersfield, England. Refining oils	471,963	Mar. 29	3561	.....	58	1821
Drake & Wood Company. (See Leonard, Charles N., assignor.)						
Draper, Daniel, Hastings-on-Hudson, N. Y. Contact-maker	470,994	Mar. 15	2109	542	58	1525
Draper, Frederick. (See Draper and Ellsworth.)						
Draper, Harvey H., Arkansas City, Kans. Broom-holder	470,480	Mar. 8	1337	348	58	1363
Draper, James W. and F., and W. Ellsworth, Alden, Iowa. Well-drilling machine	481,482	Aug. 23	2815	692	60	1161
Draper, Samuel F., Boston, Mass. Manufacturing lamp-wicks	467,871	Jan. 26	2543	645	58	506
Draper & Sons, George. (See Bennett, John H., assignor.)						
Draper & Sons, George. (See Brooks, John C., assignor.)						
Draper & Sons, George. (See Conn, Joseph, assignor.)						
Draper & Sons, George. (See Draper, William F., assignor.)						
Draper & Sons, George. (See Hefflin, Henry M., assignor.)						
Draper & Sons, George. (See McDavitt, William H., assignor.)						
Draper & Sons, George. (See Northrop, James H., assignor.)						
Draper & Sons, George. (See Rigby, Richard, assignor.)						
Draper, William F. (See Usher and Draper.)						
Draper, William F., Hopedale, Mass. Lamp-wick	472,750	Apr. 12	1141	292	59	228

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Draper, William F., assignor to G. Draper & Sons, Hopedale, Mass. Spindle-support.....	484,356	Oct. 11	1271	324	61	271
Draudt, Albert. (See Draudt, Edward and A.)						
Draudt, Edward and A., Cleveland, Ohio. Hose-coupling.....	472,342	Apr. 5	531	138	59	99
Drawbaugh, Daniel, Eberly's Mill, Pa. Pneumatic tool.....	472,435	Apr. 5	761	193	59	145
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to Pneumatic and Electric Tool Company, New York, N. Y. Graduated cock for pneumatic tools.....	479,061	July 19	1529	381	60	327
Drawbaugh, Daniel, Eberly's Mill, Pa., assignor to Pneumatic and Electric Tool Company, New York, N. Y. Pneumatic tool.....	482,942	Sept. 20	1664	419	60	1687
Drawdy, Richard A., Jacksonville, Fla. Brick and tile cutting machine.....	473,301	Apr. 19	2026	509	59	411
Drayton, Alvan, New York, N. Y. Suspension-chain.....	477,532	June 21	2064	514	59	1872
Dredge, Edgar, London, England. Folding box or crate.....	473,730	Apr. 26	2745	691	59	570
Dredge, William C., New York, N. Y. Awning.....	467,345	Jan. 19	1698	434	58	339
Dreesman, Udo, Pekin, and J. Wagler, Tremont, Ill. Gate.....	482,005	Sept. 6	134	32	60	1361
Dreisbach, Stephen S., Catawissa, Pa. Mat.....	468,940	Feb. 16	1613	408	58	859
Dreisbörner, Jacob, assignor to National Ammonia Company, St. Louis, Mo. Ammonia dipper-valve.....	482,233	Sept. 6	504	120	60	1433
Drennan, John M., New York, N. Y., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental syringe.....	479,407	July 26	2094	525	60	450
Dressel, George C., New York, N. Y. Caboose-lamp.....	470,292	Mar. 8	1017	260	58	1306
Dresser, Daniel L., et al. (See Bunch, Henry G., assignor.)						
Dresskell, William M., Brainerd, Minn. Electric motor.....	483,431	Sept. 27	2448	616	60	1851
Dreux, Louis, Presles, France. Boiler-feeder.....	483,668	Oct. 4	221	55	61	46
Drew, Alfred, De Lisle, Ohio. Coupling-pole.....	482,678	Sept. 13	1214	303	60	1591
Drew, Emanuel C. (See Slaughter and Drew.)						
Drew, Henry P., New York, N. Y. Swing-joint for electric-light brackets.....	478,417	July 5	550	134	60	108
Drew, John W., et al. (See West, Derrick S., assignor.)						
Drew, Joseph N., Malden, assignor to H. A. Carson and E. W. Bowditch, Boston, W. H. Bradley, Brookline, and F. L. Smith, Salem, Mass. Apparatus for raising and moving material.....	466,601	Jan. 5	466	120	58	90
Drew, Julius, Chattanooga, Tenn. Office-door indicator.....	483,908	Oct. 4	579	145	61	120
Drew, Manning A., Boston, Mass. Safety bank-check.....	471,106	Mar. 22	2280	586	58	1570
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	466,721	Jan. 5	663	170	58	126
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	486,371	Nov. 15	1901	502 503	61	992
Drew, Walter J., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	487,212	Nov. 29	3271	836	61	1293
Drews, Firm of H. (See Senner, Rudolf, assignor.)						
Dreyer, Charles M., St. Louis, assignor to M. J. Marsden, Bridgeton, and J. G. Gracey, St. Louis, Mo. Piston-lubricator.....	471,068	Mar. 15	2214	569	58	1545
Dreyfous, Alida, New York, N. Y. Supplemental top for gas-stoves.....	474,497	May 10	986	254	59	838
Driesbach, Victor C., et al. (See Diebel, William, assignor.)						
Driggs, George A. (See Lewis and Driggs.)						
Driggs, Gertrude, et al. (See Loree, Manfred U., assignor.)						
Driggs, William H., Washington, D. C. Band-seat for projectiles.....	469,631	Feb. 23	2676	688	58	1074
Driggs, William H., U. S. Navy. Breech-loading ordnance.....	475,545	May 24	2646	673 674	59	1191
Driller, John H., Los Angeles, Cal. Automatic funnel cut-off.....	469,639	Feb. 23	2686	691	58	1076
Driller, John H., Los Angeles, Cal. Automatic cut-off cask-filling faucet.....	482,342	Sept. 13	708	168 169	60	1488
Drinkwater, James C. (See Drinkwater, William L. and J. C.)						
Drinkwater, William L. and J. C., Mount Clemens, Mich. Parturition-shears.....	487,068	Nov. 29	3045	781	61	1249
Driscoll, William, assignor of one-half to J. Hall, Brockville, Canada. Foot-guard for railway-frogs.....	478,504	July 5	682	166	60	135
Driver, Samuel, Norfolk, Conn., assignor of one-third to A. Beardsell, Woonsocket, R. I. Feed-table for carding-engines.....	468,106	Feb. 2	298	72	58	582
Dromgold, Walker A. (See Richey, Heneb, and Dromgold.)						
Droop, Edward H., Washington, D. C. Hand-drum.....	479,636	July 26	2164	613	60	520
Droste, August H. W., and H. H. Bruns, St. Charles, Mo. Grain-weighing machine.....	483,909	Oct. 4	580	146	61	120
Drots, Peter, et al. (See Gunnarson, Wahlzer, assignor.)						
Drouet, Gustave, Paris, France. Bolt.....	485,373	Nov. 1	348	93, 94	61	644
Druckemiller, Joseph Y., Jenkintown, Pa. Expression-regulator for pianos.....	482,168	Sept. 6	410	98	60	1415
Druen, Bernard D., New Haven, Conn. Whiffletree-coupling.....	485,003	Oct. 25	2333	602	61	509
Drummond, Greenville A., Lancaster, Mo. Beehive.....	470,111	Mar. 1	699	172	58	1235
Drury, Charles E., Girard, Pa. Lamp-chimney cleaner.....	470,393	Mar. 8	1200	306	58	1336
Drury, Charles E., Girard, Pa. Clothes-drier.....	484,517	Oct. 18	1533	389	61	334
Dryer, George W. (See Bushnell and Dryer.)						
Dryfoos, Louis. (See Colgan, Catherine, assignor.)						
Du Bois, Franklin A. (See Atherton, Garrick M., assignor.)						
Du Bois, Frederick N. (See Renton, George W., assignor.)						
Du Bois, Frederick N., New York, N. Y. Waste-pipe trap.....	475,546	May 24	2650	674	59	1192
Du Bois, John L., Doylestown, Pa. Inkstand.....	468,332	Feb. 9	675	167	58	664
Du Bois, John L., Doylestown, Pa. Pen-wiper.....	473,148	Apr. 19	1767	416	59	360
Du Bois-Reymond, Alard E., assignor to Siemens & Halske, Berlin, Germany. Distribution of rotary electric currents.....	477,250	June 21	1629	398	59	1787
Du Laney, Charles F. (See Du Laney, James W. and C. F.)						
Du Laney, James W., Canton, Ohio. Mail-bag.....	473,616	Apr. 26	2573	648	59	537
Du Laney, James W. and C. F., Canton, Ohio. Electric clock-synchronizer.....	477,049	June 14	1278	310	59	1706
Du Montier, Fred, Ogdenburg, N. Y. Pipe-coupling and coupling attachment for railway-cars.....	482,304	Sept. 6	627	150	60	1458
Du Pont, Antoine B., Louisville, Ky. Car-truck.....	487,518	Dec. 6	470	123	61	1414
Du Shane, James, South Bend, Ind. Plow.....	475,681	May 24	2847	720	59	1231
Dubbs, Jesse A., Allegheny, assignor of one-half to J. H. White, Pittsburg, Pa. Manufacturing asphaltum.....	468,867	Feb. 16	1497	.....	58	836
Dubbs, Jesse A., Allegheny, assignor of three-fourths to S. M. Boyd, Pittsburg, Pa. Apparatus for the manufacture of gas.....	470,040	Mar. 1	594	147	58	1214
Dubbs, Jesse A., assignor of one-half to S. M. Boyd, Allegheny, Pa. Desulphurizing oil.....	470,911	Mar. 15	1976	505	58	1499
Dubbs, Jesse A., Allegheny, assignor of one-half to J. H. White, Pittsburg, Pa. Manufacture of asphaltum.....	480,234	Aug. 2	767	.....	60	727
Dubbs, Jesse A., Allegheny, assignor of one-half to J. H. White, Pittsburg, Pa. Manufacture of asphaltum.....	480,235	Aug. 2	768	194	60	728
Dubey, Edward A., Brooklyn, N. Y. Blank with signature-controlling indicia.....	477,744	June 28	2427	606	59	1962
Duchemin, Edmund H., Newburyport, Mass. Joint-bolt.....	470,995	Mar. 15	2110	542	58	1525

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Duck, Andrew J., W. S. Savidge, and G. W. Wolfe, Lewisburg, Pa. Tilting gate	483,432	Sept. 27	2450	616	60	1852
Duckham, Frederic E., London, England. Delivery apparatus for pneumatic grain-conveyers	470,555	Mar. 8	1440	374	58	1384
Duckham, Frederic E., London, England. Separating grain and dust or stive from air laden therewith	485,915	Nov. 8	1159	306	61	826
Dudgeon, Richard H. (See Weeks, John, assignor.)						
Dudley, Albion W., St. Louis, Mo. Device for hitching horses	466,667	Jan. 5	566	146	58	109
Dudley E. Jones Company. (See Sailor, David A., assignor.)						
Dudley, George B., assignor of one-half to T. B. Peacock, Topeka, Kans. Cartridge-pouch	487,556	Dec. 6	525	136	61	1425
Dudley, Milton L., Des Moines, Iowa. Sash-fastener	475,739	May 24	2946	747	59	1248
Dudley, Plimmon H., New York, N. Y. Railway-rail	486,633	Nov. 22	2310	603	61	1086
Dueber, John C., Canton, Ohio. Watchcase-pendant	467,260	Jan. 19	1566	398	58	314
Duechting, William, assignor to A. Fowler, Chicago, Ill. Car-coupling	478,578	July 12	796	196	60	173
Duemer, Louis, Hamilton, Ohio. Saw-set	468,438	Feb. 9	824	208	58	693
Duer, Albert, assignor of one-half to O. L. Phillis, Fombell, Pa. Nut-lock	474,315	May 3	681	176	59	768
Duesler, Oliver, Argusville, N. Y. Butter-tub closure	470,835	Mar. 15	1875	480	58	1478
Duesterwald, Frank, Brooklyn, N. Y. Ventilator	476,134	May 31	3588	906	59	1389
Duff, Leou, Cincinnati, Ohio. Gig-saddle	471,634	Mar. 29	3056	778	58	1725
Duff, Robert D., Tacoma, Wash. Pavement	420,183	Aug. 2	678	171	60	710
Duffy, James F., Chicago, Ill. System of ventilation	472,163	Apr. 5	238	63	59	45
Duffy, John F., assignor to National Ice Machine Company, Brooklyn, N. Y. Beer-cooler	487,405	Dec. 6	288	75	61	1378
Duffy, John J., assignor to E. P. Bates, Cleveland, Ohio. Fluid-pump or compressor	480,811	Aug. 16	1699	423 424	60	935
Duffy, Nicholas G., Charleston, S. C. Proof-press	483,433	Sept. 27	2451	617	60	1852
Duffy, Nicholas G., Charleston, S. C. Self-locking job-galley	483,434	Sept. 27	2453	617	60	1852
Duffy, Nicholas G., Charleston, S. C. Printer's galley	483,481	Sept. 27	2507	631	60	1863
Duffy, William. (See Cowles, Henry S., assignor.)						
Dugan, James, Bristol, Pa. Support for umbrellas, &c., on bicycles, &c.	488,549	Dec. 27	2162	534	61	1800
Dugan, Reis W. (See King, John H., assignor.)						
Dugan, Rees W., Covington, Ky. Condenser for exhaust-steam	467,715	Jan. 26	2300	584	58	460
Dugan, Rees W., Covington, Ky. Steam condenser and purifier	485,004	Oct. 25	2334	602	61	509
Duggan, John A., Quincy, Mass. Street-railway track	472,164	Apr. 5	239	64	59	45
Duggan, John A., Quincy, Mass. Fastening and seating of guard-rails, &c., for street-railways	472,165	Apr. 5	240	64	59	45
Duggan, Wilson S., Verona, Tenn. Plow	466,668	Jan. 5	567	147	58	110
Duhm, John C. E. Block, and J. Sauter, New York, N. Y. Combined refrigerating-counter and display-case	469,010	Feb. 16	1754	447	58	886
Duhme, Edward H., New Orleans, La. Sugar-gage for vacuum-pans	484,145	Oct. 11	929	239	61	204
Duisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Tetrazo dye	467,162	Jan. 19	1417		58	286
Duisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Tetrazo blue dye	476,371	June 7	230		59	1481
Duisberg, Carl, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Red dye and making the same	481,934	Sept. 6	23		60	1339
Duke, James G., Memphis, Tenn. Hanger	479,254	July 19	1832	460	60	384
Dukes, Abraham S., Branchville, S. C. Saw cotton-gin	488,921	Dec. 27	2752	679	61	1919
Dulin, Charles E., assignor of one-half to A. N. Harris, Philadelphia, Pa. Centrifugal machine	466,459	Jan. 5	241	61	58	46
Dulin, H. R. (See Dulin, William, assignor.)						
Dulin, William, Avoca, Iowa. Fence-wire reel and tightener	467,499	Jan. 26	1933	494	58	393
Dulin, William, assignor of one-half to H. R. Dulin, Avoca, Iowa. Wire-reel	486,928	Nov. 29	2833	734	61	1208
Dulitz, Paul C. (See Sherman, George H., assignor.)						
Dull, Casper, et al. (See Galvin, James A., assignor.)						
Dull, Newton A., and A. H. Moore, Santa Fé, Mo. Tilting gate	487,179	Nov. 29	3223	825 826	61	1285
Dumas, George E., Waterbury, Vt. Lining for butter-boxes	467,858	Jan. 26	2525	640	58	503
Dumais, Jean B. Z., assignor to E. A. Lord, Chicago, Ill. Pipe-threading machine	477,406	June 21	1875	461 462	59	1835
Dummer, Bessie P., et al. (See Morse, Cyrus B., assignor.)						
Dumont, Louis E. A., Newark, N. J. Metal charm or ornament	471,235	Mar. 22	2479	630	58	1607
Dunbar, Francis W., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. Electro-magnetic annunciator	469,995	Mar. 1	530	132	58	1202
Dunbar, Francis W., Newark, N. J., assignor to American Telephone and Telegraph Company, of New York. Apparatus and system for compound telegraphy and telephony	476,618	June 7	592	142	59	1554
Dunbar, John, Brooklyn, N. Y. Scaffold	482,625	Sept. 13	1171	283	60	1577
Dunbar, John W., New London, Conn., assignor to H. A. Penrose. Machine for making composition targets	486,396	Nov. 15	1939	513 514	61	1001
Duncan, David R., et al. (See Christopher, Calvin F., assignor.)						
Duncan, George N., Greenwich, Mass. Latch	480,075	Aug. 2	507	128 129	60	679
Duncan, George N., Greenwich, Mass. Tent	481,014	Aug. 16	2009	502	60	996
Duncan, George S., Melbourne, Victoria. Lubricator	473,064	Apr. 19	1624	414	59	334
Duncan, George S., Melbourne, Victoria. Hydraulic machinery	478,225	July 5	251	61, 62	60	51
Duncan, John A., et al. (See Livengood, Winfield S., assignor.)						
Duncan, John A., Kansas City, Mo. Grate-bar	474,116	May 3	362	86	59	707
Duncan, John W., et al. (See Barrett, George L., assignor.)						
Duncan, John W., and T. B. Quinby, Onancock, Va. Smoke stack and conductor	485,535	Nov. 1	581	156	61	692
Duncan, Louis, Baltimore, Md. Hydraulic variable-speed gear	466,660	Jan. 5	551	142 143	58	106
Duncan, Louis, Baltimore, Md. Hydraulic variable-speed gear	466,661	Jan. 5	553	143	58	107
Duncan, Louis, Baltimore, Md. Hydraulic variable-speed gear	466,662	Jan. 5	555	143 144	58	107
Duncan, Thomas C., et al. (See Christopher, Calvin F., assignor.)						
Duncan, Thomas J., et al. (See Ford, Charles S., Jr., assignor.)						
Dunfee, John C., Unionville Centre, assignor to R. E. Robinson, Plain City, Ohio. Dinner-bucket	480,184	Aug. 2	679	172	60	711
Dungey, Edward, Detroit, Mich. Game apparatus	484,950	Oct. 25	2246	579	61	492
Dunham, Charles H., deceased, Chicago, Ill.; D. F. Dunham, administratrix. Railway-tie plate	469,386	Feb. 23	2309	594	58	1002
Dunham, Charles H., deceased; D. T. Dunham, administratrix, and assignor to I. Veeder, trustee, Chicago, Ill. Sliding car-door	475,680	May 24	2845	720	59	1230
Dunham, Curtis, assignor of one-half to L. E. Stein, New York, N. Y. Suspenders	483,561	Feb. 9	1035	263	58	735
Dunham, Curtis, assignor to J. J. Wohlman and A. L. Gibbs, New York, N. Y. Transformation-box	478,536	July 5	738	180	60	146

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Dunham, Dorothy F., administratrix. (See Dunham, Charles H.)						
Dunham, Herbert F., New York, N. Y. Water or gas main	481,935	Sept. 6	24	6	60	1339
Dunham, Ira, Detroit, Mich. Fishing apparatus	478,579	July 12	798	197	60	173
Dunham, Thomas M., Ocean Grove, N. J. Combined inhaler and medicament-holder	482,083	Sept. 6	263	63	60	1387
Dunkirk Wagon Company. (See Munger and Capwell, assignors.)						
Dunks, George W., Hope, Kans. Feed-trough	478,052	June 28	2916	729	59	2055
Dunlap, Benjamin H., assignor to W. W. Dunlap, St. Louis, Mo. Socket-wrench	473,617	Apr. 26	2575	648 } 649	59	538
Dunlap, Charles A., Providence, R. I. Stage-fountain	469,683	Mar. 1	20	8	58	1102
Dunlap, Fred T. (See Evans and Dunlap.)						
Dunlap, Harley M., Battle Creek, Mich. Atomizer	483,435	Sept. 27	2454	617	60	1852
Dunlap, Will W., Detroit, Mich. Gearing for propelling cars	485,179	Nov. 1	38	13	61	580
Dunlap, William W. (See Dunlap, Benjamin H., assignor.)						
Dunlop, John B., Belfast, Ireland. Wheel for velocipedes	479,255	July 19	1834	460	60	384
Dunlop, John B., Belfast, assignor to Pneumatic Tyre and Booth's Cycle Agency, Limited, Dublin, Ireland. Tire for wheels of velocipedes	473,831	Apr. 26	2896	727	59	590
Dunmore, Frank H. (See Johnson, Albert, assignor.)						
Dunn, Andrew W., Pulaski, N. Y. Bicycle	478,156	July 5	127	32, 33	60	28
Dunn, Charles C., et al. (See Lassar, Zabby, assignor.)						
Dunn, Charles H. (See Siar and Dunn.)						
Dunn, Claudius A., assignor of three-sixths to W. Smith, W. A. C. McDonald, and B. Griffith, Denver, Colo. Car-coupling	475,268	May 17	2203	562 } 563 } 509 } 510	59	1091
Dunn, Dennis, Mahanoy City, Pa. Compressor for air-brakes	473,302	Apr. 19	2028	510	59	411
Dunn, Harry L., et al. (See Marshall, William M., assignor.)						
Dunn, Hugh V., Huntington, W. Va. Calculator	473,833	Apr. 26	2899	727	59	600
Dunn, J. W. (See Hall, Andrew J., assignor.)						
Dunn, Lawrence, Fort Smith, Ark. Electric signal for railway-trains	473,832	Apr. 26	2897	727	59	600
Dunn, Martin J., et al. (See Moore, George R., assignor.)						
Dunn, Patrick, Cleveland, Ohio. Incandescent-lamp socket	467,716	Jan. 26	2301	584	58	460
Dunn, Samuel W., et al. (See Marshall, William M., assignor.)						
Dunn, Sola B., Chicago, Ill. Veterinary surgical instrument	471,107	Mar. 22	2282	586	58	1570
Dunn, Thomas, London, England. Pneumatic tire	477,996	June 28	2829	708	59	2039
Dunn, William, New York, N. Y. Holdback for vehicles	487,828	Dec. 13	971	245	61	1532
Dunn, William A., et al. (See Welch, Rosia W., assignor.)						
Dunn, William J., Ben Avon, Pa. Extensible brace	485,342	Nov. 1	293	79	61	632
Dunn, William T., Pittsburg, Pa. Brace for excavations	483,737	Oct. 4	319	80	61	67
Dunne, Hugh T., New York, N. Y. Railway system	474,951	May 17	1711	435	59	994
Dunne, John J., Philadelphia, Pa. Nitrogenous fertilizer and making the same	484,631	Oct. 18	1707		61	369
Dunne, Thomas P., New York, N. Y. Broiler attachment for stoves	480,076	Aug. 2	508	129	60	679
Dunning, Jonah D., Athens, Pa. Pipe-hanger	476,227	May 31	3755	948	59	1421
Dunning, William B., Geneva, N. Y. Cattle-guard	470,556	Mar. 8	1441	375	58	1384
Duplex Printing Press Company. (See Cox, Joseph L., assignor.)						
Dupuis, George A., Detroit, Mich. Inclosed conductor for electric railways	482,343	Sept. 13	710	169	60	1488
Durand, Arthur H., assignor to J. G. Dagron, Baltimore, Md. Fire-extinguisher	470,293	Mar. 8	1018	260	58	1306
Durand & Co., Homer. (See Durand, Homer, assignor.)						
Durand, Homer, assignor to H. Durand & Co., Starkville, Colo. Mine-car	488,879	Dec. 27	2679	663	61	1904
Durand, Louis, New York, N. Y. Dough-kneading machine	485,096	Oct. 25	2474	636	61	538
Durand, Oliver. (See André and Durand.)						
Durand, William F., Lansing, Mich. Calipers	470,912	Mar. 15	1977	505	58	1499
Durant, Léon, and A. Lencauche, Paris, France. Steam-engine	485,614	Nov. 8	702	185	61	732
Durhen, Samuel, Brushton, Pa. Nut-lock	478,066	July 5	32	10	60	9
Durdilly, Louis, Paris, France. Machine for printing music	482,728	Sept. 20	1329	325	60	1621
Durfee, Edgar G. (See Gibson, Everett, assignor.)						
Durfee, Walter H. (See Harrington, John, assignor.)						
Durie, D. E. (See Begg, Alexander, assignor.)						
Durioux, Charles, assignor to W. H. Bofinger, New Orleans, La. Fan attachment for rocking-chairs	471,509	Mar. 22	2881	733	58	1684
Durkee, Edward H., Kenosha, Wis. Head-rest	485,374	Nov. 1	350	94	61	644
Durkee, George B., and D. Lanterman, Chicago, Ill. Harp	485,737	Nov. 8	903	242	61	774
Durkee, William C., Brookline, Mass. Medicament-receptacle for hypodermic syringes	468,001	Feb. 2	143	34	58	551
Durning, Joseph S., Emsworth, Pa. Tempering and hardening metals	475,725	May 24	2925		59	1244
Durr, Henry H., assignor to C. H. Childs & Co., Utica, N. Y. Hay-carrier	488,330	Dec. 20	1813	454	61	1716
Durr, Henry H., Utica, and H. D. Babcock, Leonardsville, assignors to said Babcock and C. H. Childs & Co., Utica, N. Y. Adjusting device for cultivators	479,754	July 26	2671	663	60	558
Durston, Herbert, Carlinville, Ill. Mole-trap	472,038	Apr. 5	40	8	59	10
Duryea, Edwin G., Riverhead, N. Y. Weather-strip	475,391	May 24	2400	613	59	1145
Duryea, George, Orange, N. J. Dredging-machine	471,108	Mar. 22	2283	586	58	1570
Dusang, John E., Larue, Ohio. Fence	471,682	Mar. 29	3133	798	58	1739
Dutcher Temple Company. (See Ayer, John C., assignor.)						
Dutcher Temple Company. (See Hatch, Charles J., assignor.)						
Dutchess Tool Company. (See Van Houten, Frank H., assignor.)						
Dutemple, William R., Providence, R. I. Rubber stamp	466,398	Jan. 5	136	38	58	28
Dutra, Theodore P., et al. (See Beckwith, Theodore A., assignor.)						
Dutton, Rufus, New York, N. Y. Machine for grinding mower-knives	481,275	Aug. 23	2477	610 } 611	60	1098
Dutton, Samuel T., Worcester, England. Signal and switch interlocking apparatus	488,805	Dec. 27	2567	637	61	1881
Dutton, William A., Cleveland, Ohio. Car-truck	469,011	Feb. 16	1755	447	58	887
Dutton, William H., Rochester, assignor to Buffalo Automatic Machine Company, Buffalo, N. Y. Coin-controlled machinery	484,908	Oct. 25	2178	560 } 561	61	479
Duval, Henry R., et al. (See Beal, William C., assignor.)						
Duval, Jennie P., Richmond, Mo. Bed-protector	473,065	Apr. 19	1625	415	59	335
Duval, Martin L. E., assignor to Compagnie de Fives-Lille, Paris, France. Automatic regulator for air-brakes	486,703	Nov. 22	2427	632	61	1110
Duval, James M., et al. (See Brown, William T., assignor.)						
Duval, William S. (See Fields and Duval.)						
Duval, William S. (See Miller and Duval.)						
Duvinage, Louis, Brooklyn, N. Y. Bolster for beams	468,062	Feb. 2	232	57	58	569
Dwigans, Andrew B., Chicago, Ill. Perpetual calendar and key-ring	474,725	May 10	1349	342	59	908
Dwiggins, John W., Frankton, assignor of one-half to J. V. Keck, Arcadia, Ind. Wire fence	474,952	May 17	1713	436	59	994
Dwight, Lorenzo, and A. A. Jepson, San Francisco, Cal. Waste-water gate for washing-machines	472,530	Apr. 12	826	210	59	170
Dwinnell, David C., et al. (See Gunn, John A., assignor.)						
Dworshak, Fred, Beaver Falls, Minn. Feeder and cutter for thrashing-machines	480,254	Aug. 9	809	207	60	747

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Dwyer, Cornelius. (See Reid, Andrew, assignor.)						
Dwyer, Daniel C., assignor of two-thirds to R. C., Jr., and W. A. Stewart, Wichita, Kans. Spring-heel horseshoe	482,998	Sept. 20	1759	444	60	1705
Dwyer, John, Texarkana, Tex. Convertible trunk	471,768	Mar. 29	3269	835	58	1764
Dwyer, John T., Montreal, Canada. Trunk	477,795	June 28	2509	629 630	59	1976
Dye, Emery C. (See Merkins, Jacob S., assignor.)						
Dye, John Y., Knowles, La. Cotton-chopper	487,725	Dec. 13	799	204	61	1496
Dye, William A., Jr. (See Morrison and Dye.)						
Dyer, Alonzo, Odessa, Mo. Cultivator attachment	482,729	Sept. 20	1331	326	60	1621
Dyer, Arthur H. S., Schenectady, assignor to E. Munsell & Co., New York, N. Y. Making artificial mica sheets for electrical insulation	483,646	Oct. 4	192	48	61	40
Dyer, Charles M., Cloverdale, Ind. Telegraph-relay	470,557	Mar. 8	1443	375	58	1384
Dyer, Edward F. and H. P., Cleveland, Ohio. Diffusion apparatus	480,812	Aug. 16	1701	424	60	935
Dyer, George F. (See Richardson and Dyer.)						
Dyer, Harold P. (See Dyer, Edward F. and H. P.)						
Dyer, Henry C. S., Westhope, assignor to W. G. Armstrong, Mitchell & Co., Limited, Newcastle, England. Manufacturing steel	466,927	Jan. 12	1010	.....	58	201
Dyer, Isaac T., assignor of two-thirds to R. O. Burke and J. R. Coffey, Chicago, Ill. Fluid-pressure apparatus	474,059	May 3	285	69	59	692
Dyer, Isaac T., assignor of two-thirds to R. O. Burke and J. R. Coffey, Chicago, Ill. Automatic water-lifting apparatus	474,338	May 3	731	191	59	777
Dyer, Nelson M., Toledo, Ohio, assignor of one-half to A. E. Fawcett, Toronto, Canada. Disinfecting device	471,602	Mar. 29	3012	767	58	1717
Dyer, Nelson M., Toledo, Ohio, assignor of one-half to A. E. Fawcett, Toronto, Canada. Disinfecting apparatus	471,603	Mar. 29	3013	767	58	1717
Dyer, Nelson M., assignor to A. and E. Bonrlrier, Louisville, Ky. Catamenial sack	478,053	June 28	2917	729	59	2055
Dyer, Richard N., East Orange, N. J., assignor to American Bell Telephone Company, Boston, Mass. Telephone system	481,483	Aug. 23	2816	692	60	1161
E. C. Atkins & Company. (See Black, George S., assignor.)						
E. Howard Watch and Clock Company. (See James, William H., assignor.)						
E. & H. T. Anthony & Company. (See Anthony and Lewis, assignors.)						
E. & H. T. Anthony & Company. (See Hare, James H., assignor.)						
E. & H. T. Anthony & Company. (See Lewis, William H., assignor.)						
E. J. Brooks & Company. (See Brooks, Edward J., assignor.)						
E. Kempshall Company. (See Kempshall, Eleazer, assignor.)						
E. L. Bushnell Spring Company. (See Bushnell, Edwin L., assignor.)						
E. L. Bushnell Spring Company. (See Bushnell and Dryer, assignors.)						
E. N. Gates Heating Company. (See Gates, Fannie A. and E. N., assignors.)						
E. N. Gates Heating Company. (See Gates, John N. and E. N., assignors.)						
E. W. Bliss Company. (See Pollard, Charles E., assignor.)						
Eacker, James S., Fultonville, N. Y. Game apparatus	466,868	Jan. 12	914	234	58	183
Eacrett, George K., Solomon, Iowa. Propeller	471,604	Mar. 29	3015	767	58	1717
Eads, John W., Dallas, Tex. Locomotive ash-pan	482,235	Sept. 6	508	121	60	1434
Eager, William A. W., West Gardner, Mass. Velocipede	479,792	Aug. 2	27	7	60	587
Eagle Lock Company. (See Roche, James, assignor.)						
Eagle Manufacturing Company. (See King and Stokely, assignors.)						
Eagle Pencil Company. (See Boman, Claes W., assignor.)						
Eagle Pencil Company. (See Fischer, Frederick J. W., assignor.)						
Eagle Pencil Company. (See Kaiser, August, assignor.)						
Eagle Pencil Company. (See McIntyre, Frank, assignor.)						
Eagle Pencil Company. (See Pusey, Joshua, assignor.)						
Eagleson, William H., Hopedale, Ohio. Brake mechanism for wagons	485,916	Nov. 8	1160	307	61	826
Eames, Charles J., New York, N. Y. Reduction of iron ore	479,408	July 26	2095	.....	60	450
Eames, Henry H., Baltimore county, Md., assignor to Eames Purifying and Separating Company, of West Virginia. Separating iron from ores	484,877	Oct. 25	2122	.....	61	467
Eames Purifying and Separating Company. (See Eames, Henry H., assignor.)						
Earl, William S., et al. (See McKinney, Samuel C., assignor.)						
Earle, Henry C., New York, N. Y., assignor to Earle Portable Steam Heater Company, of New Jersey. Gas-heater	471,211	Mar. 22	2443	621	58	1601
Earle, Henry E., assignor of one-half to J. Baker, Sidney, Ohio. Gas-burner for stoves, grates, &c.	469,881	Mar. 1	344	88	58	1168
Earle, John, Primos, Pa. Penmanship-guide	472,751	Apr. 12	1142	293	59	228
Earle, Morris, et al. (See Bellati, Anthony J., assignor.)						
Earle Portable Steam Heater Company. (See Earle, Henry C., assignor.)						
Earle, Theodore O., New York, N. Y. Penholder	469,684	Mar. 1	21	8	58	1103
Earnest, George H., assignor of one-half to Rogers Fence Company, Springfield, Ohio. Hay-tedder	467,224	Jan. 19	1507	385 386	58	303
Eason, Henry K. (See Fitzgibbons and Eason.)						
East, George W., Heltonville, Ind. Horseshoe	467,859	Jan. 26	2526	640	58	503
Easterlin, John D. (See Wotton, James A., assignor.)						
Eastham, Charles L., Medora, Ill., assignor of two-thirds to W. M. Eccles, St. Louis, Mo., and G. T. Wright, Medora, Ill. Thrashing-machine attachment	470,639	Mar. 8	1559	406	58	1409
Eastman Company. (See Brownell, Frank A., assignor.)						
Eastman Company. (See Eastman, George, assignor.)						
Eastman Company. (See Edwards, Benjamin J., assignor.)						
Eastman, George, assignor, by mesne assignments, to Eastman Company, Rochester, N. Y. Machine for forming flexible photographic films	471,469	Mar. 22	2828	720 721	58	1674
Eastman, George, assignor, by mesne assignments, to Eastman Kodak Company, Rochester, N. Y. Camera-shutter	486,397	Nov. 15	1941	514	61	1001
Eastman, Joseph H., et al. (See Ethridge, Martin V. B., assignor.)						
Eastman Kodak Company. (See Eastman, George, assignor.)						
Eastman Kodak Company. (See Pierce, Arthur M., assignor.)						
Eastman Kodak Company. (See Reichenbach, Henry M., assignor.)						
Eastman, Lucius R., Boston, Mass. Ventilated shoe	485,180	Nov. 1	40	13	61	580
Eastman, Olaf, San Francisco, Cal. Water-filter	478,157	July 5	129	33	60	28
Eastman, William E., Boston, Mass. Automatic refrigerator	469,296	Feb. 23	2174	558	58	975
Eastman, William E., Boston, Mass. Thermostatic governor and motor	476,372	June 7	231	56	59	1481
Eastman, William E., Boston, Mass. Sliding-door lock and fixture	476,373	June 7	234	57	59	1482
Eastman, William E., Boston, Mass. Recording-thermometer	476,374	June 7	235	57	59	1482
Eastman, William H., assignor, by mesne assignments, to Pulsion Telephone Company, Concord, N. H. Mechanical telephone	469,203	Feb. 16	2029	518	58	939
Eastman, William J., Waterville, N. Y. Electric cigar-lighting lamp	481,692	Aug. 30	3147	768	60	1241

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Easton & Burnham Machine Company. (See Easton, Nicholas H., assignor.)						
Easton, Edward D. (See Douglass, Leon F., assignor.)						
Easton, Lucien F., La Crosse, Wis. Temperature-regulator	472,255	Apr. 5	390	102	59	72
Easton, Lucien F., La Crosse, Wis. Temperature-regulator	472,256	Apr. 5	391	102	59	73
Easton, Nicholas H., Central Falls, assignor to Easton & Burnham Machine Company, Pawtucket, R. I. Bobbin-holder for spooling-machines	470,558	Mar. 8	1444	375	58	1384
Eastwick, Edward P., Jr., New York, N. Y. Car-coupling	475,682	May 24	2849	720	59	1231
Eastwick, Edward P., Jr., New York, N. Y. Car-coupling	475,683	May 24	2850	721	59	1231
Eastwood, Benjamin. (See Brooks, John C., assignor.)						
Eastwood, Benjamin. (See Risk, Robert J., assignor.)						
Eaton, Andrew L. (See Harman and Eaton.)						
Eaton, Charles H., Batavia, Ill. Anchor	477,745	June 28	2428	607	59	1963
Eaton & Co., George H. (See Eaton and Barber, assignors.)						
Eaton, Enoch C., Pinckneyville, Ill., and F. C. Damm, Findlay, assignors to Cleveland Target Company, Cleveland, Ohio. Target-trap	469,904	Mar. 1	379	95	58	1174
Eaton, Francis M., West Tremont, Me. Center-board for boats	481,484	Aug. 23	2818	692	60	1162
Eaton, George H., and E. E. Barber, assignors to G. H. Eaton & Co., Boston, Mass. Clutch	475,232	May 17	2160	548 549	59	1081
Eaton, George M. (See Baker, Homer M., assignor.)						
Eaton, Howard F. (See Neal and Eaton.)						
Eaton, Howard F., Quincy, Mass. Electric signal system	468,107	Feb. 2	299	72, 73	58	582
Eaton, Marshall F., Chicago, Ill. Boiler-setting	484,878	Oct. 25	2123	546	61	467
Eaton, S. A. D. (See Jackson, John A. C., assignor.)						
Eaton, William A., Marcellus, Mich. Sectional desk	484,357	Oct. 11	1272	324	61	271
Eavenson, Frank V., Philadelphia, Pa. Candlestick	473,149	Apr. 19	1768	447	59	360
Eayrs, Winslow P., assignor of one-half to F. A. McKean, Nashua, N. H. Rheostat	478,276	July 5	343	83	60	69
Eberhard, John J., assignor to Clauss Shear Company, Fremont, Ohio. Knife	485,264	Nov. 1	165	48	61	607
Eberhardt, Louis A., Brooklyn, N. Y. Bottle-stopper	477,202	June 21	1538	376	59	1771
Eberhardt, William C., Plymouth, Wis. Milk-cooler	479,494	July 26	2261	567	60	482
Ebersohl, Philip J., Centreville Station, Ill. Turning-plow	488,880	Dec. 27	2680	663 664	61	1905
Ebert, John L., Farmington, N. Y. Sash-fastener	479,409	July 26	2096	525	60	450
Ebert, William, Chicago, Ill. Electrical annunciator	468,170	Feb. 2	397	99	58	601
Ebi, Edward, Cedar Rapids, Iowa. Dental plugger	470,184	Mar. 8	830	205	58	1269
Ecanbert, Frederic. (See Wilhelm, Charles, assignor.)						
Eccles, William M., et al. (See Eastham, Charles L., assignor.)						
Eccleston, Noyes B., Oxford, assignor of one-half to E. Smith, Elmira, N. Y. Cuff-holder	472,343	Apr. 5	532	138	59	99
Echols, Frank G., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Suspension device for lamps	479,874	Aug. 2	150	37	60	611
Eckels, George M., Chicago, Ill. Type-writing machine	466,490	Jan. 5	287	73 74 75	58	55
Eckenroth, Philip, Jr., Philadelphia, Pa. Tube-scraper	467,028	Jan. 12	1167	296	58	230
Ecker, George F. (See Ecker, Henry J. and G. F.)						
Ecker, Henry J. and G. F., Philadelphia, Pa. Soap	480,840	Aug. 16	1739		60	943
Ecker, Henry J. and G. F., Philadelphia, Pa. Composition of matter for cleaning brown-stone, &c	483,143	Sept. 27	1986		60	1762
Ecker, James S., assignor of five-eighths to J. S. and J. Laidlaw, Portland, Oreg. Furnace	486,704	Nov. 22	2429	633	61	1110
Eckerle, Charles E. (See Simms, Alonzo H., assignor.)						
Eckerson, Albert W., Schenectady, N. Y. Door-guard	472,110	Apr. 5	160	43	59	30
Eckerson, David I., Worcester, N. Y. Printing-press	483,377	Sept. 27	2372	594 595 596	60	1836
Eckert, Jacob E., Marengo, Iowa. Balance-wheel pliers and calipers	481,936	Sept. 6	26	6	60	1339
Eckert, John C., assignor to Dicks & Wiggin, Dayton, Ohio. Sealing-wax mold	483,512	Sept. 27	2563	643	60	1874
Eckert, Otto C., and L. Cohen, Providence, R. I. Mother-of-pearl articles and making the same	482,548	Sept. 13	1058	257	60	1556
Eckert, Thomas T., New York, N. Y. Galvanic battery	482,425	Sept. 13	852	204	60	1515
Eckes, John, and A. W. Crone, Jersey City, N. J. Ash-sifter	474,063	May 3	321	76	59	699
Eckhardt, Jacob, St. Louis, Mo. Apparatus for consumption of sewer-gas	481,108	Aug. 16	2174	538	60	1027
Eclipse Bicycle Company. (See Morrow, Alexander P., assignor.)						
Eclipse Wind Engine Company. (See Ford and Ferguson, assignors.)						
Economic Advertising Company. (See Webb, Alfred E., assignor.)						
Economic Feed Bag Company. (See Ehrhardt, William, assignor.)						
Economic Gas and Coke Company. (See Jones, Frederick J., assignor.)						
Economist Plow Company. (See Tower, Caleb E., assignor.)						
Eddishaw, Henry, Ilion, N. Y. Burring and napping attachment for knitting-machines	469,128	Feb. 16	1901	486 487	58	916
Eddleman, Dudley E. and R. C. Weatherford, Tex. Washing-machine	469,234	Feb. 23	2076	534	58	957
Eddleman, Richard C. (See Eddleman, Dudley E. and R. C.)						
Eddy, Arthur H. (See Burton, Eddy, and Briggs.)						
Eddy, George A. (See Nash and Eddy.)						
Eddy, Oscar H., assignor to W. Eddy & Sons, Greenwich, N. Y. Foot-latch for reversible plows	480,077	Aug. 2	509	129	60	679
Eddy & Sons, W. (See Eddy, Oscar H., assignor.)						
Eddy, William W. (See Connors and Eddy.)						
Edelmann, Bernhard. (See Roessler, Heinrich, assignor.)						
Edenborn, William, St. Louis, Mo. Machine for coiling wire	480,564	Aug. 9	1300	326	60	842
Edenborn, William, St. Louis, Mo. Machine for coiling wire	480,565	Aug. 9	1301	326	60	843
Edgar, Butler, Sunbury, Pa. Axle-lubricator	466,399	Jan. 5	138	38	58	28
Edgar, Butler, Sunbury, Pa. Nut-lock	468,315	Feb. 2	636	158 159	58	647
Edgar, Butler, Sunbury, Pa. Lubricating-packing	485,265	Nov. 1	166	48	61	607
Edgar, Butler, and L. T. Rohrbach, assignors to said Rohrbach, J. Haas, Sunbury, C. O. McWilliams, W. C. McConnell, and G. O. Martz, Shamokin, Pa. Mail-pouch	472,963	Apr. 12	1447	369 370	59	289
Edgar, Charles F., Wilkes-Barre, Pa. Torpedo-placer	487,917	Dec. 13	1121	279	61	1560
Edgar, Charles H., trustee. (See Hawes, Herbert E., assignor.)						
Edgar, Charles H., trustee. (See Young, Josiah L., assignor.)						
Edgar, Daniel, Adrian, Mich. Spring bed-bottom	469,836	Mar. 1	274	71	58	1154
Edgar, Dennis P., Manchester, Mich. Refrigerator-building	475,851	May 31	3146	798	59	1301
Edgar, Ellis F., Woodbridge, N. J. Vapor generator and burner	469,685	Mar. 1	23	8	58	1101
Edgar, Ellis F., Woodbridge, N. J. Furnace	478,319	July 5	405	98	60	81
Edgar, Ellis F., Woodbridge, N. J. Steam-boiler	478,320	July 5	407	98	60	82
Edgar, John, Rochester, Minn. Whiffletree	469,736	Mar. 1	105	28	58	1120

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Edgar, John, Rochester, Minn. Whiffletree.	483,604	Oct. 4	131	32, 33	61	28
Edgar, John, Rochester, Minn. Whiffletree.	486,092	Nov. 15	1463	387	61	906
Edgar, Selwyn C., St. Louis, Mo. Furnace for smelting zinc ores.	476,789	June 14	851	210	59	1620
Edgar, Silas D., assignor of one-fourth to C. McDonald, Wilkes-Barré, Pa. Torpedo-placer.	467,926	Feb. 2	36	8	58	533
Edgar, William, assignor to Sanford Foundry and Machine Works, Sanford, Fla. Molding-machine.	480,566	Aug. 9	1302	326	60	843
Edge, James, assignor of one-half to S. H. Brooks, Gorton, England. Carding-engine for grinding revolving flats when in situ.	481,228	Aug. 23	2389	{ 589 590 }	60	1082
Edge, William C., Montrose, N. J. Jeweler's spring-snap.	472,616	Apr. 12	943	243	59	193
Edge, William C., Montrose, N. J. Link attachment for buttons, &c.	485,320	Nov. 1	258	70	61	625
Edge, William C., Montrose, N. J. Buckle for reins.	487,474	Dec. 6	403	104	61	1400
Edgerly, Joseph H., Morrilton, Ark. Churn-dasher.	474,117	May 3	363	87	59	707
Edgerly, Joseph H., Morrilton, Ark. Combined fishing-rod and cane.	475,852	May 31	3150	799	59	1302
Edgerly, Sylvester A., et al. (See Morrill, George W., assignor.)						
Edie, James P. (See Mars, Charles P., assignor.)						
Edinger, Joseph H. (See Brolin, Peter, assignor.)						
Edison Electric Light Company. (See Edison, Thomas A., assignor.)						
Edison Electric Light Company. (See Edison and Ott, assignors.)						
Edison General Electric Company. (See Andrews, William S., assignor.)						
Edison General Electric Company. (See Andrews and Ball, assignors.)						
Edison General Electric Company. (See Ball, Henry P., assignor.)						
Edison General Electric Company. (See Dobbie, Robert S., assignor.)						
Edison General Electric Company. (See Goold, Frederick D., assignor.)						
Edison General Electric Company. (See Henderson and Phelps, assignors.)						
Edison General Electric Company. (See Howell, John W., assignor.)						
Edison General Electric Company. (See Hutchinson, Cary T., assignor.)						
Edison General Electric Company. (See Hutchinson, Joseph, assignor.)						
Edison General Electric Company. (See Kennelly, Arthur E., assignor.)						
Edison General Electric Company. (See Kennelly and Ott, assignors.)						
Edison General Electric Company. (See Kolben, Emil, assignor.)						
Edison General Electric Company. (See Melick, George F., assignor.)						
Edison General Electric Company. (See Meyer and Binder, assignors.)						
Edison General Electric Company. (See Ott and Kennelly, assignors.)						
Edison General Electric Company. (See Parshall, Horace F., assignor.)						
Edison General Electric Company. (See Robb, James T., assignor.)						
Edison General Electric Company. (See Scheffbauer, Rupert, assignor.)						
Edison General Electric Company. (See Sprague, Frank J., assignor.)						
Edison General Electric Company. (See Weber, August, assignor.)						
Edison Phonograph Company. (See Edison, Thomas A., assignor.)						
Edison, Thomas A. (See Ott, John F., assignor.)						
Edison, Thomas A., Menlo Park, N. J. Electrolytic decomposition.	466,460	Jan. 5	243	61	58	46
Edison, Thomas A., Menlo Park, N. J. Manufacture of filaments for incandescent lamps.	470,922	Mar. 15	1992		58	1501
Edison, Thomas A., Menlo Park, N. J. System of electrical distribution.	476,529	June 7	458	109	59	1527
Edison, Thomas A., Menlo Park, N. J. Telephone-repeater.	478,743	July 12	1037	255	60	221
Edison, Thomas A., Llewellyn Park, N. J. Converter system for electric railways.	468,949	Feb. 16	1636	417	58	863
Edison, Thomas A., Llewellyn Park, N. J. Commutator-brush for electric motors and dynamos.	468,950	Feb. 16	1638	417	58	863
Edison, Thomas A., Llewellyn Park, N. J. Railway signaling.	470,923	Mar. 15	1993	509	58	1501
Edison, Thomas A., Llewellyn Park, N. J. Electric conductor.	470,924	Mar. 15	1994	510	58	1501
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of filaments for incandescent electric lamps.	479,925	Mar. 15	1995	510	58	1502
Edison, Thomas A., Llewellyn Park, N. J. Dynamo-electric machine or motor.	470,926	Mar. 15	1996	510	58	1502
Edison, Thomas A., Llewellyn Park, N. J. Driving mechanism for cars.	470,927	Mar. 15	1997	{ 510 511 }	58	1502
Edison, Thomas A., Llewellyn Park, N. J. Alternating-current generator.	470,928	Mar. 15	1999	511	58	1503
Edison, Thomas A., Llewellyn Park, N. J. Magnetic separator.	470,929	Mar. 15	2000	512	58	1503
Edison, Thomas A., Llewellyn Park, N. J. Dynamo-electric machine.	470,930	Mar. 15	2001	512	58	1503
Edison, Thomas A., Llewellyn Park, N. J. Ore-conveyer and arranging ore thereon.	471,268	Mar. 22	2528	642	58	1616
Edison, Thomas A., Llewellyn Park, N. J. Dust-proof bearing for shafts.	472,288	Apr. 5	440	113	59	83
Edison, Thomas A., Llewellyn Park, N. J. Dust-proof journal-bearing.	472,752	Apr. 12	1144	293	59	228
Edison, Thomas A., Llewellyn Park, N. J. Ore-screening apparatus.	472,753	Apr. 12	1144	293	59	229
Edison, Thomas A., Llewellyn Park, N. J. Extracting gold from sulphide ores.	474,591	May 10	1138		59	867
Edison, Thomas A., Llewellyn Park, N. J. Ore-conveying apparatus.	474,592	May 10	1139	290	59	867
Edison, Thomas A., Llewellyn Park, N. J. Dust-proof swivel-shaft bearing.	474,593	May 10	1140	290	59	867
Edison, Thomas A., Llewellyn Park, N. J. Incandescent electric lamp.	476,530	June 7	459	109	59	1528
Edison, Thomas A., Llewellyn Park, N. J. Ore-screening apparatus.	476,532	June 7	462	110	59	1528
Edison, Thomas A., Llewellyn Park, N. J. Pyromagnetic generator.	476,963	June 14	1176	285	59	1684
Edison, Thomas A., Llewellyn Park, N. J. Expandable pulley.	476,984	June 14	1179	285	59	1685
Edison, Thomas A., Llewellyn Park, N. J. Trolley for electric railways.	476,985	June 14	1179	285	59	1685
Edison, Thomas A., Llewellyn Park, N. J. Means for propelling electric cars.	476,986	June 14	1180	{ 285 286 }	59	1685
Edison, Thomas A., Llewellyn Park, N. J. Electric locomotive.	476,987	June 14	1182	286	59	1686
Edison, Thomas A., Llewellyn Park, N. J. Lightning-arrester.	476,988	June 14	1183	286	59	1686
Edison, Thomas A., Llewellyn Park, N. J. Conductor for electric railways.	476,989	June 14	1184	{ 286 287 }	59	1686
Edison, Thomas A., Llewellyn Park, N. J. Electric meter.	476,990	June 14	1185	287	59	1686
Edison, Thomas A., Llewellyn Park, N. J. Method of and apparatus for separating ores.	476,991	June 14	1187	288	59	1687
Edison, Thomas A., Llewellyn Park, N. J. Incandescent electric lamp.	476,992	June 14	1188	288	59	1687
Edison, Thomas A., Llewellyn Park, N. J. Electric-arc lamp.	476,993	June 14	1189	{ 288 289 }	59	1688
Edison, Thomas A., Llewellyn Park, N. J. Electrical depositing-meter.	484,183	Oct. 11	990	253	61	216
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of carbon filaments.	484,184	Oct. 11	991	253	61	216
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of carbon filaments.	484,185	Oct. 11	992	254	61	216
Edison, Thomas A., Llewellyn Park, N. J. Phonograph cutting-tool.	484,583	Oct. 18	1627	413	61	353
Edison, Thomas A., Llewellyn Park, N. J. Phonograph-reproducer.	484,584	Oct. 18	1628	413	61	353
Edison, Thomas A., Llewellyn Park, N. J. Phonograph.	484,585	Oct. 18	1629	413	61	353
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of carbon filaments.	485,615	Nov. 8	703	185	61	733
Edison, Thomas A., Llewellyn Park, N. J. Manufacture of carbon filaments.	485,616	Nov. 8	704		61	733
Edison, Thomas A., Llewellyn Park, N. J. Incandescent-lamp filament.	485,617	Nov. 8	705		61	733
Edison, Thomas A., Llewellyn Park, N. J. Bricking fine iron ores.	485,840	Nov. 8	1036		61	801
Edison, Thomas A., Llewellyn Park, N. J. Magnetically separating ores.	485,841	Nov. 8	1037		61	801
Edison, Thomas A., Llewellyn Park, N. J. Magnetic-ore separation.	485,842	Nov. 8	1038		61	801
Edison, Thomas A., Llewellyn Park, N. J. Phonogram-blank.	488,191	Dec. 20	1580	396	61	1671

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telegraph.....	474,230	May 3	534	130	59	741
Edison, Thomas A., Menlo Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telegraph.....	474,231	May 3	535	130	59	741
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. System of electric lighting.....	476,527	June 7	455	108	59	1527
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Incandescent electric lamp.....	476,528	June 7	457	109	59	1527
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric-lighting system.....	476,531	June 7	461	109	59	1528
Edison, Thomas A., Menlo Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Means for controlling electric generation.....	482,549	Sept. 13	1059	257	60	1556
Edison, Thomas A., Menlo Park, N. J., and P. Kenny, New York, N. Y. Fac-simile telegraph.....	479,184	July 19	1728	433 434	60	363
Edison, Thomas A., Menlo Park, N. J., and E. T. Gilliland, Boston, Mass., assignors, by mesne assignments, to Consolidated Railway Telegraph Company, of New York. System of railway signaling.....	486,634	Nov. 22	2311	603 604	61	1087
Edison, Thomas A., Llewellyn Park, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Speaking-telegraph.....	474,232	May 3	536	131	59	741
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric locomotive.....	475,491	May 24	2559	652	59	1175
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric locomotive.....	475,492	May 24	2562	652	59	1175
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric locomotive.....	475,493	May 24	2563	653	59	1175
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Electric Light Company, New York, N. Y. Electric railway.....	475,494	May 24	2565	653	59	1176
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Phonograph Company, of New Jersey. Duplicating phonograms.....	484,582	Oct. 18	1625	413	61	353
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Phonograph Company, of New Jersey. Phonograph.....	488,189	Dec. 20	1578	395	61	1670
Edison, Thomas A., Llewellyn Park, N. J., assignor to Edison Phonograph Company, of New Jersey. Phonograph-reproducer.....	488,190	Dec. 20	1579	396	61	1670
Edison, Thomas A., Llewellyn Park, and J. F. Ott, Newark, N. J., assignors to Edison Electric Light Company, New York, N. Y. Cut-out for incandescent lamps.....	466,460	Jan. 5	139	38	58	28
Edison, Thomas A., Newark, N. J., assignor, by mesne assignments, to Western Union Telegraph Company. Duplex telegraph.....	480,567	Aug. 9	1305	326	60	844
Edler, Francis, Chicago, Ill. Tobacco-pipe.....	486,093	Nov. 15	1469	387	61	906
Edlin, Robert, Leicester, England. Wheel-tire.....	486,191	Nov. 15	1613	428	61	935
Edmiston, James B., Liverpool, England. Filtering or purifying feed-water.....	481,109	Aug. 16	2175	539	60	1027
Edmiston, Leslie, Bangor, Pa. Combined washer and nut-lock.....	474,421	May 17	1506	385	59	953
Edmond, William J., and T. J. Keon, Philadelphia, Pa. Shade for incandescent electric lamps.....	479,207	July 19	1761	441 442	60	369
Edsall, William H. (See Steele, Elijah F., assignor.)						
Edsall, William H., Brooklyn, N. Y. Adjustable joint for display-frames.....	473,919	May 3	55	10	59	646
Edward Best Car Axle Box and Lubricator Company. (See Spencer, Henry B., assignor.)						
Edward Miller & Company. (See Baldwin, George W., assignor.)						
Edward Miller & Company. (See Homan, William C., assignor.)						
Edward Miller & Company. (See Johnson, John I., assignor.)						
Edward Miller & Company. (See Rhind, Frank, assignor.)						
Edward Miller & Company. (See Williams, Frank T., assignor.)						
Edward P. Allis Company. (See Gray, William D., assignor.)						
Edward P. Allis Company. (See Hinkley, George M., assignor.)						
Edward P. Allis Company. (See Steiger, Alphons, assignor.)						
Edward P. Allis & Company. (See Wardhaugh, Richard E., assignor.)						
Edwards, Archer. (See Edwards, Richard J. and A.)						
Edwards, Archer and R. J., London, England. Machinery or apparatus for cutting paper or other substances into sheets.....	473,731	Apr. 26	2746	691 692	59	570
Edwards, Archer and R. J., London, England. Machine for straightening and winding cloth, &c.....	478,255	July 5	312	76	60	63
Edwards, Basil, Ashleworth, England. Tile.....	467,791	Jan. 26	2410	614	58	482
Edwards, Benjamin J., London, England, assignor to Eastman Company, Rochester, N. Y. Photographic camera.....	472,257	Apr. 5	393	102	59	73
Edwards, Daniel, Morriston, England. Apparatus for manufacturing tin-plate.....	486,635	Nov. 22	2313	604 605	61	1087
Edwards, Daniel R., assignor of one-half to M. D. La Due, Saginaw, Mich. Block-sawing machine.....	474,233	May 3	538	131 132	59	741
Edwards, David, Melbourne, Victoria. Plow.....	471,420	Mar. 22	2757	704	58	1661
Edwards, Edgar A., Cincinnati, Ohio. Steam-motor.....	485,536	Nov. 1	584	156 157	61	692
Edwards, Edgar A., Cincinnati, Ohio. Electric-arc lamp.....	485,537	Nov. 1	588	157 158	61	693
Edwards, Edward J. (See Caldwell, Edward P., assignor.)						
Edwards, Frederick. (See Wilkes and Edwards.)						
Edwards, Harry. (See Smallfield and Edwards.)						
Edwards, James, assignor to Peru Plow and Wheel Company, Peru, Ill. Wheel-hub.....	469,235	Feb. 23	2077	534	58	957
Edwards, John J. (See Edwards, Thomas, Jr., and J. J.)						
Edwards, Joseph H., Giddings, Tex. Insect-trap.....	473,920	May 3	56	10	59	647
Edwards, Oliver, et al. (See Myers, Orlando R., assignor.)						
Edwards, Oliver M., Syracuse, N. Y. Window.....	482,344	Sept. 13	711	170	60	1489
Edwards, Richard J. (See Edwards, Archer and R. J.)						
Edwards, Richard J., Galena, Ill. Scraper attachment for shovels.....	475,208	May 17	2112	534	59	1072
Edwards, Richard J. and A., London, England. Machinery or apparatus for grinding and polishing tubes or bars.....	469,910	Mar. 1	391	98	58	1176
Edwards, Robert. (See Lungen, Adam, assignor.)						
Edwards, Samuel H., Bayonne, N. J. Box-nailing machine.....	482,866	Sept. 20	1539	383 384 385	60	1663
Edwards, Thomas, Jr., and J. J., Grand Rapids, Mich. Screw-driver.....	487,946	Dec. 13	1165	291	61	1569
Edwards, William C. (See Taylor and Edwards.)						
Edwards, William J. (See McCain, Joseph, assignor.)						
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Velocipede.....	469,883	Mar. 1	348	89	58	1168

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr &c	Vol.	Page.
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Velocipede-wheel.	470,185	Mar. 8	832	205	58	1270
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Velocipede.	475,207	May 17	2110	534	59	1072
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Safety bicycle.	475,444	May 24	2480	632	59	1159
Edwards, William J., assignor to Union Manufacturing and Plating Company, Chicago, Ill. Velocipede.	475,445	May 24	2482	633 634	59	1160
Edwards, William J., and F. R. Barclay, Youngstown, Ohio. Hook and eye.	482,867	Sept. 20	1548	386	60	1664
Edwards, William S., Charleston, W. Va. Type-writing machine.	482,519	Sept. 13	1010	245	60	1546
Edwards, William S., Charleston, W. Va. Car-coupling.	488,065	Dec. 13	1381	343	61	1614
Edwards, Willie M., Atlanta, Ga. Car-coupling.	475,269	May 17	2205	563	59	1091
Eells, Dan P. (See Morrison, Robert T., Jr., assignor.)						
Effront, Jean, assignor to Société Générale de Maltose, Brussels, Belgium. Fermenting.	478,418	July 5	551		60	108
Egan, Charles E. (See Johnston and Egan.)						
Egan Company. (See Bugbee and Danner, assignors.)						
Egan, John R., New York, N. Y. Cabinet for coal and wood.	475,303	May 24	2255	581	59	1117
Egan, Michael C., North La Crosse, Wis. Combined seeder and gang-plow.	471,050	Mar. 15	2183	562	58	1538
Eger, William, assignor to himself, G. W. and C. H. Francisco, Brooklyn, N. Y. Sheave for sliding doors.	467,735	Jan. 26	2329	591	58	465
Egelston, Edgar A., Easton, Md. Washing-machine.	478,926	July 12	1316	327	60	276
EGge, Frederick, Bridgeport, Conn. Machine for setting lacing-hooks.	480,185	Aug. 2	680	172 173	60	711
EGge, Frederick, Bridgeport, Conn., assignor to Smidt & Pupke Manufacturing Company, New York, N. Y. Machine for making lacing-hooks.	473,215	Apr. 19	1887	475 476	59	382
EGge, Frederick, Bridgeport, Conn., assignor to Smidt & Pupke Manufacturing Company, New York, N. Y. Machine for setting lacing-hooks.	476,006	May 31	3383	852 853 854	59	1348
EGge, Frederick, assignor of two-thirds to C. E. and O. C. Smith, Bridgeport, Conn. Bicycle-lock.	481,390	Aug. 23	2662	652 653	60	1130
Eggers, Anton C., Brooklyn, N. Y. Sinkers for syringe-tubes.	475,495	May 24	2568	654	59	1176
Eggers, William. (See Mueller, Matchett, and Eggers.)						
Eggleston, Harvey B., Brock, Mo. Churn.	471,109	Mar. 22	2285	587	58	1571
Eggleston, Joseph W., Ithaca, N. Y. Breast-collar.	472,866	Apr. 12	1297	333	59	259
Egler, John H., Knoxville, Pa. Carpet-stretcher.	468,333	Feb. 9	676	167	58	664
Eglin, William, assignor of one-half to J. L. Hill, Philadelphia, Pa. Urinal and patrol-box.	478,505	July 5	683	166	60	135
Egly, John C., assignor, by mesne assignments, to T. A. Pearce and R. E. Egly, Philadelphia, Pa. Knitting-machine needle.	473,697	Apr. 26	2699	679	59	562
Egly, Rose E. <i>et al.</i> (See Egly, John C., assignor.)						
Egry, William L., Hamilton, Ohio. Autographic register.	481,937	Sept. 6	27	7	60	1339
Ehberts, Carl J., assignor to Colt's Patent Fire Arms Manufacturing Company, Hartford, Conn. Safety-lock for revolvers.	469,465	Feb. 23	2431	624	58	1025
Ehenger, Smith, Park City, Utah Ter. Can-opener.	479,256	July 19	1835	460	60	384
Ehle, Homer F., assignor of one-half to A. C. Shilling, Helena, Mont. Artificial limb.	487,697	Dec. 6	743	190	61	1467
Ehlers, William H., <i>et al.</i> (See Wilson, William C., assignor.)						
Ehrenberg, Eduard, Hamburg, Germany. Brush or broom.	472,986	Apr. 19	1504	383	59	313
Ehrentraut, Charles P. B., Pittsburg, Pa. Fire-escape.	470,112	Mar. 1	701	173 174	58	1235
Ehrhardt, Gustave, Pittsburg, Pa. Self-adjusting feed mechanism.	487,116	Nov. 29	3126	802	61	1266
Ehrhardt, William, assignor, by mesne assignments, to Economic Feed Bag Company, New York, N. Y. Nose-bag.	482,730	Sept. 20	1332	326	60	1621
Ehst, Irwin T., Boyertown, and H. P. Fiester, Philadelphia, Pa.; said Fiester assignor to said Ehst. Paper-bag machine.	467,553	Jan. 26	2051	518 519	58	413
Eibee, Carl, Brooklyn, N. Y. Coal-cart.	474,374	May 10	795	207	59	801
Eichenberg, Edouard A., Warren, Pa. Egg-beater.	467,328	Jan. 19	1668	425	58	334
Eichhorn, Andreas, assignor of one-half to A. Franz, St. Louis, Mo. Combined spool-holder and thread-cutter.	480,455	Aug. 9	1147	287	60	810
Eichstaedt, Roman, Michigan City, Ind. Drawer-pull.	481,853	Aug. 30	3426	841	60	1295
Eick, Otto, Philadelphia, Pa. Bottle washer and rinser.	487,999	Dec. 13	1252	311 312	61	1586
Eickemeyer Field Company. (See Eickemeyer, Rudolf, assignor.)						
Eickemeyer, Rudolf, Yonkers, N. Y. Armature-winding for dynamo-electric machines.	469,917	Mar. 1	399	100 101	58	1178
Eickemeyer, Rudolf, Yonkers, N. Y. Dynamo-electric machine.	473,618	Apr. 26	2578	649 650	59	538
Eickemeyer, Rudolf, Yonkers, N. Y. Dynamo-electric machine.	473,619	Apr. 26	2581	650	59	539
Eickemeyer, Rudolf, Yonkers, N. Y. Dynamo-electric machine.	479,118	July 19	1625	406	60	344
Eickemeyer, Rudolf, Yonkers, N. Y. Armature-winding for dynamo-electric machines.	482,825	Sept. 20	1475	367	60	1650
Eickemeyer, Rudolf, Yonkers, N. Y. Secondary battery.	486,094	Nov. 15	1471	387 388	61	906
Eickemeyer, Rudolf, Yonkers, N. Y., assignor to Eickemeyer Field Company, of New York. Electric locomotive.	480,918	Aug. 16	1857	463	60	967
Eickershoff, John H., J. and H. Knost, Cincinnati, Ohio. Educational appliance.	474,773	May 10	1419	361	59	923
Eickhorst, Charles, and J. Idstein, Chicago, Ill. Bridge-gate.	466,401	Jan. 5	140	38, 39	58	29
Einig, John, Jacksonville, Fla. Steam-whistle.	480,078	Aug. 2	510	130	60	680
Eisenhardt, George F., Philadelphia, Pa. Apparatus for printing oil-cloth.	476,135	May 31	3589	906 907 908	59	1389
Eisenhardt, George F., assignor to Dienelt & Eisenhardt, Philadelphia, Pa. Machine for printing oil-cloth.	478,927	July 12	1317	337	60	276
Eisenhardt, George F., assignor to Dienelt & Eisenhardt, Philadelphia, Pa. Oil-cloth-printing machine.	487,365	Dec. 6	210	57, 58	61	1362
Eisenhart, Henry W. (See Farquhar, Eisenhart, and Morton.)						
Eisenhart, Henry W., assignor to A. B. Farquhar, York, Pa. Spring-tooth harrow.	485,493	Nov. 1	522	138	61	678
Eisenstaedt, Isidore, Chicago, Ill. Box for blacking, &c.	476,619	June 7	595	142	59	1555
Eisner, Theodor D., Boston, Mass. Fabric-holder for embroidering-machines.	481,553	Aug. 30	2935	721	60	1200
Eissner, Frederick, New York, N. Y. Surgical needle and holder.	472,258	Apr. 5	396	102	59	74
Ekelund, Herman, Jönköping, Sweden. Cooking-oven.	471,692	Mar. 29	3147	802	58	1742
Eklund, Andrew M., Minneapolis, Minn. Electric belt.	479,410	July 26	2098	525	60	450
Eklund, Lewis N. (See Gylfe, Alexander, assignor.)						
Ekman, Carl F., Marshalltown, Iowa. Fire-escape.	479,257	July 19	1837	461	60	384

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
E Kroth, Teodor, Stockholm, Sweden. Cash-register	470,423	Mar. 8	1244	{ 318 319 320 }	58	1345
Ekström, Axel, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch	483,712	Oct. 4	282	70	61	59
Ekström, Axel, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric snap-switch	483,713	Oct. 4	283	71	61	60
Ekströmer, Eduard, and H. Mörner, Malmö, Sweden. Apparatus for the application and removal of tires	468,797	Feb. 16	1391	{ 352 353 }	58	816
Elastic Nut Company. (See Burdick, Justin H., assignor.)						
Elbe, Henry, Niagara Falls, N. Y., assignor of one-half to F. E. Grice, Washington, D. C. Indicating device for guns	477,187	June 14	1501	{ 367 368 }	59	1751
Elbers, Alexander D., Hoboken, N. J. Treating clay and products thereof	485,917	Nov. 8	1161		61	826
Elcock, Joseph, Mechanicsburg, Pa. Gate	471,851	Mar. 29	3406	869	58	1791
Elder, Benjamin W., New Orleans, La. Apparatus for boring Artesian wells	484,764	Oct. 18	1927	490	61	416
Elder, Maxwell E., Formby, assignor of one-half to H. B. Taylor, Bootle, England. Lamp-wick	470,113	Mar. 1	705	174	58	1236
Eldred, Zenas C., et al., receivers. (See Fuller, Clark S., assignor.)						
Eldredge, Daniel, Boston, Mass. Speaking attachment for telephones	479,062	July 19	1531	382	60	327
Eldridge, Edward E., assignor of one-half to A. W. Stone, North East, Pa. Folding chair	479,355	July 19	1997	500	60	417
Eldridge, Herbert M., Niagara, Canada, assignor to Oneida Community, Limited, Kenwood, N. Y. Sheet-metal chain	483,347	Sept. 27	2326	585	60	1828
Eldridge, Hillary, Purvis, Miss., assignor of one-half to P. C. Gagne, Houston, Tex. Magnifying-globe for the diffusion of artificial light	483,482	Sept. 27	2508	631	60	1863
Electric Alarm Lock Company. (See Baumann, Robert, assignor.)						
Electric Boot and Shoe Finishing Company. (See Crooker, William W., assignor.)						
Electric Boot and Shoe Finishing Company. (See Swain, John F., assignor.)						
Electric Brand Company. (See Fitzmaurice, James S., assignor.)						
Electric Construction Corporation. (See Parker, Thomas, assignor.)						
Electric Cutting Machine Company. (See Caldwell, Henry A., assignor.)						
Electric Engineering and Supply Company. (See Hinds, Jesse L., assignor.)						
Electric Engineering and Supply Company. (See Snow, Eugene A., assignor.)						
Electric Gas Lighting Company. (See Lane, Thomas W., assignor.)						
Electric Gas Lighting Company. (See Nourse and Lane, assignors.)						
Electric Heat Alarm Company. (See Palmer and Desisle, assignors.)						
Electric Heat Alarm Company. (See Pierce, Desisle, and Oliver, assignors.)						
Electric Reciprocating Company. (See Carstarphen, William, Jr., assignor.)						
Electric Secret Service Company. (See Moore, William C., assignor.)						
Electric Secret Service Company. (See Vineing, Henry E., assignor.)						
Electric Storage Battery Company. (See Lloyd, Henry H., assignor.)						
Electric Typographic Company. (See Schuckers, Jacobs W., assignor.)						
Electric Wheel Company. (See Hill, Thomas, assignor.)						
Electrical Fiber-Carbon Company. (See Davis, John H., assignor.)						
Electrical Forging Company. (See Angell, Edwin E., assignor.)						
Electrical Forging Company. (See Burton, George D., assignor.)						
Electrical Forging Company. (See Burton and Angell, assignors.)						
Electrical Forging Company. (See Burton, Eddy, and Briggs, assignors.)						
Electrical Reflector Company. (See Hofheimer, Maurice, assignor.)						
Electrical Supply Company. (See Wirt, Charles, assignor.)						
Elevator Supply and Repair Company. (See Heermans, Thaddeus W., assignor.)						
Elevator Supply and Repair Company. (See Wyld, Edward, assignor.)						
Elges, Gottlieb D., Davenport, Iowa. Vehicle-wheel	466,776	Jan. 12	756	196	58	153
Elgin National Watch Company. (See Hunter, George E., assignor.)						
Elgin National Watch Company. (See Smith, Carlos H., assignor.)	481,167	Aug. 23	2290	564	60	1062
Elias, Leopold, Kosten, Germany. Paper-holder	469,129	Feb. 16	1902	487	58	917
Elieson, Chaimsonovitz P., London, England, assignor of one-half to F. A. Pellas, Oggobio, Italy. Storage-battery	469,129	Feb. 16	1902	487	58	917
Elkins, Hattie L., et al. (See Hunter, William, assignor.)						
Elkins, Ira S. (See Boeklen, Reinhold, assignor.)						
Elkins, Ira S., New York, and R. Boeklen, Brooklyn, N. Y. Apparatus for making gas	483,107	Sept. 20	1924	{ 487 488 }	60	1740
Elkins, William F., assignor of one-half to T. J. Burks, Comanche, Tex. Washing-machine	483,547	Oct. 4	47	12	61	12
Elkins, William H., Cambridge, Mass. Dynamo	470,784	Mar. 15	1779	458	58	1460
Elkins, William H., Cambridge, Mass. Dynamo	470,785	Mar. 15	1780	458	58	1460
Elkins, William H., Cambridge, Mass. System of electrical distribution	474,166	May 3	432	104	59	722
Elkins, William H., Cambridge, Mass. Commutator	479,793	Aug. 2	28	7	60	587
Elkins, William H., Boston, Mass., assignor to H. E. Irvine, New York, N. Y. Regulator for dynamos and motors	474,165	May 3	430	{ 103 104 }	59	721
Elkins, William H., Cambridge, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo	485,181	Nov. 1	40	13	61	580
Ellacott, Joseph P. (See Dickerman and Ellacott.)						
Ellard, Jonathan A., Birmingham, Ala. Dental regulator	487,726	Dec. 13	800	204	61	1496
Ellery, Robert L., assignor of one-half to F. E. Fuller, Taunton, Mass. Car-truck	483,211	Sept. 27	2096	532	60	1786
Ellery, Robert L., assignor of one-half to F. E. Fuller, Taunton, Mass. Running-gear for vehicles	484,186	Oct. 11	993	254	61	217
Ellinger, Wilam H., Ni Wot, Colo. Band-cutter and feeder	473,620	Apr. 26	2584	651	59	539
Elliott, Henry, East St. Louis, Ill. Spring-rail frog	474,726	May 10	1350	342	59	908
Elliott, Henry, East St. Louis, Ill. Railway-frog crossing, &c	474,727	May 10	1352	343	59	909
Elliott, William T., Kent, Iowa. Animal-poke	477,651	June 28	2284	572	59	1931
Elliott, Charles B., assignor to Revere Rubber Company, Boston, Mass. Hauger for electric-railway wires	476,192	May 31	3688	931	59	1408
Elliott, Charles B., assignor to Revere Rubber Company, Boston, Mass. Swivel pull-off for overhead wires	476,193	May 31	3688	932	59	1408
Elliott, Charles B., assignor to Revere Rubber Company, Boston, Mass. Incandescent-lamp socket	487,213	Nov. 29	3273	836	61	1293
Elliott, Charles H. (See Steen, Samuel, Jr., assignor.)						
Elliott, Charles S., Greenville, Ohio. Veterinary mouth-speculum	477,838	June 28	2588	648	59	1991
Elliott, Elias S., Rich Square, N. C. Bedstead-brace	469,081	Feb. 16	1845	472	58	905
Elliott, Elmore H., Truebada, W. Va. Apple parer, corer, and cutter	473,621	Apr. 26	2585	651	59	539
Elliott, Franklin O., Catawba, N. C. Thermostat	487,519	Dec. 6	471	123	61	1414
Elliott, George E., Grosvenor Dale, Conn. Spoke connection for vehicle-wheels	477,203	June 21	1538	376	59	1771
Elliott, George F., U. S. Navy. Submarine shell	467,792	Jan. 26	2411	614	58	492

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Elliott, George F., U. S. Navy. Submarine mine	467,793	Jan. 26	2415	614	58	482
Elliott, George F., U. S. Navy. Cable-grip	475,684	May 24	2852	721	59	1232
Elliott, Gilbert R., Boston, Mass. Car-brake	484,783	Oct. 25	1969	502	61	437
Elliott Hickory Cycle Company. (See Elliott, Sterling, assignor.)						
Elliott, Irvin H., Allapaha, Ga. Bed-lock	482,626	Sept. 13	1173	283	60	1577
Elliott, James M., Jr., Gadsden, Ala. Car-coupling	483,047	Sept. 20	1835	467	60	1732
Elliott, James M., Jr., Gadsden, Ala. Car-coupling	483,048	Sept. 20	1837	467	60	1732
Elliott, James N., Battle Creek, Mich. Lubricating-gland	471,269	Mar. 22	2530	642	58	1617
Elliott, James W., Warren, assignor to W. Resor & Co., Cincinnati, Ohio. Stove	469,466	Feb. 23	2434	624	58	1026
Elliott, Oscar A., assignor of one-half to C. Fishbaugh, York, Nebr. Pencil-holder	478,537	July 5	739	180	60	146
Elliott, Richard P. (See Garland, Charles F., assignor.)						
Elliott, Robert C., Prairie Creek, Ind. Nut-lock	472,111	Apr. 5	161	43	59	30
Elliott, Simon G., Quincy, Mass. Ore-separator	473,066	Apr. 19	1626	415	59	335
Elliott, Sterling, Newton, Mass. Ball-bearing for axles	483,836	Oct. 4	472	118	61	97
Elliott, Sterling, Newton, assignor to Elliott Hickory Cycle Company, Watertown, Mass. Pneumatic tire	487,874	Dec. 13	1054	264	61	1547
Elliott, Walter P. (See Hearne, John, assignor.)						
Elliott, Walter P., New York, N. Y. Apparatus for manufacturing gas	480,919	Aug. 16	1859	463 464 465	60	968
Ellis, Aaron D., Rutland, Vt. Angle-finish for rooms	478,928	July 12	1319	328	60	276
Ellis, Alvinis L., Chicago, Ill. Automatic potential-regulator for electric currents	474,953	May 17	1713	436	59	995
Ellis, Arthur W., London, England, assignor of one-half to T. H. Carman, London, England, and Montreal, Canada. Distillation and apparatus used therefor	473,659	Apr. 26	2637	665 666	59	550
Ellis, Augustin, Bedford, Ind. Cultivator	478,790	July 12	1118	276	60	237
Ellis, Augustin, Bedford, Ind. Safety attachment for cars and trucks	485,918	Nov. 8	1163	307	61	826
Ellis, Charles H., Hanover, Mass. Vehicle-shaft support	488,000	Dec. 13	1254	312	61	1587
Ellis, Edward E., assignor of one-half to B. L. Wheeler, Washington, D. C. Setting mechanism for timepieces	478,321	July 5	408	98	60	82
Ellis, Elisha A., and W. C. S. Wood, Grassy Pond, S. C. Cotton-chopper	478,158	July 5	131	33	60	29
Ellis, Emmett A., Sartartia, Tex. Apparatus for separating molasses from sugar	487,323	Dec. 6	143	41	61	1349
Ellis, Ferand F., Oneida, assignor to Oneida Community, Limited, Kenwood, N. Y. Chain-making machine	484,909	Oct. 25	2181	561 562 563	61	480
Ellis, Frank A., Toronto, Canada. Electric clock	467,748	Jan. 26	2352	596	58	470
Ellis, Frederick L., Milldale, Conn. Shelf-bracket	476,994	June 14	1191	289	59	1688
Ellis, George W. (See Gillpatrick, George, assignor.)						
Ellis, Harry S. (See Ramsden and Ellis.)						
Ellis, Henry, Ramsgate, England. Inhaler	486,951	Nov. 29	2873	742	61	1215
Ellis, John, Stockton, Cal. Combined vise, pipe-tongs, and cutter	481,168	Aug. 23	2291	564	60	1062
Ellis, John S. (See Schuman, John, assignor.)						
Ellis, Lucien W., Anamosa, Iowa, assignor to W. Deering, Chicago, Ill. Bundle-carrier for harvesters	480,944	Aug. 16	1894	474	60	975
Ellis, Orville C. R., Chicago, Ill. Picture-frame	477,188	June 14	1502	368	59	1751
Ellis, Richard E., assignor of one-half to F. Bastable, Syracuse, N. Y. Machine for treating leaf-tobacco	467,246	Jan. 19	1546	394	58	311
Ellis, Seale H., Waverly, N. Y. Bicycle	467,794	Jan. 26	2418	614 615	58	482
Ellis, Thomas, Jr. (See Abundi, Ellis, and Sackett.)						
Ellis, Washington L., Sr., et al. (See Beckwith, William G., assignor.)						
Ellis, Willard H., Columbus, Nebr., assignor of one-half to Sheffield Velocipede Car Company, Three Rivers, Mich. Mail-crane	486,032	Nov. 8	1349	359	61	866
Ellis, William H. (See Starrevant and Ellis.)						
Ellis, Wilson R., Woodland, Cal. Meat and vegetable cutter	480,569	Aug. 9	1307	327	60	844
Ellison, Byron A., Kansas City, Mo. Sectional grate-bar	480,568	Aug. 9	1306	327	60	844
Ellithorp, Orren S., Chicago, Ill. Grain-binder	470,236	Mar. 8	911	225	58	1285
Ellithorp, Orren S., assignor to William Deering & Company, Chicago, Ill. Self-binder	486,440	Nov. 22	2015	534	61	1029
Ellithorp, Albert B. (See Hultgren, William H., assignor.)						
Ellrich, Robert C., Plantsville, Conn. Nail-extractor	474,594	May 10	1141	291	59	867
Ellrich, Robert C., Plantsville, Conn. Meat-cutter	474,595	May 10	1142	291	59	868
Ellrich, Robert C., Plantsville, Conn. Combined standard and clamp	475,054	May 17	1875	475	59	1025
Ellrich, Robert C., Plantsville, Conn. Tool-chuck	475,055	May 17	1876	475	59	1026
Ells, Josiah W., assignor to O. and H. Kleber and H. Braun, Pittsburg, Pa. Machine for making hobnails	476,191	May 31	3684	930 931	59	1408
Ellstrom, John P. (See Smades and Ellstrom.)						
Ellsworth, Charles W., assignor to Chicago Stamping Company, Chicago, Ill. Machine for seaming cans	478,580	July 12	799	197	60	174
Ellsworth, Erastus W., East Windsor Hill, assignor of one-half to C. W. Vibert, South Windsor, Conn. Blowpipe-lamp	480,717	Aug. 16	1559	388	60	906
Ellsworth, George W., Bowling Green, Ohio. Orchestral pedal-harp	471,470	Mar. 22	2834	721	58	1675
Ellsworth, John A. (See Fuller, Oscar B., assignor.)						
Ellsworth, Walter. (See Draper and Ellsworth.)						
Elmes, Charles F., Chicago, Ill. Fluid-motor	486,095	Nov. 15	1473	388	61	907
Elmore, Alexander S. (See Elmore, Francis E. and A. S.)						
Elmore, Alexander S., Leeds, assignor to Elmore's American and Canadian Patent Copper Depositing Company, Limited, London, England. Apparatus for the manufacture of metallic articles by electrolysis	484,704	Oct. 18	1821	464	61	393
Elmore, Francis E., Leeds, assignor to Elmore's American and Canadian Patent Copper Depositing Company, Limited, London, England. Manufacture of mandrels for electrolytic deposit of tubes	485,919	Nov. 8	1165	307	61	827
Elmore, Francis E. and A. S., Leeds, assignors to Elmore's American and Canadian Patent Copper Depositing Company, Limited, London, England. Loosening tubes from mandrels	473,732	Apr. 26	2749	.....	59	571
Elmore, Francis E. and A. S., Leeds, assignors to Elmore's American and Canadian Patent Copper Depositing Company, Limited, London, England. Manufacturing tubes	480,186	Aug. 2	683	173	60	711
Elmore, William A., New York, N. Y. Seat-support for bicycles	478,581	July 12	802	198	60	174
Elmore's American and Canadian Patent Copper Depositing Company. (See Elmore, Alexander S., assignor.)						
Elmore's American and Canadian Patent Copper Depositing Company. (See Elmore, Francis E., assignor.)						
Elmore's American and Canadian Patent Copper Depositing Company. (See Elmore, Francis E. and A. S., assignors.)						
Elrick, George, Joliet, Ill. Straw-binder	470,665	Mar. 15	1598	415 416 417	58	1425
Elrick, George, Joliet, Ill. Rotary engine	476,451	June 7	347	79	59	1505

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Else, Harry G., Erie, Pa. Folding hammock-frame	488,272	Dec. 20	1716	432	61	1697
Elser, Charles F. (See Künzel, Charles A., assignor.)						
Elsinger, Sigmund, assignor of one-half to J. C. Reuter, Savannah, Ga. Fire-kindler	486,966	Nov. 29	2894		61	1219
Elston, Charles C., Elmira, N. Y. Table attachment for bedsteads	484,187	Oct. 11	994	254	61	217
Eltbogen, Hermann, <i>et al.</i> (See Bithorn, Richard, assignor.)						
Eltbogen, Moritz, <i>et al.</i> (See Bithorn, Richard, assignor.)						
Eltbogen, Wilhelm, <i>et al.</i> (See Bithorn, Richard, assignor.)						
Elterich Art Tile Company. (See Elterich, Otto P. and G. O., assignors.)						
Elterich, Gotthold O. (See Elterich, Otto P. and G. O.)						
Elterich, Otto P. and G. O., Maywood, N. J., assignors to Elterich Art Tile Company, of New Jersey. Tile-frame	477,746	June 28	2429	607	59	1963
Elton, Henry F., and J. W. Cadwell, New York, N. Y. Paper-bag holder	482,056	Sept. 6	218	52	60	1378
Eltonhead, William B., West Point, assignor of nine-sixteenths to S. A. Murray, Jr., Philadelphia, Pa. Window	486,223	Nov. 15	1663	440	61	944
Elwood, Jonathan, Sanger, Cal. Ant or insect guard	479,976	Aug. 2	317	78	60	642
Ely, Edward O., trustee. (See Forbes, Silas H., assignor.)						
Ely, Edward O., Boston, Mass. Deodorizing device	475,547	May 24	2651	674	59	1192
Ely, Thomas T., West Paris, Me. Tobacco-pipe	480,570	Aug. 9	1309	327	60	845
Embley, William. (See Shobe and Embley.)						
Emerson, Charles H., Yonkers, N. Y. Boomerang-gun	477,747	June 28	2430	{ 607 608 609 }	59	1963
Emerson, Charles H., Yonkers, N. Y. Boomerang	477,748	June 28	2438	609	59	1964
Emerson, Charles M., Eau Claire, Wis. Band-saw mill	477,299	June 21	1705	{ 417 418 }	59	1801
Emerson Electric Manufacturing Company. (See Meston, Charles R. and A. W., assignors.)						
Emerson, George W. (See Crossman, Milledge A., assignor.)						
Emerson, James E., and T. Midgley, Beaver Falls, Pa., assignors of one-third to J. Lynch, Washington, D. C. Shield for gunners	478,506	July 5	684	166	60	135
Emerson, Ralph, Rockford, Ill. Knitting-machine	485,738	Nov. 8	904	242	61	774
Emerson, Ralph W., <i>et al.</i> (See Snyder, William D., assignor.)						
Emerson, Rufus H., <i>et al.</i> , receivers. (See Fuller, Clark S., assignor.)						
Emerson, Talcott & Company. (See Jones, James H., assignor.)						
Emery, Charles E., Brooklyn, N. Y. Method of and apparatus for rating watch-balances	469,967	Mar. 1	487	121	58	1193
Emery, Charles E., Brooklyn, N. Y. Apparatus for regulating the rolling and pitching of vessels	471,212	Mar. 22	2445	622	58	1601
Emery, Charles E., Brooklyn, N. Y. Apparatus for controlling and indicating steam-supply	473,733	Apr. 26	2749	{ 692 693 }	59	571
Emery, Charles G. (See Normand, Joseph E., assignor.)						
Emery, Charles G. (See Shortt, Edward G., assignor.)						
Emery, Charles G. (See Silcock, Aaron, assignor.)						
Emery, Charles G., trustee. (See Shortt, Edward G., assignor.)						
Emery, Charles H., assignor to himself and C. P. Libby, Chicago, Ill. Process of and machine for soldering cans	473,216	Apr. 19	1888	{ 476 477 478 }	59	382
Emery, Charles H., assignor to himself and C. P. Libby, Chicago, Ill. Can-holding frame for use with can-testing machines	475,446	May 24	2487	634	59	1161
Emery, George D. (See Skanks, George W., assignor.)						
Emery, John G., Jr., Milwaukee, Wis. Railway-station	469,882	Mar. 1	346	89	58	1168
Emery, L., Jr. (See Geary, James, assignor.)						
Emery, Lewis, Jr. (See Whitmore, Edwin B., assignor.) (Reissue.)						
Emery, Thomas J., Boston, Mass. Car-coupling	487,475	Dec. 6	404	104	61	1400
Emley, James E., Laredo, Tex. Electric battery	473,366	Apr. 19	2182	548	59	441
Emme, Michael, Atlanta, Ga. Method of and apparatus for extracting aluminium	476,256	June 7	42	10	59	1446
Emmens, Stephen H., London, England. Steam-jacketed kettle	484,784	Oct. 25	1972	{ 502 503 }	61	438
Emmer, Isaac, St. Louis, Mo. Interchangeable sign-board	480,255	Aug. 9	809	208	60	748
Emmert, Frederick, Kansas City, Kans. Barrel-heading machine	474,596	May 10	1144	291	59	868
Emmert, Joseph F., Waynesborough, Pa. Vise	471,169	Mar. 22	2377	607	58	1588
Emmitt, John V., <i>al.</i> (See Wilson, William H., assignor.)						
Emmons, Charles C., Pittsburg, Pa. Plaster-blade	473,303	Apr. 19	2029	510	59	411
Empie, Joseph L., Orlando, Fla. Crate-head	479,794	Aug. 2	30	7	60	588
Empire Car Coupler Company. (See Dale, Charles H., assignor.)						
Empire Car Coupler Company. (See Fox, Frank A., assignor.)						
Empire Car Coupler Company. (See Tower, Clinton A., assignor.)						
Empire Cash Register Company. (See Rosenfield, William W., assignor.)						
Empire Machine and Tool Company. (See Whitaker, Richard, assignor.)						
Empire Portable Forge Company. (See Melius, Walter, assignor.)						
Empson, John H., Longmont, Colo. Pea huller or sheller	486,441	Nov. 22	2016	535	61	1029
Emrich, Samuel, Reno, Nev. Railway-signal	479,258	July 19	1838	461	60	385
Emrich, Samuel, Reno, Nev. Railway-spike	486,328	Nov. 15	1835	483	61	980
Endemann, Hermann, Brooklyn, N. Y., assignor to W. Zahn, Newark, N. J. Tawing hides	472,701	Apr. 12	1073		59	215
Endicott, Mordecai T., Washington, D. C. Dry-dock	470,750	Mar. 15	1727	445	58	1450
Engeneg, William L., Franklin Mass. Apparatus for dispensing beverages	476,452	June 7	348	79, 80	59	1505
Engelbach, Augustus L., Leadville, Colo. Pipe-wrench	471,471	Mar. 22	2836	722	58	1676
Engelhard, Friederick, Hofheim-on-Taunus, Germany. Buttonhole-reinforce for collars	488,806	Dec. 27	2568	637	61	1881
Engelhardt, Frederick, St. Johnsville N. Y. Piano-action	486,096	Nov. 15	1475	388	61	907
Engelhardt, Johann M., Bremen Germany. Washing-machine	476,995	June 14	1192	229	59	1688
Engels, Charles T. N., Middlesborough, Ky., assignor of one-half to J. W. Forrest, Cumberland Gap, Tenn. Pantaloon-hanger	477,170	June 14	1475	361	59	1746
England, Alexander W. (See Anderson and England.)						
England, Frank D. (See Anderson and England.)						
England, William R., Chicago, Ill. Pipe-coupling	487,829	Dec. 13	972	245	61	1532
Engle, Abijah L., Terre Haute, Ind. Display-rack	469,686	Mar. 1	25	9	58	1105
Engle, Andrew. (See Engle, George A., assignor.)						
Engle, George A., Baxter, assignor of one-third to A. Engle, Des Moines, Iowa. Mill for cutting grain and making flour	467,247	Jan. 19	1547	394	58	311
Engle, Horace M., <i>et al.</i> (See Groff, Sylvanus E., assignor.)						
Engle, Jacob P., San Francisco, Cal. Recovering waste products of petroleum	481,391	Aug. 23	2663	653	60	1130
Engle, Jacob P., San Francisco, Cal. Separation of waste products of petroleum distillation	481,392	Aug. 23	2664	653	60	1130
Engle, John H. (See Turner and Engle.)						
Engle, Samuel R. (See Curtis, William, assignor.)						
Engledue, William J., Byfleet, England. Galvanic battery	481,664	Aug. 30	3103	757	60	1233

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Disg.	Vol.	Page.
Engler, Richard A., Columbus, Ohio. Bicycle-supporting frame	481,751	Aug. 30	3260	793	60	1263
Engler, William, Brooklyn, N. Y. Window-seat	481,854	Aug. 30	3427	811	60	1295
Englin, Eric A., assignor to J. E. Gagnelius, Stillwater, Minn., and F. L. Englin, Osceola, Wis. Permutation-lock	471,498	Mar. 22	2868	730	58	1682
Englin, F. L., <i>et al.</i> (See Englin, Eric A., assignor.)						
English, Analdo M., New York, assignor to P. Becker, Brooklyn, N. Y. Type-writing machine	481,855	Aug. 30	3428	{ 841 842 }	60	1295
English, David B., Guerneville, Cal. Hillside-plow	472,112	Apr. 5	162	44	59	30
English, Henry R., Jackson, Mo. Plaster compound	486,329	Nov. 15	1836		61	980
English, Matthew K., Columbus, Ohio. Folding bed	476,876	June 14	997	242	59	1649
English, Samuel M., <i>et al.</i> (See Green, John, assignor.)						
English, Solon, Kinzua, Pa. Machine for sawing shingles	470,996	Mar. 15	2111	{ 542 543 }	58	1525
Englund, Axel H., Chicago, Ill. Insulating-swivel	468,053	Feb. 2	220	54	58	567
Engquist, Nicholas, assignor of two-thirds to E. G. and G. C. Whitesides, Philadelphia, Pa. Spigot for refrigerators, &c	486,705	Nov. 22	2431	633	61	1110
Engsberg, Karl, New York, N. Y. Loom for weaving fringe	477,204	June 21	1539	{ 376 377 }	59	1771
Engström, Axel H. (See Wallgren, Ernest F., assignor.)						
Engstrom, Jacob B., Manchester, Iowa. Hay-rake	473,416	Apr. 19	2230	560	59	450
Euholm, Oscar A., assignor to F. H. Cornell, New York, N. Y. Boiler oil-injector	485,920	Nov. 8	1166	307	61	827
Ennis, George H., assignor to J. D. Ennis, Troy, N. Y. Cake or bread box	480,718	Aug. 16	1560	389	60	907
Ennis, George H., assignor to J. D. Ennis, Troy, N. Y. Ventilator	484,879	Oct. 25	2125	546	61	468
Ennis, Jessie D. (See Ennis, George H., assignor.)						
Ennis, John E., Duluth, Minn. Brick-marking machine	483,910	Oct. 4	582	{ 146 147 }	61	121
Ennis, John E., Duluth, Minn. Builder's scaffold	485,463	Nov. 1	481	{ 127 128 }	61	670
Ennis, Lawrence M. (See Bastian, Charles L., assignor.)						
Eno, Joseph A., Newark, N. J. Game apparatus	472,289	Apr. 5	440	114	59	83
Enos, Alanson T., New York, N. Y. Combined gas and electric-light fixture	480,813	Aug. 16	1701	424	60	936
Enos, Fred, Bridgeport, Conn. Car-coupling	486,578	Nov. 22	2220	{ 582 583 }	61	1067
Enos, Helen M., Millersburg, Ohio. Book-cover protector	481,015	Aug. 16	2010	502	60	936
Enos, Henry B., Corpus Christi, Tex. Piano tuning-pin	486,561	Nov. 22	2188	576	61	1062
Enos, John A., Boston, Mass., assignor of one-half to D. J. Byrnes, Washington, D. C. Carburetor	486,442	Nov. 22	2017	535	61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,443	Nov. 22	2018		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of cement	486,444	Nov. 22	2019		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,445	Nov. 22	2020		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,446	Nov. 22	2021		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,447	Nov. 22	2022		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,448	Nov. 22	2023		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of artificial stone	486,449	Nov. 22	2024		61	1030
Enricht, Louis, Chicago, Ill., assignor to United States Duroolithic Company, West Union, Iowa. Manufacture of cement	486,450	Nov. 22	2025		61	1030
Euschedé, James M., Crete, Nebr. Clevis	479,208	July 19	1763	442	60	370
Enterprise Manufacturing Company. (See Woodruff, Oliver D., assignor.)						
Enterprise Manufacturing Company of Pennsylvania. (See Woodruff, Oliver D., assignor.)						
Entz, Justus B. (See Waddell, Entz, and Phillips.)						
Entz, Justus B., New York, and W. A. Phillips, Brooklyn, N. Y. Secondary battery	467,573	Jan. 26	2079	526	58	418
Ephraim, Ferdinand, San Francisco, Cal. Sole	473,304	Apr. 19	2030	510	59	412
Eppenstein & Co., M. C. (See Hopkins, Thomas A., assignor.)						
Epple, Albert, Providence, R. I. Scarf-pin	474,004	May 3	188	44	59	675
Epple, Magnus, Augsburg, Bavaria, Germany. Clasp	474,521	May 10	1026	264	59	846
Eppler, Andrew, Newton, Mass. Sewing-machine	487,214	Nov. 29	3274	{ 836 837 }	61	1293
Eppler, Andrew, Jr., Newton, assignor to Eppler Welt Machine Company, Boston, Mass. Shoe	487,011	Nov. 29	2963	{ 763 764 }	61	1232
Eppler, John, Philadelphia, Pa. Sausage-stuffing machine	485,576	Nov. 1	649	173	61	707
Eppler Welt Machine Company. (See Eppler, Andrew, Jr., assignor.)						
Epps, Henry G., Cameron, La. Floor-layer	474,654	May 10	1235	315	59	885
Epstein, Moritz, Berlin, Germany. Filtering-tube	485,788	Nov. 8	963	258	61	787
Epting, Max, assignor to Farbwerke, vormals Meister, Lucius and Brüning, Höchst-on-the-Main, Germany. Red dye	473,453	Apr. 26	2289		59	483
Erath, Charles W., Wilkes-Barre, Pa. Hitching-post	487,727	Dec. 13	801	205	61	1497
Erb, Emil A., Appleton, Wis. Total combustion	478,693	July 12	952	236	60	205
Erbeau, Julius, assignor to H. Mnh's Sons, Philadelphia, Pa. Watchcase-spring	469,660	Feb. 23	2724	700	58	1085
Erdmann, William J., assignor to V. D. Fischbeck, Milwaukee, Wis. Fly-net	475,496	May 24	2568	654	59	1176
Erhard, Karl T., Brooklyn, N. Y. Holder for erasers, chalk, or crayons	488,604	Dec. 27	2256	559	61	1820
Erhard, Ursinus. (See Lillard and Erhard.)						
Erhart, Andrew J. (See Zalud, Albert, assignor.)						
Erickson, Martin, La Crosse, Wis. Compressor	466,334	Jan. 5	40	10	58	10
Erickson, John. (See Stenback and Erickson.)						
Ericson, Charles J., Salt Lake City, Utah Ter. Gate-latch	475,270	May 17	2206	563	59	1091
Ericson, Charles J., Salt Lake City, Utah Ter. Gate-hinge	475,271	May 17	2207	563	59	1092
Ericson, Herman, assignor to J. B. Holmer, Chicago, Ill. Hack-saw	468,742	Feb. 9	1302	330	58	789
Ericson, Lars G., New York, N. Y. Stocking-stretcher	474,954	May 17	1714	436	59	995
Ericson, Richard W., Aurora, assignor to Pettibone-Muliken & Company, Chicago, Ill. Counterbalance for the discharge apparatus for coal or ore bins	485,789	Nov. 8	964	{ 258 259 }	61	787
Ericsson, Oscar, Sioux Falls, S. D. Electric meter	475,759	May 31	2979	755	59	1269
Erisman, George R. (See Killian, George W., assignor.)						
Erlanger, Charles, Baltimore, Md. Button	474,445	May 10	910	235	59	823
Erneling, Richard W., Bath, Ill. Corn-harvester	478,849	July 12	1207	300	60	254
Ernold, Edward, New York, N. Y. Bottle-corking machine	487,387	Dec. 6	242	65	61	1369
Ernold, George, New York, N. Y. Larynx-tube	478,582	July 12	803	198	60	175
Eternert, Paul, Ludwigshafen, Germany. Making salicylate of phenyl	486,770	Nov. 22	2532		61	1131

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr't	Vol.	Page.
Ernst, Clare, Bay City, Mich. Vise.....	475,760	May 31	2980	{ 755 756 }	59	1269
Ernst, Richard P. (See Orr, John E., assignor.)						
Erren, Frank, and O. Lohner, St. Paul, Minn. Dough-kneader	478,507	July 5	685	167	60	135
Erskine & Co., John. (See Erskine, William B., assignor.)						
Erskine, John, Ligoniel, near Belfast, Ireland. Machine for hackling flax, &c	468,194	Feb. 2	435	108	58	609
Erskine, William B., assignor to J. Erskine & Co., New York, N. Y. Machine for folding tubular fabrics	475,272	May 17	2208	{ 564 565 }	59	1092
Ertel, Charles M. (See Sheer, Henry M., assignor.)						
Ervin, Charles E., Princeton, Ind. Artificial leg	472,443	Apr. 5	678	173	59	127
Ervin, Elijah O., New Virginia, Iowa. Combined mounted hay stacker and rake	484,493	Oct. 18	1494	380	61	326
Ervin, George M. (See Huber and Ervin.)						
Erwin, Frank B., Chicago, Ill. Railway-switch	466,491	Jan. 5	295	75	58	56
Erwin, James A., West Point, Ga. Switch or station signal	469,130	Feb. 16	1903	{ 487 488 }	58	917
Eshelman, Henry R., Reading, Pa. Protractor	472,531	Apr. 12	826	210	59	170
Eshleman, John W., Mount Joy, Pa. Combined meat-tenderer and ice-pick and making the same	484,518	Oct. 18	1534	389	61	334
Esmond, William V., assignor of one-half to A. C. Kemper, Chicago, Ill. Combined camera and photograph-exhibitor	488,331	Dec. 20	1814	454	61	1716
Espee, Elias. (See Swanson and Espee.)						
Espele, Ferdinand, San Francisco, Cal. Measuring-canister	486,451	Nov. 22	2026	536	61	1031
Espitallier, George, Chalon, France. Card barracks	484,413	Oct. 18	1362	{ 348 349 }	61	301
Espy, James T. (See Griffith, Joseph H., assignor.)						
Essex, George B. (See Marvin and Essex.)						
Essex, Stephen, Providence, R. I. Potato-planter	467,683	Jan. 26	2238	570	58	448
Estell, Samuel F., Chicago, Ill. Toy	484,850	Oct. 25	2084	536	61	460
Ester, George L., et al. (See Ester, Henry J. C., assignor.)						
Ester, Henry J. C., assignor of two-thirds to G. L. and W. W. Ester, Erie, Pa. Lamp-black-machine	486,007	Nov. 15	1476	389	61	907
Ester, William W., et al. (See Ester, Henry J. C., assignor.)						
Esterbrook, Edward E. (See Cox, Charles B., assignor.)						
Esterly, George, Whitewater, Wis., assignor to Esterly Harvesting Machine Company. Grain-binder	480,079	Aug. 2	512	130	60	620
Esterly Harvesting Machine Company. (See Esterly, George, assignor.)						
Estes, Elmer F., Lincoln, Nebr. Type-writing machine	471,964	Mar. 29	3561	909	58	1821
Estes, William A., Boston, Mass. Plow	487,142	Nov. 29	3167	{ 811 812 }	61	1273
Estey, David M., et al. (See Clapp, Dwight C., assignor.)						
Estey Manufacturing Company et al. (See Clapp, Dwight C., assignor.)						
Estey Organ Company. (See Fuller, Levi K., assignor.)						
Estey Organ Company. (See Whitney, Charles E., assignor.)						
Estrayer, Augustin, Marseilles, France. Oil-press	480,867	Aug. 16	1781	445	60	952
Esty, William, assignor to C. A., J. T., and F. E. Busiel, Laconia, N. H. Knitting stockings. (Reissue)	11,221	Feb. 2	644	160	58	649
Esty, William, assignor to C. A., J. T., and F. E. Busiel, Laconia, N. H. Stocking. (Reissue)	11,222	Feb. 2	645	160	58	649
Etève, Eugene, and J. Lemichel, Paris, France. Elevating-siphon	479,411	July 26	2099	526	60	450
Ethridge, Harry, Pittsburg, Pa., assignor to Writing Telegraph Company, New York, N. Y. Writing-telegraph system	477,652	June 28	2284	572	59	1932
Ethridge, Frank N., assignor of one-third to G. A. Peterson, Boston, Mass. Piston-packing	484,188	Oct. 11	995	254	61	217
Ethridge, Frank N., assignor of one-third to G. A. Peterson, Boston, Mass. Piston-packing	485,407	Nov. 1	401	107	61	654
Ethridge, Martin R., Portsmouth, N. H. Clothes-line holder	479,136	July 19	1651	{ 412 413 }	60	349
Ethridge, Martin V. B., Boston, Mass. Stamp-canceling and postmarking machine	467,889	Jan. 26	2573	{ 652 653 }	58	512
Ethridge, Martin V. B., Everett, Mass. Waiter-signal	475,937	May 31	3283	828	59	1328
Ethridge, Martin V. B., Boston, Mass., assignor to American Postal Machines Company, Portland, Me. Stamp-canceling and postmarking machine	467,762	Jan. 26	2369	{ 601 602 }	58	474
Ethridge, Martin V. B., Everett, Mass., assignor to American Postal Machines Company, Portland, Me. Machine for marking mail-matter	468,774	Feb. 9	1349	{ 340 341 }	58	798
Ethridge, Martin V. B., Everett, Mass., assignor to American Postal Machines Company, Portland, Me. Machine for marking mail-matter	468,775	Feb. 9	1356	342	58	800
Ethridge, Martin V. B., Everett, assignor to American Postal Machines Company, Boston, Mass. Packing device for machines for marking mail-matter	473,660	Apr. 26	2641	666	59	551
Ethridge, Martin V. B., Everett, assignor to Boston Street Sweeping Machine Company, Lynn, Mass. Street-sweeping machine	485,577	Nov. 1	650	173	61	707
Ethridge, Martin V. B., Everett, assignor of two-thirds to H. E. Waite, Newton, and J. H. Eastman, Boston, Mass. Electric clock	486,838	Nov. 22	2644	691	61	1155
Ethridge, Martin V. B., Everett, and H. E. Waite, Newton, Mass. Rotary marking-stamp	469,632	Feb. 23	2676	{ 688 689 }	58	1074
Ette, Charles G., St. Louis, Mo. Stop-box	477,523	June 21	2064	514	59	1878
Ette, Charles G., St. Louis, Mo. Hydrant	479,259	July 19	1840	461	60	385
Ette, Charles G., St. Louis, Mo. Lawn-sprinkler	486,771	Nov. 22	2533	661	61	1131
Ette, Charles G. and B. H. Sanders, St. Louis, Mo., assignors to said Ette. Sad-iron	478,929	July 12	1320	328	60	276
Ettien, James, Utica, Mont. Irrigating head-gate	474,549	May 10	1072	275	59	854
Ettlinger, Frederick V., West Brighton, N. Y. Box-cover	476,453	June 7	349	81	59	1505
Ettlinger, Frederick V., West Brighton, N. Y. Cover for boxes	485,790	Nov. 8	965	259	61	787
Etzkorn, Herman C., assignor of one-half to J. R. Schulte, Fort Madison, Iowa. Horse-collar	475,039	May 17	1850	469	59	1020
Eubank, A. (See Smith, William B. and J. R., assignors.)						
Eubank, Thomas, Little Rock, Ark. Car-door	486,562	Nov. 22	2189	576	61	1062
Euchler, Otto, assignor to A. Featherstone, Chicago, Ill. Cone-bearing and ball-lock for bicycles	486,452	Nov. 22	2028	536	61	1031
Euker, Louis, et al. (See Jenkins, Wilton F., assignor.)						
Eulenfeld, Ferdinand von, Breslau, Germany. Combined penholder and blotter	469,433	Feb. 23	2380	610	58	1016
Euler, Hans, Lehe, near Bremerhaven, Germany. Shallow-water alarm	482,550	Sept. 13	1061	258	60	1556
Eummelen, Henry, Leavenworth, Kans. Sacramental case or box	470,319	Mar. 8	1067	272	58	1313
Eureka Cash Register Company. (See Beck, Warren F., assignor.)						
Eureka Coat Pad Company. (See Goldman, Edward, assignor.)						
Eureka Coupler and Buffer Company. (See McMichael, George C., assignor.)						
Eureka Mower Company. (See Davison, George B., assignor.)						
Eureka Tape and Belt Fastening Company. (See Bailey and Tilton, assignors.)						
Eureka Wood Pulley Company. (See Reitz, Daniel G., assignor.)						
Eustace, Thomas F., St. Louis, Mo. Cartridge	488,627	Dec. 27	2292	567	61	1226

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Enstis, John P., New York, N. Y. Graduated measuring-vessel	476,136	May 31	3593	908	59	1390
Enstis, John P., New York, N. Y. Cooking or culinary vessel	476,137	May 31	3594	908	59	1390
Ewer, James N., New Castle, Pa. Sash-fastener	477,891	June 28	2674	660	59	2007
Eva, Addison H., Austin, Tex. Mosquito-canopy	467,163	Jan. 19	1419	362	58	286
Eva, Addison H., Austin, Tex. Canopy for folding beds	479,063	July 19	1532	382	60	323
Eva, Addison H., Austin, Tex. Mosquito-canopy for folding beds	485,494	Nov. 1	523	139	61	679
Evans, Arthur G., Westminster, England. Bearing for signal and switch rods	483,518	Oct. 4	43	12	61	12
Evans, Charles H., and F. T. Dunlap, Manchester, N. H. Whiffletree-hook	486,929	Nov. 29	2834	734	61	1208
Evans, D. Walter. (See Lang, Evans, and Devore.)						
Evans, Daniel, <i>et al.</i> (See Hamill, Robert J., assignor.)						
Evans, David, Eureka, Cal. Logging-roadway	487,557	Dec. 6	527	136	61	1425
Evans, David, E. H. Percy, and B. Perry, Eureka, Cal. Skid for loading and handling logs	475,011	May 17	1811	459 460	59	1012
Evans, Edwin W., Philadelphia, Pa., assignor to Evans Gas Engine Company, of New Jersey. Gas-engine	488,165	Dec. 13	1539	386	61	1645
Evans, Ellwood. (See Heulings and Evans.)						
Evans, Evan, Kaylor, Pa. Shut-off valve for oil-wells	469,996	Mar. 1	533	133	58	1202
Evans, Frank A., Waterville, Minn. Wheat-steamer	476,138	May 31	3595	908 909	59	1391
Evans, Frank W., <i>et al.</i> (See Widmer, Jacob A., assignor.)						
Evans Gas Engine Company. (See Evans, Edwin W., assignor.)						
Evans, George, New York, N. Y. Metal tooth-crown	472,344	Apr. 5	533	138	59	100
Evans, George W., Brooklyn, N. Y. Paper-cutting machine	475,761	May 31	2982	756	59	1269
Evans, George W., Baltimore, Md. Milk-can	486,281	Nov. 15	1767	465	61	966
Evans, Ira C. (See Evans, Phelps, assignor.)						
Evans, John, Philadelphia, Pa. Hot-air furnace	471,110	Mar. 22	2285	587	58	1571
Evans, John, Providence, R. I. Coin-actuated mechanism	482,119	6	322	77	60	1398
Evans, John A., Richmond, Ind. Support for shafting	484,148	Oct. 11	935	240	61	205
Evans, John R. (See Overfelt, Evans, and Capp.)						
Evans, John T., and J. H. Douglass, Adamsville, Utah Ter. Machine for cutting hay-stacks	481,393	Aug. 23	2665	653 654	60	1131
Evans, John W., Cleveland, Ohio. Percolator	486,246	Nov. 15	1701	449 450	61	952
Evans, Joseph, assignor of one-half to A. W. Wills, Birmingham, England. Power-hammer	486,772	Nov. 22	2535	661 662	61	1131
Evans, Lewis D., <i>et al.</i> (See Ratchford, Nicholas, assignor.)						
Evans, Lonis C., Springfield, Ohio. Spreader for harrows	488,352	Dec. 20	1851	463	61	1723
Evans, Mabel A. (See Newton, Andrew L., assignor.)						
Evans, Owen F., assignor of one-fourth to H. J. Biddlecome, Columbus, Ohio. Trolley-wire support	474,375	May 10	796	207	59	802
Evans, Owen N., Montreal, Canada. Cattle-guard	471,213	Mar. 22	2451	622	58	1602
Evans, Phelps, Bond Head, Canada, assignor to I. C. Evans, Tacoma, Wash. Draft-equalizer	483,911	Oct. 4	584	147	61	121
Evans, Quimby N., Brooklyn, N. Y. Heating apparatus for buildings	471,351	Mar. 22	2645	672	58	1640
Evans, Samuel W., Jr. (See Gaskill, William H., assignor.)						
Evans, Thomas S., St. Louis, Mo. Stovepipe	481,856	Aug. 30	3431	842	60	1296
Evans, Thomas W., New York, N. Y. Fountain-pen	467,261	Jan. 19	1567	399	58	315
Evans, Thomas W., Leocompton, Kans. Tree-protector	469,532	Feb. 23	2576	660	58	1053
Evans, Warren R., Portland, Me. Filter	487,614	Dec. 6	603	155	61	1442
Evans, William. (See Stafford and Evans.)						
Evans, William, Philadelphia, Pa. Molding-machine	479,755	July 26	2672	663	60	558
Evans, William, Philadelphia, Pa. Machine for treating hides or skins	484,146	Oct. 11	936	240	61	204
Evans, William, Philadelphia, Pa. Machine for treating hides or skins	484,147	Oct. 11	932	240	61	205
Evans, William D. (See Haas and Evans.)						
Evans, William E. (See Vaughan and Evans.)						
Evans, William H., Baltimore, Md. Stone-molding machine	478,226	July 5	256	63, 63	60	52
Evans, William H., Baltimore, Md. Machine for molding stone slabs	478,227	July 5	257	63, 64	60	52
Evans, William J., assignor to McKesson & Robbins, New York, N. Y. Powder-blower	478,744	July 12	1039	255	60	222
Eveleth, James E., Salix, Iowa. Portable wagon-loader	482,169	Sept. 6	411	98	60	1416
Even, Charlie, Davenport, Iowa. Lawn-mower grass-receptacle	474,234	May 3	540	133	59	742
Evered & Company. (See Clarke, George, assignor.)						
Everett, Laban J., and H. C. Betterman, Omaha, Nebr. Refrigerator	467,225	Jan. 19	1509	386	58	304
Everett, Clemen J. (See Freid, Calvin T., assignor.)						
Everett, John A., and J. Finn, Jr., Natick, Mass. Sandpapering-roll	481,938	Sept. 6	29	7	60	1340
Everett, Mary S., Brooklyn, N. Y. Cover for ironing-boards	484,951	Oct. 25	2247	579	61	492
Everett, Samuel H., Macedon, N. Y. Fertilizer-distributor	479,637	July 26	2465	613	60	520
Everhart, Logan W., Chanute, Kans. Vapor-burner	467,795	Jan. 26	2419	615	58	483
Everitt, James A., Indianapolis, Ind. Cultivator	467,226	Jan. 19	1510	336	58	304
Everitt, John S., Jewell, Iowa. Wrench	471,539	Mar. 29	2922	744	58	1701
Evershed, Sydney, London, England. Electric measuring-instrument	478,097	July 5	32	10	60	9
Evershed, Sydney, London, England. Apparatus for the measurement of electric resistances	478,098	July 5	34	11	60	10
Evershed, Sydney, London, England. Magneto-electric generator	484,785	Oct. 25	1973	503	61	438
Everson, Carrie J. (See Hebron and Everson.)						
Everson, Carrie J., <i>et al.</i> (See Hebron, Charles B., assignor.)						
Evert, John F., Mendon, Mich. Adjustable-number device	480,841	Aug. 16	1740	435	60	943
Eves, Joshua V., Belfast, Ireland. Manufacturing yarn from scatched flax	487,875	Dec. 13	1055	264	61	1547
Evory, William H., Brooklyn, N. Y. Plumber's tack	469,553	Feb. 23	2577	660	58	1053
Ewart, William D., Chicago, Ill., and J. M. Dodge, assignors to Link-Belt Engineering Company, Philadelphia, Pa. Elevator	480,659	Aug. 9	1462	364	60	874
Ewell, Herbert P., Rochester, Mich. Truss	477,251	June 21	1632	398	59	1787
Ewer, Alfred, Holicong, Pa. Corn-marker	471,214	Mar. 22	2451	622 623	58	1602
Ewers, Ammon M., Edison, Ohio. Weather-strip	481,229	Aug. 23	2392	590	60	1082
Ewers, George L., San Francisco, Cal. Gas-burner	475,912	May 17	1812	460	59	1012
Ewert, Friedrich W., Woodlawn, Ill. Fowl-crate	478,930	July 12	1322	328	60	277
Ewing, Edwin C., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Metallic ceiling	469,183	Feb. 16	1981	506	58	932
Ewing, Edwin C., and J. H. Packer, assignors to Wheeling Corrugating Company, Wheeling, W. Va. Metallic ceiling	469,182	Feb. 16	1980	506	58	932
Ewing, William W., Butler, Pa. Door-securer	473,395	Apr. 19	2030	510	59	412
Excelsior Needle Company. (See Dayton, William H., assignor.)						
Excelsior Specialty Company. (See Taylor, Cyrus, assignor.)						
Exley, George. (See Haigh and Exley.)						
Exline, Marcus P., Galveston, Tex. Cabinet for holding postage-stamps, &c	475,685	May 24	2854	721	59	1232

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Eyle, Fred, New Orleans, La. Apparatus for repelling boarders and distributing oil	481,613	Aug. 30	3031	741	60	1218
Eyman, Henry H. (See Cook and Eyman.)						
Eymer, Andrew, Saginaw, Mich. Machine for pasting labels on bottles	479,209	July 19	1764	442	60	370
Eyraud, Jean J., Paris, France. Window	470,114	Mar. 1	705	174	58	1236
Eyre, George L. P., London, and T. J. Hopkins, Trowbridge, England. Apparatus for treating wool or like substances	475,106	May 17	1958	496	59	1041
Ezell, Francis L., Wilkerson, Tenn. Sausage-stuffer	467,029	Jan. 12	1168	296	58	230
F. M. Weiler's Liberty Machine Works. (See Almén, Karl, assignor.)						
F. P. Schlosser Electric Signal and Alarm Company. (See Schlosser, Frank P., assignor.)						
Faber, Carl, Nuremberg, Germany. Pencil-sharpener	482,826	Sept. 20	1478	367	60	1650
Faber, Eberhard, New Brighton, N. Y. Lead or crayon holder. (Reissue)	11,285	Nov. 22	2650	692	61	1156
Faber, Jacob, and C. Hans, Elberfeld, Germany. Meat-chopping machine	468,531	Feb. 9	986	252	58	725
Faber, John E., St. Louis, Mo. Preserving-jar	481,939	Sept. 6	31	7	60	1340
Facer, Wilson E., assignor to G. S. Iddings and M. M. Hobart, Cleveland, Ohio, G. N. Morton and S. W. Wood, New York, N. Y. Cable telegraph	466,492	Jan. 5	295	75.76	58	56
Fach, Charles, St. Louis, Mo., and F. Hottes, Mascoutah, Ill. Wire-screen-cloth holder ..	474,577	May 10	1120	286	59	863
Fagan, Thomas B., Van Wert, Ohio. Attachment for plows	470,886	Mar. 15	1942	497	58	1492
Fager, Anthony, assignor to F. E. Kohler & Co., Canton, Ohio. Currycomb	466,827	Nov. 22	2629	686	61	1152
Fagg, Volentine F., Avilla, Mo. Steamer	481,940	Sept. 6	32	7	60	1340
Fahlberg, Nicolaus. (See Prokhoroff, Nicolaus, assignor.)						
Fahnehjelm, Otto B., Stockholm, Sweden, and C. Dellwik, Rogers Park, Ill. Machine for securing incandescing bodies for gas-burners and their holders	485,321	Nov. 1	259	70	61	625
Fahnehjelm, Otto B., Stockholm, Sweden, and C. Dellwik, Rogers Park, Ill. Machine for manufacturing lamellae or needles for incandescing gas-burners	485,322	Nov. 1	260	70	61	625
Fahnestock, George E., et al. (See Iske, Albert, assignor.)						
Fahrner, Theodor, Pforzheim, Germany. Pin-fastening	485,005	Oct. 25	2337	602	61	509
Fahrney, Callo D., Manitowoc, Wis. Coupling for air-brake pipes	485,182	Nov. 1	41	14	61	581
Fairbank Canning Company. (See Hopper, George B., assignor.)						
Fairbrother, Frederic A., Jr. (See Vanstone, Samuel, assignor.)						
Fairchild, Ben L., executor. (See Norton, Francis L.)						
Fairchild, Frank H. (See Biggs and Fairchild.)						
Fairchild, George H. (See Anderson and Fairchild.)						
Fairchild, Harry P., New York, N. Y. Combined key-ring and pencil	470,997	Mar. 15	2113	543	58	1525
Faire, Watkin L., London, England. Boot-stretcher	474,376	May 10	797	208	59	802
Fairfield, John M., Hartford, Conn. Punch	484,891	Oct. 25	2149	551	61	473
Fairfield, John M., assignor to American Writing Machine Company, Hartford, Conn. Type-writing machine	478,228	July 5	259	64	60	53
Fairfield, Roswell M. (See Allan, Robert W., assignor.)						
Fairfield, Roswell M. (See Benham, Elijah B., assignor.)						
Fairfield, Roswell M. (See Reynolds, James, assignor.)						
Fairfield, Roswell M., et al. (See Richards, Francis H., assignor.)						
Fairman, James W. (See Wankey, Lewis F., assignor.)						
Fairman, Simon, assignor to B. G. Harris, Baltimore, Md. Car-brake	488,118	Dec. 13	1456	367	61	1629
Fairmount Machine Company. (See Brown, Thomas S., assignor.)						
Faisant, John B., Paterson, N. J. Swivel-loom	467,321	Jan. 19	1656	{ 421 422 }	58	331
Faist, Kraus & Co. (See Faist and Fux, assignors.)						
Faist, William, and J. Fux, assignors to Faist, Kraus & Co., Milwaukee, Wis. Machine for sifting and sorting flour or meal	484,306	Oct. 11	1198	305	61	256
Falardeau, Dennis L., Cohoes, N. Y. Game apparatus	479,638	July 26	2467	614	60	521
Falch, Charles H. (See Fenner, Richard E., assignor.)						
Falcon, Joseph G., Evanston, Ill. Apparatus for laying iron pipe under water	467,927	Feb. 2	38	9	58	533
Fales, Eben C., Foxborough, and H. Prendiville, Worcester, Mass. Rest or support for music-books, &c.	473,150	Apr. 19	1769	447	59	361
Fales, Edward, Beaumont, Mass. Grate	465,684	Nov. 8	813	217	61	756
Falk, Gustav, New York, N. Y. Hand of leaf-tobacco	476,943	June 14	1117	269	59	1673
Falk, Gustav, New York, N. Y. Hand of leaf-tobacco	484,930	Oct. 25	2223	573	61	487
Falk, Maurice. (See Taylor and Falk.)						
Falk, Salomon. (See Webb, Henry C., assignor.)						
Falley, James. (See Falley, William and J.)						
Falley, William and J., Lafayette, Ind. Carburetor	488,281	Dec. 27	2682	664	61	1905
Fallis, Richard, Pontypool, assignor of one-half to R. H. Staples, Bethelamy, Canada. Car-brake	488,965	Dec. 27	2823	697	61	1935
Falls, William F., Boston, Mass. Portable heater	469,417	Feb. 23	2362	606	58	1012
Falvey, Jeremiah, New York, N. Y. Holder for fishing-line reels	481,941	Sept. 6	33	8	60	1340
Fancher, Alton H. (See Lauback, Isaac S., assignor.)						
Fancher, Alton H., Canton, Conn., assignor to Universal Selling Machine Company, New York, N. Y. Package adapted for automatic delivery	474,167	May 3	433	104	59	722
Fane, Thomas, and C. F. Lavender, Toronto, Canada. Tire for cycles	484,786	Oct. 25	1975	503	61	438
Fannin, Bryant B., et al. (See Brown, William T., assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Duisberg, Carl, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Lanch, Richard, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Runkel, Friedrich, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Schmidt, Robert E., assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich, Moritz, assignor.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich and Bammann, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Ulrich and Lanch, assignors.)						
Farbenfabriken, vormals Fr. Bayer & Co. (See Volkmann, Paul, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Epting, Max, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Homolka, Benno, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Kuzel, Hans, assignor.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Kuzel, Hans, assignor.) (Reissue.)						
Farbwerke, vormals Meister, Lucius & Brüning. (See Vongerichten, Eduard, assignor.)						
Fargo, Frank B., Lake Mills, Wis. Milk-tester	478,099	July 5	35	11	60	10
Fargo, William H., assignor of two-thirds to G. B. and E. P. Balch, Boston, Mass. Piano ..	488,731	Dec. 27	2452	609	61	1858
Farini, Guillermo A. (See Urry and Farini.)						
Faris, Joseph S. (See Shepherd, Francis H., assignor.)						
Faris, Lafayette, Pricetown, Ohio. Vehicle-hub-attaching collar	482,627	Sept. 13	1174	284	60	1577
Fariss, Thomas J., Judson, assignor of one-half to J. B. Conine, Alexander City, Ala. Plow ..	472,015	Mar. 29	3629	928	58	1835
Farland, Antoine, Southbridge, Mass. Adjustable staging or scaffolding	472,867	Apr. 12	1298	333	59	256
Farley, Cyrus H., Portland, Me. Eyeglass-case	474,235	May 3	541	133	59	742
Farley, Henry W., Urbana, Ill. Doll's rocking-chair	468,612	Feb. 9	1103	281	58	748
Farmer, James, Salford, England. Machine for printing or embossing fabrics	477,205	June 21	1540	{ 377 378 }	59	1772

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Farmer, Julins M., assignor of two-thirds to M. H. Case, Milwaukee, Wis. Mortising-machine	468,417	Feb. 9	799	199	58	689
Farmer, William H., and T. White, Saginaw, Mich. Means for operating the switches of street-railways	466,602	Jan. 5	468	120	58	90
Farmer's Friend Manufacturing Company. (See Waters, Frank M., assignor.)						
Farnell, Edwin. (See Clarkson, Edward, assignor.)						
Farnen, John, and J. Mulloy, Chicago, Ill. Brick-machine and mold-sander	469,399	Feb. 23	2324	{ 599 600 }	58	1065
Farnen, John, and J. Mulloy, Chicago, Ill. Brick-mold sander	469,400	Feb. 23	2334	600	58	1007
Farnor, John J., Nokomis, Ill. Step for shelves	487,117	Nov. 29	3128	802	61	1266
Farnham, John N., Waltham, Mass. Shutter-worker	485,811	Nov. 8	990	266	61	792
Farnham, John R., Brooklyn, N. Y. Vacuum-pan	472,209	Apr. 5	320	82, 83	59	60
Farnham, John S. (See Hanson and Farnham.)						
Farnham, Moses P., Germantown, Cal. Stovepipe-drum	467,370	Jan. 19	1731	443	58	345
Farnsworth, Enoch, Utahville, Pa. Automatic car-brake	486,453	Nov. 22	2020	536	61	1032
Farnsworth, William R., Turner's Falls, Mass. Paper-reel	471,788	Mar. 29	3317	845	58	1773
Farnum, William C., Arlington, Vt. Car-brake regulator	468,562	Feb. 9	1035	263	58	735
Farnum, William C., Chicago, Ill. Apparatus for casting cylindrical bodies	482,405	Sept. 13	814	196	60	1509
Faron, Samuel, Pahala, Kau, Hawaii. Diffusion apparatus	480,571	Aug. 9	1310	328	60	845
Farquhar, Arthur B. (See Eisenhart, Henry W., assignor.)						
Farquhar, Arthur B., H. W. Eisenhart, and S. S. Morton, York, Pa. Machine for thrashing and separating grain	480,660	Aug. 9	1465	{ 364 365 }	60	874
Farquhar, John F. C., Sydney, New South Wales, assignor to P. R. Craft, London, England. Knife cleaner and polisher	487,728	Dec. 13	802	205	61	1497
Farquharson, James, Tacoma, Wash. Reversible window	487,118	Nov. 29	3129	{ 802 803 }	61	1267
Farquher, John D., assignor of one-third to H. E. Long, Des Moines, Iowa. Antifriction car-wheel	472,944	Apr. 12	1414	361	59	283
Farr, Freeman S., assignor of one-half to R. W. Jones, Minneapolis, Minn. Lumber-sorter	472,016	Mar. 29	3630	928	58	1836
Farrad & Votey Organ Company. (See Hunter, Robert, assignor.)						
Farrall, George A., assignor to Johnston Harvester Company, Batavia, N. Y. Mower	472,754	Apr. 12	1146	294	59	229
Farrall, George A., assignor to Johnston Harvester Company, Batavia, N. Y. Corn-harvester	482,551	Sept. 13	1062	{ 258 259 }	60	1556
Farrand, William K., Brooklyn, N. Y. Feed-regulating valve	486,398	Nov. 15	1943	514	61	1002
Farrar, R. M., et al. (See Jones and Ashley, assignors.)						
Farrel, Franklin, Ansonia, Conn. Apparatus for and process of refining copper by electricity	485,618	Nov. 8	706	185	61	733
Farrel, John H., Camden, N. J., assignor to J. W. Douglass, Philadelphia, Pa. Pocket-lamp	479,741	July 26	2652	657	60	554
Farrell, Franklin. (See Pollard, William, assignor.)						
Farrell, George W., Au Sable Forks, assignor to I. Wiley, Albany, N. Y. Vehicle-spring	481,394	Aug. 23	2668	654	60	1131
Farrell, John, Huntsville, N. J. Hoisting-tackle	471,308	Mar. 22	2586	656	58	1628
Farrell, John A. (See Farrell, John R., assignor.)						
Farrell, John R., assignor of one-half to J. A. Farrell, Boston, Mass. Shoulder-knot	487,698	Dec. 6	745	190	61	1468
Farrell, Philip H. (See Foster and Farrell.)						
Farrell, Thomas F., Paterson, N. J. Air-compressor	479,260	July 19	1841	462	60	385
Farrell, Thomas F., Paterson, N. J. Rock-drill	479,356	July 19	1998	500	60	417
Farren Brothers Company. (See King, Charles, assignor.)						
Farren, James, assignor of one-half to R. T. Blades, Roxbury, Conn. Road-cart	475,273	May 17	2211	565	59	1093
Farrington, Clarence H., assignor to F. W. Mann, Milford, Mass. Hand bone-cutter	474,728	May 10	1352	343	59	909
Farrington, Joel, assignor of two-thirds to T. Meyerhoefer and S. Clover, Erie, Pa. Mowing-machine	470,331	Mar. 8	1095	279	58	1318
Farrington, William P., New York, N. Y. Powder-box	472,532	Apr. 12	827	211	59	170
Farrior, J. D., et al. (See Nolley, David D., assignor.)						
Farrow, Thomas L. (See Miller and Farrow.)						
Farwell, Fay O., Dubuque, Iowa. Cash-carrier	479,261	July 19	1843	462	60	386
Farwell, Pulaski, Frederick, Ill. Door-fastener	473,548	Apr. 26	2444	619	59	512
Faske, Joseph, assignor to National Hardware Company, Cincinnati, Ohio. Spring-gear for vehicles	475,304	May 24	2256	581	59	1117
Fasoldt, Ernest C., assignor of one-half to J. B. Thacher, Albany, N. Y. Speed-regulator for air-compressor pistons	481,527	Aug. 23	2886	708	60	1175
Fasoldt, Ernest C., assignor of one-half to J. B. Thacher, Albany, N. Y. Pressure-regulator for compressed-air machines	485,578	Nov. 1	653	174	61	707
Fasoldt, Ernest C., assignor of one-half to J. B. Thacher, Albany, N. Y. Valve-operating mechanism for engines	485,579	Nov. 1	655	174	61	708
Fassett, Riley D. (See Burke and Fassett.)						
Faubion, John, Sr., Leander, Tex. Car-coupling	479,262	July 19	1845	462	60	386
Faught, John. (See Overton and Faught.)						
Faught, Luther R., Philadelphia, Pa. Chilled cast-iron car-wheel	477,524	June 21	2066	514	59	1873
Faulder, Thomas, assignor to C. C. Bradley, Syracuse, N. Y. Vehicle-body	484,089	Oct. 11	846	214	61	188
Faulder, Thomas, assignor to C. C. Bradley, Syracuse, N. Y. Clamping device for vehicle-seats	486,636	Nov. 22	2315	{ 605 606 }	61	1087
Faulhaber, Friedrich A. H., and C. F. Koch, Schwäbisch Hall, Germany. Hinge	487,476	Dec. 6	406	105	61	1401
Faulkner, James J., Memphis, Tenn. Spring-motor	488,192	Dec. 20	1581	396	61	1671
Faulkner, James J., assignor of two-thirds to National Cotton Seed Oil and Huller Company, Memphis, Tenn. Cotton-seed-hull-linting machine	466,669	Jan. 5	569	147	58	110
Faulkner, James J., assignor to National Cotton Seed Oil and Huller Company, Memphis, Tenn. Cotton-seed huller	477,997	June 28	2832	{ 708 709 }	59	2040
Faulkner, Morris G., Homer, N. Y. Paper carpet	485,921	Nov. 8	1167		61	827
Faulkner, Percy S., London, England. Game apparatus	478,100	July 5	36	12	60	10
Faulkner, William J., Chicago, Ill. Toy ball	484,189	Oct. 11	996	255	61	217
Faulkner, William J., Chicago, Ill. Locket	486,033	Nov. 8	1351	359	61	866
Faunce, Albert B., and M. S. Cabell, Quincy, Ill. Lubricator	469,236	Feb. 23	2078	534	58	957
Faure, Charles, Neufchâtel, Switzerland. Apparatus for rolling up strips or webs	479,875	Aug. 2	152	37, 38	60	612
Faure, Pierre P., Limoges, France. Machine for decorticating ramie, &c.	473,110	Apr. 19	1708	432	59	348
Faust, Jacob N., Rockford, Ill. Suspender-clasp	474,060	May 3	287	69	59	692
Faust, Matthew, Munich, Germany. Inkstand	485,375	Nov. 1	351	94	61	644
Fanst, Peter, Brooklyn, N. Y. Paint-mixer	484,851	Oct. 25	2085	536	61	460
Favets, John, London, England. Cover for shoes	484,705	Oct. 18	1822	464	61	393
Favor, Myra E., Brooklyn, N. Y. Game apparatus	469,554	Feb. 23	2578	661	58	1053
Faw, Jack A., Bristol, Tenn. House-door letter-box	476,139	May 31	3597	909	59	1391
Fawcett, Albert E. (See Dyer, Nelson M., assignor.)						
Fawcett, Richard, Salem, Ohio. Shifting seat for vehicles	484,414	Oct. 18	1365	349	61	301
Fawcett, Thomas C., Leeds, England. Brick-machine	485,323	Nov. 1	262	71, 72	61	625

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Fawell, Joseph. (See Hemphill and Fawell.)						
Fawkes, Jacob H., New York, N. Y. Pocket-lamp	476,042	May 31	3435	867	59	1359
Fawkes, Joseph W., Sr., Burbank, Cal. Cultivator	474,377	May 10	798	208 209	59	802
Fawkes, Wilbert C., Chicago, Ill. Picture-exhibitor	485,464	Nov. 1	483	128	61	671
Fay, Alpheus, Cincinnati, Ohio. Churn	468,013	Feb. 2	163	39	58	556
Fay, Charles S., San Francisco, Cal. Sash-fastener	484,149	Oct. 11	936	240	61	205
Fay, Herman W., St. Louis, Mo. Bottle	486,418	Nov. 15	1976	524	61	1008
Fay, Rimmon C., assignor to Remington Arms Company, Ilion, N. Y. Wheel for cycles	484,952	Oct. 25	2248	579	61	493
Fay, Rimmon C., assignor to Remington Arms Company, Ilion, N. Y. Bicycle-brake	484,953	Oct. 25	2249	579	61	493
Fay, Stephen C., and H. Willis, Rochester, N. Y. Magazine-camera	479,587	July 26	2388	595	60	506
Fay, Thornton W., Philadelphia, Pa. Rail-fastening	475,097	Oct. 25	2475	636	61	539
Fay, Waldo G., Columbus, Ohio. Automatic tramway-switch	477,749	June 28	2441	609	59	1964
Fea, John, Amsterdam, N. Y. Furnace-door and boiler-front	471,667	Mar. 29	3104	789 790	58	1734
Fearn, Thomas J., New York, N. Y. Combination-table	471,815	Mar. 29	3358	854 855	58	1781
Fearon, Thomas, Yonkers, N. Y. Steam-heater	484,787	Oct. 25	1976	504	61	438
Fearon, Thomas, Yonkers, N. Y. Steam-generator	486,098	Nov. 15	1477	389 390	61	908
Feaster, Florence G., Ephrata, Pa. Carpet-fastener	466,903	Jan. 12	975	249	58	194
Featherstone, Alfred. (See Euchler, Otto, assignor.)						
Featherstone, Alfred. (See Haag, Paul, assignor.)						
Featherstone, Alfred, Chicago, Ill. Parasol for baby-carriages	486,454	Nov. 22	2032	537	61	1032
Fechheimer, Isaac. (See Coates and Helton, assignors.)						
Fechheimer, Isaac, <i>et al.</i> (See Coates, John F., assignor.)						
Federroll, Rudolph, New York, N. Y. Wood and coal box	478,931	July 12	1323	328	60	277
Feeney, Michael B., New York, N. Y. Magazine for cameras	471,715	Mar. 29	3190	813	58	1749
Fefel, Henry H., New York, N. Y., assignor to Union Special Sewing Machine Company, of Illinois. Overstitch binding for edges of fabrics	476,454	June 7	350	81	59	1505
Fefel, Henry H., New York, N. Y., assignor to Union Special Sewing Machine Company, of Illinois. Sewing-machine	476,455	June 7	351	82	59	1505
Fefel, Henry H., New York, N. Y., assignor to Union Special Sewing Machine Company, of Illinois. Sewing-machine	476,456	June 7	353	82	59	1506
Feger, Louis. (See Bailey and Feger.)						
Fehr, Ernst, Lucerne, Switzerland. Liquid-cooler	468,647	Feb. 9	1155	295	58	759
Fehr, Louis A., New York, N. Y. Electrical switchboard	474,632	May 10	1200	305 306	59	879
Feick, Fredrick C., assignor to Northampton Cutlery Company, Northampton, Mass. Machine for grinding cutlery and other handles	481,259	Aug. 23	2451	603 604	60	1093
Feige, Ernest, Saginaw, Mich. Drawer-fastener	486,455	Nov. 22	2033	537	61	1032
Feigenspan, Christian, assignor to Universal Carbonating Company, Newark, N. J. Manufacturing beer	475,853	May 31	3150	799	59	1302
Fein, Louise D., Cincinnati, Ohio. Steam-cooker	466,904	Jan. 12	976	249	58	195
Feldt, Frank S. (See Whelan, Andrew, assignor.)						
Feirabend, Jacob, Niederhausen, Germany. Wadding	468,480	Feb. 9	898	225	58	708
Feldkamp, Fritz A., assignor to Feldkamp, Schoenhaar & Lehr, Newark, N. J. Electrical attachment for pianos	470,294	Mar. 8	1020	260 261 262	58	1306
Feldkamp, Schoenhaar & Lehr. (See Feldkamp, Fritz A., assignor.)						
Feldmann, Alfred, Bremen, Germany. Distilling apparatus	480,842	Aug. 16	1741	435	60	943
Felton, George I., Lambeth, England. Apparatus for coating paper or other fabrics	470,115	Mar. 1	706	175	58	1236
Feldt, Ferdinand J., Peoria, Ill. Key-seating attachment for metal planing and shaping machines	483,714	Oct. 4	285	71	61	60
Feldt, Ferdinand J., and F. C. Mahler, Peoria, Ill. Metal-reamer	470,205	Mar. 8	1024	262	58	1307
Felix, Numa J., Brooklyn, N. Y. Fishing-reel	469,687	Mar. 1	26	9	58	1103
Felix, Numa J., Brooklyn, N. Y. Curtain	471,215	Mar. 22	2453	623	58	1602
Felker, Melancthon O., Springfield, Ohio. Whip-cane	482,895	Sept. 20	1603	402	60	1674
Fell, Charles, Southport, England. Velocipede	479,064	July 19	1533	382	60	328
Fell, Charles J., assignor of one-half to A. J. Schuler, Wilkes-Barré, Pa. Umbrella-runner	486,209	Nov. 15	1640	434	61	939
Fell, James W., Cambridge, Ill. Washing-machine	485,791	Nov. 8	966	259	61	788
Felland, Andrew G. (See Starks and Felland.)						
Feldlin, Abraham, Auburn, N. Y. Damper for pianos	466,493	Jan. 5	299	77	58	57
Feldlin, Abraham, Auburn, N. Y. Piano-tuning apparatus	477,590	June 21	2166	537	59	1893
Feller, Fritz, <i>et al.</i> (See Laesecke, Friedrich A., assignor.)						
Fellner, Adolf, Cincinnati, Ohio. Clasp	467,371	Jan. 19	1733	443	58	345
Fellows, Byron W., assignor of one-half to C. Murphy, Beverly, Mass. Steam steering apparatus	467,620	June 7	596	142 143	59	1555
Fellows, Frank, assignor of one-half to J. Ballard, Boston, Mass. Shaft-tug	484,415	Oct. 18	1366	349	61	301
Fellows, Jerome B., North Conway, N. H. Traveling lawn-sprinkler	473,454	Apr. 26	2229	578	59	483
Fellows, Ozro S., Bedford, assignor of one-half to D. Coy, Battle Creek, Mich. Band-cutter and feeder for thrashing-machines	467,464	Jan. 19	1870	477 478	58	372
Felsberg, Edward, and F. S. Dill, Montgomery Station, Pa. Gag-runner	475,392	May 24	2401	613	59	1145
Feltman, George, New York, N. Y. Bottling machine	467,574	Jan. 26	2080	526 527	58	419
Felton, Charles E. (See Mack, Albert G., assignor.)						
Felton, Thomas W., San Gabriel, Tex. Car-coupling	480,456	Aug. 9	1148	287	60	811
Fender, John M., Liberty, and J. L. Riter, Brownsville, Ind. Seeding-machine	486,637	Nov. 22	2317	606	61	1028
Fenn, Charles W. (See Stag, Fenn, and Schoen.)						
Fenner, George P., New London, Conn. Sheet-delivery for printing-presses	469,555	Feb. 23	2579	661	58	1053
Fenner, Herbert, <i>et al.</i> (See Keene, Samuel D., assignor.)						
Fenner, Richard E., assignor of one-half to C. H. Falch, Chicago, Ill. Fishing-reel	476,621	June 7	597	143	59	1555
Fennerty, Barbara, administratrix. (See Fennerty, John M.)						
Fennerty, John M., deceased, Washington, D. C.; B. Fennerty, administratrix. Railway-spike	477,171	June 14	1476	362	59	1746
Fenno, Charles C., Grinnell, Iowa. Corn-harvester and feed-cutter	473,111	Apr. 19	1709	432 433	59	348
Fenton, Alfred, and J. Barnes, London, England. Can-opener	480,868	Aug. 16	1782	446	60	953
Fenton Metallic Manufacturing Company. (See Foster and Hine, assignors.)						
Fenwick, Robert W., Washington, D. C., assignor to A. E. Hunt, Scranton, Pa. Glass-tube cutter	467,500	Jan. 26	1934	494	58	393
Ferdinand, Anthony B., Oshkosh, Wis. Telephone system	471,352	Mar. 22	2649	673	58	1641
Féret, Ernest, Paris, France. Permutation-lock	478,868	Apr. 12	1298	333	59	259
Fergus, William L., Chicago, Ill. Ash or garbage receptacle	472,667	Apr. 12	1011	262	59	205

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Ferguson, Alexander, Lewiston, Me. Fire-escape	482,345	Sept. 13	715	170	60	1489
Ferguson Brothers. (See Campbell, James W., assignor.)						
Ferguson, Clarence R., assignor to himself and F. M. Moore, Brooklyn, N. Y. Device for delivering change	469,779	Mar. 1	182	47	58	1123
Ferguson, Clayton C., New York, N. Y. Automatic feed-regulator	486,668	Nov. 22	2367	619	61	1097
Ferguson, Drew, <i>et al.</i> (See Williams, Robert E., assignor.)						
Ferguson, Finton F., Murfreesborough, N. C. Combined ridger, pulverizer, seed-planter, and fertilizer-distributor	471,852	Mar. 29	3407	869	58	1791
Ferguson, George, Los Angeles, Cal. Hose-band	484,190	Oct. 11	998	255	61	217
Ferguson, George C. (See Bixler and Ferguson.)						
Ferguson, George C., Odell, Nebr. Tool for dressing saw-teeth	473,622	Apr. 26	2587	651	59	539
Ferguson, Hannah F., Fort Erie, Canada. Catamenial sack	474,378	May 10	801	209	59	803
Ferguson, James R. and J., Chester, Conn. Book-leaf holder	472,571	Apr. 12	874	225	59	180
Ferguson, John. (See Ferguson, James R. and J.)						
Ferguson, John. (See James and Ferguson.)						
Ferguson, Ralph E., Akron, Ohio. Revolving paper-file	481,857	Aug. 30	3432	842	60	1296
Ferguson, Ray. (See Hanscome and Ferguson.)						
Ferguson, Richard M. (See Ford and Ferguson.)						
Ferguson, Robert G., Lakewood, N. J., assignor of two-thirds to W. A. Williams, Scarborough, N. Y. Packing	487,260	Dec. 6	33	11	61	1328
Ferguson, Robert W., <i>et al.</i> , trustees. (See Hill, Charles, assignor.)						
Ferguson, Samuel, Cedar Rapids, Iowa. Hay-loader	488,732	Dec. 27	2453	610	61	1858
Ferguson, Thomas A., Lyons, Nebr. Wrench	468,648	Feb. 9	1156	295	58	759
Ferguson, William B., <i>et al.</i> (See Ward, William H., assignor.)						
Ferguson, William E., Montclair, N. J. Device for illuminating railway-tracks	481,016	Aug. 16	2011	503	60	996
Ferguson, William W., Bloomdale, Ohio. Beer-cooler	475,548	May 24	2652	674 675	59	1192
Fergusson, Osmond, London, England. Lamp	488,711	Dec. 27	2425	601	61	1852
Fernandez, José C., Key West, Fla. Cigar-measure	470,999	Mar. 15	2115	543	58	1526
Ferraioli, Louis G., assignor of one-half to W. A. Cameron, New York, N. Y. Cake and confectionery machine	467,003	Jan. 12	1126	285	58	222
Ferraris, Erminio, Turin, Italy. Magnetic separator	468,599	Feb. 9	1084	277	58	745
Ferrell, Alfonso. (See Rogers, Timothy, assignor.)						
Ferrell, Frank J., New York, N. Y. Valve	468,242	Feb. 2	501	123 124	58	623
Ferrell, Frank J., New York, N. Y., assignor to Ferrell Manufacturing Company, of New Jersey. Valve	467,796	Jan. 26	2421	615	58	483
Ferrell, Frank J., New York, N. Y., assignor to Ferrell Manufacturing Company, of New Jersey. Valve, gate, or similar device	468,334	Feb. 9	677	167	58	604
Ferrell Manufacturing Company. (See Ferrell, Frank J., assignor.)						
Ferrell, William, assignor to Charles Scott Spring Company, Philadelphia, Pa. Mandrel for barrel-shaped springs	477,525	June 21	2068	515	59	1873
Ferren, Myron J., Stoneham, Mass. Elevated-railway track	469,371	Feb. 23	2226	587	58	998
Ferres, Jeffery T., Anderson, Ind. Coupling for shafts	469,780	Mar. 1	183	48	58	1136
Ferres, Jeffery T., Anderson, Ind. Veneer box	476,622	June 7	598	143	59	1556
Ferrin, Charles F. (See Carr and Ferrin.)						
Ferrin, Frank M. (See Roberts, Henry P., assignor.)						
Ferris, Addison J., Easthampton, Mass. Attachment for planes	469,688	Mar. 1	27	9	58	1103
Ferris, Fred H., Ketchum's Corners, N. Y. Spring-teeth harrow	485,324	Nov. 1	265	72	61	626
Ferris, Henry L., assignor to Hunt, Helm & Ferris, Harvard, Ill. Hay-carrier track	481,349	Aug. 23	2600	639	60	1119
Ferris, Sherwood B., Lakewood, N. J. Garment-supporter	474,379	May 10	803	209	59	803
Ferris, Will H., Franklinville, N. Y. Gun-cleaner	481,858	Aug. 30	3433	813	60	1296
Ferris, William J., Louisville, Ky. Bottle-stopper	481,616	Aug. 30	3032	741	60	1219
Ferriss, Edward, assignor of one-half to N. A. Jones, Alta, Cal. Machine for reducing brasses of journals	483,956	Oct. 4	651	162	61	135
Ferry, Charles H. (See Millett, Humphry D., assignor.)						
Ferry, Edwin R., New Haven, Conn. Sash-fastener	466,821	Jan. 12	826	212	58	167
Fetters, Joseph F., Dayton, Ohio. Steam-condenser	480,572	Aug. 9	1311	328	60	845
Feuchtwanger, Henry J., Elmira, N. Y. Umbrella-stand	473,623	Apr. 26	2587	651	59	540
Fey, Johann, Offenbach-on-the-Main, Germany. Apparatus for pickling meat	474,446	May 10	911	235	59	823
Fichtner, Friedrich A., Dresden, Germany. Photographic plate-changing apparatus	472,702	Apr. 12	1074	276	59	215
Fickes, Isaac N., Holland, Kans. Corn-harvester	487,558	Dec. 6	528	136	61	1425
Fickett, William S., Rochester, N. Y. Soap-bubble pipe	486,967	Nov. 29	2894	747	61	1219
Fickett, William S., assignor, by mesne assignments, to W. Wilcklow and M. Fry, Rochester, N. Y. Soap-holder	468,868	Feb. 16	1498	321	58	836
Fickett, William S., assignor of one-half to N. P. Matthews, Rochester, N. Y. Picket fence	472,636	Apr. 12	969	251	59	198
Fickett, William S., assignor to C. L. Stowell, Rochester, N. Y. Caustic-soda distributor	487,729	Dec. 13	804	205	61	1497
Fiedler, Frederick W., Scranton, Pa. Vehicle-hub	478,277	July 5	345	83	60	69
Field, Albert D., assignor to Metal Goods Manufacturing Company, Bridgeport, Conn. Shoe-fastening	483,144	Sept. 27	1980	501	60	1762
Field, Alfred, <i>et al.</i> (See Woods, Robert, assignor.)						
Field, Benjamin F., Chicago, Ill. Self-purifying superheating steam-generator	488,519	Dec. 20	2124	525 526	61	1777
Field, Benjamin P., Babylon, N. Y. Can-stopper	476,623	June 7	599	143	59	1556
Field, Charles H. (See Field, Frank H. and C. H.)						
Field, Edward, London, England. Apparatus for producing mixtures of steam and hot air	479,707	July 26	2587	644	60	542
Field, Emil J., <i>et al.</i> (See Stearns, Collins M., assignor.)						
Field, Frank H., New Orleans, La., and C. H. Field, Dalton, Ga. Portable dental chair	482,520	Sept. 13	1011	245	60	1547
Field, Jesse A., Buffalo, N. Y. Molding-machine	481,017	Aug. 16	2012	503 504	60	996
Field, John S., and W. J. Shedd, Chicago, Ill. Dumping-wagon	482,731	Sept. 20	1332	326 327	60	1621
Field, Rogers, London, England. Intermittent siphon	485,759	Nov. 8	926	248	61	779
Field, Stephen D., Yonkers, N. Y. Electrically-repeating signal	488,550	Dec. 27	2163	534 535	61	1800
Field, Thomas, <i>et al.</i> (See Stearns, Collins M., assignor.)						
Field, Thomas, Brooklyn, N. Y. Nether garment	474,550	May 10	1075	275	59	854
Field, Walter D., Millburn, N. J. Compound of sulphureted oils	478,955	July 12	1353	.....	60	283
Field, Walter D., Millburn, N. J., assignor to Tannette Manufacturing Company, of New Jersey. Compound of sulphureted oils	473,306	Apr. 19	2031	.....	59	412
Field, William R. (See Buck, Julius W., assignor.)						
Fielden, Thomas, St. Louis, Mo., assignor to Universal Brake Beam Company, Chicago, Ill. Core for hollow brake-beams	468,910	Feb. 16	1559	397	58	848

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Fields, Charles C., New Haven, W. Va. Car-coupling.....	475,040	May 17	1852	470	59	1021
Fields, Charles C., Wallace's Switch, Va., assignor of one-half to A. D. Reynolds, Bristol, Tenn. Plow.....	471,111	Mar. 22	2288	587	58	1571
Fields, Charles C., Bristol, Tenn., and W. S. Duvall, Washington, D. C.; said Fields assignor of three-eighths to A. D. Reynolds and J. B. Childers, Bristol, Tenn. Wrench.....	484,307	Oct. 11	1200	306	61	257
Fien, George H., Oneida, N. Y. Veil-pin.....	483,605	Oct. 4	132	33	61	28
Fiene, Henry, and J. E. Kroencke, Concordia, Mo. Seed-planter.....	486,669	Nov. 22	2369	619	61	1098
Fiesse, Charles, New York, N. Y. Gas-producer.....	466,603	Jan. 5	469	121	58	90
Fiester, Henry P. (See Ebst and Fiester.)						
Fiester, John C., Reading, Pa. Split pulley.....	483,647	Oct. 4	193	48	61	40
Fietsch, Herman, Jr., assignor to D. W. Ryan, Chicago, Ill. Block for stereotypes, &c....	477,591	June 21	2167	537	59	1893
Fife, Lillian R. (See Nelson, George, assignor.)						
Fifield, James J., Chelsea, Mass. Mechanism for concaving razors.....	466,777	Jan. 12	757	196 } 197 }	58	153
Filmer, William, San Francisco, Cal. Clamp for securing stereotype-plates.....	486,160	Nov. 15	1577	417	61	527
Filkins, Adelbert, assignor of one-half to T. H. Bell, Round Lake, N. Y. Snap-hook.....	473,173	Apr. 19	1820	459	59	369
Finch, Byron L., Saginaw, Mich. Washing-machine.....	485,812	Nov. 8	991	266	61	792
Finch, Henry, Michigan City, Ind. Submarine telephone.....	476,007	May 31	3387	854	59	1349
Finch, John Q., assignor of one-third to A. W. Sanborn, San Francisco, Cal. Axle-lubricator.....	482,918	Sept. 20	1633	410	60	1680
Finch, John I. (See Finch, Thomas J., assignor.)						
Finch, Thomas J., Leona, Tex., assignor of one-half to J. I. Finch, Union City, Tenn. Hay-press.....	474,498	May 10	986	254	59	838
Fincher, Thomas J., and W. Byers, Irondale, Ala. Planter.....	468,335	Feb. 9	678	108	58	664
Finck, Julius, San Francisco, Cal. Cash and package carrier.....	469,296	Mar. 1	368	93	58	1172
Finck, Julius, San Francisco, Cal. Cash and package carrier.....	471,325	Mar. 22	2606	661	58	1632
Finck, Nicholas, Elizabeth, N. J., assignor to P. L. Coombs, St. Joseph, Mo. Carburetor.....	486,224	Nov. 15	1665	440	61	945
Findlay, James, assignor of one-half to H. Miller, Toronto, Canada. Street-car replacer.....	467,763	Jan. 26	2373	603	58	474
Findlay, John H. (See Bossert and Findlay.)						
Findling, Valentine, Tipton, Ind. Fence-post.....	486,544	Nov. 22	2157	570	61	1057
Fine, Mahlon H., Alden Station, Pa. Lubricator.....	482,346	Sept. 13	716	171	60	1489
Finegan, Amos E., Meyersdale, Pa. Combined collection and delivery letter-box.....	467,588	Jan. 26	2099	532	58	423
Finegan, Amos E., Meyersdale, Pa. Door-securer.....	467,589	Jan. 26	2101	532	58	423
Finegan, John W., Lowell, Mass. Wringing-machine.....	480,457	Aug. 9	1149	288	60	811
Fink, Conrad, St. Louis, Mo. Smoke-purifier.....	486,247	Nov. 15	1706	450	61	953
Fink, Joseph H., New York, N. Y. Finger-ring.....	467,928	Feb. 2	39	9	58	533
Fink, Joseph H., New York, N. Y. Finger-ring.....	467,929	Feb. 2	40	9	58	533
Fink, Joseph H., New York, N. Y. Finger-ring.....	470,751	Mar. 15	1729	445	58	1451
Fink, Joseph H., New York, N. Y. Interchangeable-initial finger-ring.....	480,080	Aug. 2	513	130	60	680
Finkbiner, W. S. G., et al. (See Manderfield, George J., assignor.)						
Finkler, Henry C., San Francisco, Cal. Roller-brake.....	488,066	Dec. 13	1383	343	61	1614
Finley, Martin L., Smith Centre, Kans. Timber-blasting plug.....	469,297	Feb. 23	2179	559	58	976
Finnand, John J., Hopkins, Minn. Siding-holder.....	476,257	June 7	44	10	59	1446
Finnant, John J., and J. J. Nissen, Hopkins, Minn. Level attachment.....	472,345	Apr. 5	534	138	59	100
Finn, Edwin, Elkhart, Ind. Boring and screw-driving machine.....	487,441	Dec. 6	354	90, 91	61	1391
Finn, Edwin, Elkhart, Ind. Riser for wagon-bodies.....	488,671	Dec. 27	2363	584	61	1840
Finn, Edwin, Elkhart, Ind., assignor to S. D. Kimbark, Chicago, Ill. Corner-iron for wagon bodies or seats.....	480,187	Aug. 2	685	173	60	712
Finn, George W., et al. (See Gordon, Thomas J., assignor.)						
Finn, John, Jr. (See Everett and Finn.)						
Finnegan, John, assignor to T. Devlin & Co., Philadelphia, Pa. Transom-lifter.....	466,739	Jan. 5	687	176 } 177 }	58	131
Finney, John, Portland, Oreg. Link-lifter.....	478,932	July 12	1324	329	60	277
Finnigan, Frank B., assignor of one-half to G. W. Hillman, Boston, Mass. Shears.....	467,130	Jan. 12	1355	316	58	266
Finsterer, Frederick, Avon, Mont. Wagon-jack.....	470,116	Mar. 1	708	175	58	1236
Finsterer, John, Philadelphia, Pa. Chamber or commode pot.....	470,887	Mar. 15	1943	497	58	1492
Firestone, Elmer A., Spencer, Ohio. Animal-dipper.....	466,372	Nov. 15	1993	503	61	993
Firman, Leroy B., Chicago, Ill. Police and fire-alarm signaling apparatus.....	470,666	Mar. 15	1603	417	58	1426
Firman, Leroy B., assignor to Police Telephone and Signal Company, Chicago, Ill. Combined police and fire-alarm signal apparatus.....	470,667	Mar. 15	1606	417	58	1427
Firme, Christian W. (See Thillman and Firme.)						
Firnstein, George A., Cincinnati, Ohio. Punch for cutting out shapes from sheets of plastic material.....	475,549	May 24	2654	675	59	1193
First National Bank. (See Hanson, Olaus, assignor.)						
Firth, John P., Titusville, Pa. Weighing-scale.....	488,882	Dec. 27	2683	664	61	1905
Fisch, Joseph. (See Hall and Gottschalk, assignors.)						
Fischbeck, Victor D. (See Erdmann, William J., assignor.)						
Fischer, Albert, Philadelphia, Pa. Bottler's apron.....	473,698	Apr. 26	2700	679	59	562
Fischer, Benno, Stuttgart, assignor to himself and Keats Maschinen Gesellschaft, Frankfurt-on-the-Main, Germany. Sewing-machine.....	466,559	Jan. 5	401	102	58	77
Fischer, Charles S. (See Jacobi, Henry, assignor.)						
Fischer, Emil, Hallsville, Ill. Sliding gate.....	476,375	June 7	236	57	59	1482
Fischer, Engelbert, Chicago, Ill. Box-board matcher and jointer.....	481,752	Aug. 30	3262	794	60	1263
Fischer, Engelbert, Chicago, Ill. Automatic cut-off sawing-machine.....	483,998	Oct. 11	717	180 } 181 }	61	162
Fischer, Frank X., Oakland, Cal. Boiler.....	480,081	Aug. 2	514	130	60	6-0
Fischer, Frederick J. W., assignor to Eagle Pencil Company, New York, N. Y. Pen.....	487,143	Nov. 29	3171	812	61	1274
Fischer, Gustav, Chemnitz, assignor to A. Vieweg, Siegmars, Germany. Thermostat and alarm.....	485,739	Nov. 8	905	242	61	775
Fischer, Herman, Brooklyn, N. Y. Machine for pasting vamps to uppers.....	487,388	Dec. 6	244	66	61	1369
Fischer, Hermann, Prairieville, Ill. Metallic fence-post.....	488,193	Dec. 20	1583	397	61	1671
Fischer, Hermann C. (See Kuchler and Fischer.)						
Fischer, Jacob A. (See Grace, Henry S., assignor.)						
Fischer, John, and E. Preiser, Milwaukee, Wis. Stove.....	479,210	July 19	1766	443	60	370
Fischer, John F., Philadelphia, Pa. Manufacture of paper frames for slates, &c.....	483,648	Oct. 4	194	48	61	40
Fischer, John H. (See Struck, Charles E., assignor.)						
Fischer, John U., New York, N. Y. Sounding-board and resonant chamber for pianofortes.....	473,307	Apr. 19	2034	511	59	412
Fischer, John U., New York, N. Y. Upright piano.....	473,308	Apr. 19	2035	511 } 512 }	59	412
Fischer, Joseph, Cleveland, Ohio. Underground trolley.....	482,506	Sept. 13	985	238	60	1542
Fischer, Richard E., Baltimore, Md. Rotary drying-machine.....	474,005	May 3	129	44, 45	59	675
Fish, Charles H., et al. (See West, Derrick S., assignor.)						
Fish, George M., et al. (See Fish, John, assignor.)						
Fish, Henry C., Worcester, Mass. Steam-generator.....	480,365	Aug. 9	994	250	60	783

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Fish, John, South Bend, Ind., assignor of one-half to G. M. and M. Fish, Joliet, Ill. Electric mining pick and drill.	472,444	Apr. 5	678	174	59	127
Fish & Kronenberg. (See Martin, Albert D., assignor.)						
Fish, Manning, <i>et al.</i> (See Fish, John, assignor.)						
Fish, Perry J., assignor of one-half to E. M. Buel, Barberton, Ohio. Envelope or case.	469,204	Feb. 16	2030	518	58	939
Fish, Warren E., assignor of two-thirds to C. C. Corbett and C. T. Osborn, Chicago, Ill. Soap receptacle and grater.	470,186	Mar. 8	834	205	58	1270
Fishbaugh, Charles. (See Elliott, Oscar A., assignor.)						
Fishel, Charles W., Aspen, Colo. Paper bag.	467,088	Jan. 12	1271	322	58	250
Fisher, Ahnon H., Worcester, Mass. Railway step-ladder.	470,374	Mar. 8	1166	299	58	1331
Fisher, Alvan B., Rutland, Mass. Roving-can.	481,554	Aug. 30	2937	722	60	1201
Fisher, Andrew S., assignor of one-half to M. H. Valentine, Bedford, Pa. Sash-fastener.	483,837	Oct. 4	473	118	61	98
Fisher, Charles H., Canton, Mass., assignor to American Atomizing Aerator Company, Portland, Me. Atomizer.	470,375	Mar. 8	1168	299 300	58	1331
Fisher, Ebenezer. (See McBride and Fisher.)						
Fisher, Edmond T., assignor of one-third to F. K. Parker, Boston, Mass. Paper-dampening machine.	483,738	Oct. 4	320	80, 81	61	67
Fisher, Elben C., Sissonville, W. Va. Corn-planter.	476,624	June 7	600	144	59	1556
Fisher, George A., assignor to Abendroth Brothers, New York, N. Y. Stove or range.	474,729	May 10	1353	343	59	909
Fisher, George H., South Bend, Ind. Card game-counter.	483,715	Oct. 4	286	71	61	60
Fisher, George L., Amboy, Ill. Washing machine.	477,998	June 28	2833	709	59	2010
Fisher, George W., Keene, N. H. Combined pad-support and pencil-holder.	470,668	Mar. 15	1608	417	58	1427
Fisher, Henry W., assignor to Standard Underground Cable Company, Pittsburg, Pa. Joint-mold.	467,881	Jan. 26	2562	649	58	509
Fisher, Ina M. (See Fisher, Isaac M. and I. M.)						
Fisher, Isaac M. and I. M., Burrows, Mo. Jar filler and holder.	483,049	Sept. 20	1838	467	60	1723
Fisher, Jacob H. (See Hess, John R., assignor.)						
Fisher, James, New Orleans, La. Belt-and-pulley gearing.	477,108	June 14	1374	335	59	1725
Fisher, James W., assignor of one-half to F. C. McLam, Palouse, Wash. Water-supply system.	476,043	May 31	3436	868	59	1359
Fisher, James W., assignor to himself, F. McLam, E. and W. Jones, and E. Doering, Palouse, Wash. Car-brake.	477,172	June 14	1478	362	59	1746
Fisher, John, Havana, Cuba. Cane-mill.	482,084	Sept. 6	265	64	60	1387
Fisher, John, Havana, Cuba. Feed-chute for sugar-mills.	482,085	Sept. 6	267	64	60	1388
Fisher, John A., Pittsburg, Pa. Car-brake.	473,501	Apr. 26	2370	601	59	498
Fisher, John V. (See Gilham, William C., assignor.)						
Fisher, Leonora E., <i>et al.</i> (See Fisher, Thomas N., assignor.)						
Fisher, Louis F., Willow Springs, Mo. Safety attachment for car-trucks.	486,968	Nov. 29	2895	748	61	1220
Fisher, Michel J. (See Snyder and Fisher.)						
Fisher, Sarah M., assignor to herself and M. L. Jennings, Spencer, N. Y. Shutter-worker.	476,044	May 31	3437	868	59	1360
Fisher, Thomas N., assignor to G. H. Smith and L. E. Fisher, Cleveland, Ohio. Coffin-protector.	473,760	Oct. 4	391	97	61	82
Fisher, William H., assignor of one-half to B. G. Segog, Duluth, Minn. Automatic railway-switch.	466,977	Jan. 12	1088	276	58	215
Fisher, William T., Prigmore, Tenn. Egg-crate.	487,144	Nov. 29	3171	812	61	1274
Fisher, William Y., Big Timber, Mont. Snow-plov.	469,937	Mar. 1	432	108	58	1184
Fisher, William Y., and C. Perry, Big Timber, Mont. Lifting-jack.	482,628	Sept. 13	1176	284	60	1577
Fisk, Amos, Amboy, Minn. Car-coupling.	468,600	Feb. 9	1086	277	58	745
Fisk, Clark & Flagg. (See Flagg, Thomas J., assignor.)						
Fisk, Henry D., Davidsburg, Mich. Nut-wrench.	467,401	Jan. 19	1778	453	58	354
Fisk, Henry G., <i>et al.</i> (See Heath, Henry, assignor.)						
Fisk, Horace H., Florence, Oreg. Barrel-stand.	483,978	Oct. 4	687	171	61	142
Fisk, John F., Jr., Cincinnati, Ohio. Valve-nozzle for oil-cans.	486,373	Nov. 15	1905	503	61	993
Fisk, Sam T., <i>et al.</i> (See Noteman, Alonzo, assignor.)						
Fiske, Bradley A., U. S. Navy. Method of and apparatus for finding the position of distant objects.	472,617	Apr. 12	944	243 244	59	193
Fiske, Bradley A., U. S. Navy. Range and position finder.	483,999	Oct. 11	720	181 182	61	162
Fiske, Jonathan P. B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Trolley-wire support.	468,336	Feb. 9	680	168	58	665
Fiske, Jonathan P. B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Rheostatic controller for electric motors.	485,619	Nov. 8	709	186	61	733
Fiske, Jonathan P. B., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-motor controller.	485,620	Nov. 8	711	186	61	734
Fitch, Asa M., Seymour, Ind. Walking and riding plow.	468,966	Feb. 16	1662	425	58	868
Fitch, Asa M., Seymour, Ind. Combined riding and walking gang-plow.	484,000	Oct. 11	723	182	61	163
Fitch, Charles T., and A. Schantz, Perth Amboy, N. J. Brick-cutting machine.	488,883	Dec. 27	2685	664 665	61	1905
Fitch, Ellsworth E., <i>et al.</i> (See Wall, Charles W., assignor.)						
Fitch, Francis E. (See Horton and Fitch.)						
Fitch, Nathan T., assignor to Salisbury Manufacturing Company, Salisbury, Md. Truck or fruit basket.	472,964	Apr. 12	1449	370	59	289
Fitch, William E., Louisville, Ky. Back or lining for fireplaces.	479,103	July 19	1594	399	60	339
Fitch, William E., Louisville, Ky. Back or lining for fireplaces.	480,322	Aug. 9	929	236	60	771
Fitch, William E., assignor to Peerless Manufacturing Company, Louisville, Ky. Fire-place-grate.	470,855	Mar. 15	1897	486	58	1483
Fithian, Frank L., Haddonfield, N. J. Game apparatus or puzzle.	473,217	Apr. 19	1896	478	59	324
Fithian, Frank L., Haddonfield, N. J. Game apparatus.	473,218	Apr. 19	1897	478 479	59	384
Fithian, Jonathan, Bridgeton, N. J. Bottle-snap.	480,458	Aug. 9	1150	288	60	811
Fitts, William L., San José, Cal. Pipe-coupling.	466,521	Jan. 5	341	85	58	66
Fitz, Amos G., Auburn, Me. Lathe for roughing lasts.	485,621	Nov. 8	714	187	61	734
Fitz, James H., Waltham, Mass. Overalls.	471,789	Mar. 29	3319	845	58	1773
Fitzgerald, Walter H., and A. Bencke, Newark, N. J. Watchcase.	475,209	May 17	2113	534 535	59	1073
Fitzgerald, James. (See Pelton, George W., assignor.)						
Fitzgerald, James, Duluth, Minn. Clutch.	484,308	Oct. 11	1202	306	61	257
Fitzgerald, James E., Fall River, Mass. Top roll for twisting-machines.	485,266	Nov. 1	167	49	61	607
Fitzgerald, John, Montreal, Canada. Combined gas and electric-light bracket.	473,661	Apr. 26	2643	666	59	551
Fitzgibbons, Patrick, and H. K. Eason, Oswego, N. Y. Steam-generator.	485,183	Nov. 1	45	14	61	581
Fitzmaurice, James S., assignor to Electric Brand Company, Limited, Sydney, New South Wales. Branding-stamp.	483,050	Sept. 20	1839	467	60	1723
Fitzpatrick, Edward E., Wichita, Kans. Flood-gate for sewers.	470,669	Mar. 15	1609	418	58	1427

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Fitzpatrick, James H. (See Andrews and Fitzpatrick.)						
Fitzsimons, Thomas J., Rapidan, Minn. Wheel-cultivator	488,884	Dec. 27	2686	665	61	1906
Fitzwater, William M., Berryville, assignor of seven-tenths to H. L. D. Lewis, S. J. C. and A. Moore, Jr., C. Kownslar, G. G. Calmer, Clarke county, and M. McCormick, Berryville, Va. Street letter-box	476,996	June 14	1193	290	59	1689
Fix, F. William, Jr. (See Snell, Levi W., assignor.)						
Flack, Eli G., Tiffin, Ohio. Display-rack for whips	470,559	Mar. 8	1445	375	58	1385
Flagg, Frank E., assignor of one-half to A. Dow, New York, N. Y. Pencil-pointer	481,018	Aug. 16	2016	504	60	997
Flagg, George H. P. (See Warren, Frank H., assignor.)						
Flagg, Samuel H., Providence, R. I. Conduit for electric wires	480,573	Aug. 9	1313	328	60	845
Flagg, Thomas J., et al. (See Heath, Henry, assignor.)						
Flagg, Thomas J., assignor to Fisk, Clark & Flagg, New York, N. Y. Shirt	466,335	Jan. 5	42	11	58	11
Flaglor, Amasa P., assignor to H. Flaglor, San Francisco, Cal. Device for modifying and controlling rays of light for photographic purposes	483,606	Oct. 4	133	33	61	28
Flaglor, Helen. (See Flaglor, Amasa P., assignor.)						
Flaherty, Edward, Mahanoy City, Pa. Steam-engine	467,501	Jan. 26	1935	494	58	393
Flaherty, Thomas, Pittsburg, Pa. Electric-street-lamp post	476,739	June 7	768	189	59	1590
Flajole, John A., Bay City, Mich. Steam-heater	486,862	Nov. 29	2696	704	61	1180
Flamm, William, Denver, Colo. Sofa	488,332	Dec. 20	1816	{ 454 455 }	61	1716
Flanagan, Michael, assignor of one-half to W. Doyle, Milwaukee, Wis. Car-coupling	476,008	May 31	3388	855	59	1349
Flanagan, James I., Philadelphia, Pa. Handle for washboilers, &c	470,888	Mar. 15	1944	497	58	1492
Flanagan, James I., Philadelphia, Pa. Handle for washboilers	479,588	July 26	2390	596	60	506
Flanders, Henry M., Ashland, Nebr. Post-hole auger	484,519	Oct. 18	1535	390	61	334
Flanders, John J., assignor to C. R. Milliken, Portland, Me. Pulp-screen	488,166	Dec. 13	1540	386	61	1646
Flanders, William G., New York, N. Y. Combined vaporizer, inhaler, and atomizer	475,274	May 17	2211	{ 565 566 }	59	1093
Flanders, William G., New York, N. Y. Dental-tool sterilizer	482,552	Sept. 13	1069	259	60	1557
Flanigan, Thomas A., Pittsburg, Pa. Nut and bolt lock	482,472	Sept. 13	926	226	60	1529
Flannery, Michael, North Towanda, Pa. Puzzle	475,210	May 17	2114	535	59	1073
Flatau, Louis S., Pittsburg, Tex., assignor to B. F. Avery & Sons, Louisville, Ky. Cultivator	468,764	Feb. 9	1335	337	58	796
Flatau, Louis S., Pittsburg, Tex., assignor to B. F. Avery & Sons, Louisville, Ky. Plow	470,913	Mar. 15	1979	506	58	1499
Flatau, Louis S., Pittsburg, Tex., assignor to B. F. Avery & Sons, Louisville, Ky. Harrow and cultivator	471,378	Mar. 22	2687	685	58	1649
Flatau, Louis S., Pittsburg, Tex., assignor to B. F. Avery & Sons, Louisville, Ky. Harrow	471,379	Mar. 22	2690	686	58	1649
Flatau, Louis S., Pittsburg, Tex., assignor to B. F. Avery & Sons, Louisville, Ky. Sulky-plow	482,943	Sept. 20	1667	419	60	1687
Flatau, Louis S., Pittsburg, assignor to Flatau Manufacturing Company, Dallas, Tex. Whiffletree	485,622	Nov. 8	717	188	61	735
Flatau, Louis S., Pittsburg, assignor to Flatau Manufacturing Company, Dallas, Tex. Whiffletree	486,863	Nov. 29	2697	704	61	1180
Flatau Manufacturing Company. (See Flatau, Louis S., assignor.)						
Fleck & Söhne, C. L. P. (See Schrader, Wolfgang, assignor.)						
Fleckenstein, Cornelius, assignor to F. X. Wagner, New York, N. Y. Type-writing machine	472,445	Apr. 5	680	{ 174 175 131 132 }	59	127
Fleckenstein, Valentin, Oshkosh, Wis. Machine for sewing straw covers for bottles	480,082	Aug. 2	515	{ 131 132 }	60	680
Fleet, Lindley M. (See Nickerson and Fleet.)						
Fleischel, George, and J. Bertrand, San Francisco, Cal. Lock	479,104	July 19	1595	399	60	339
Fleischer, Emil, Wiesbaden, Germany. Making aluminates of alkalies	472,668	Apr. 12	1012	-----	59	205
Fleischer, Nicholas A. (See Grieger, Louis H., assignor.)						
Fleischmann & Co. (See Kliemetschek, Adolph, assignor.)						
Fleischmann & Co. (See Sobotka, Gustav, assignor.)						
Fleischmann & Co. (See Sobotka and Kliemetschek, assignors.)						
Fleischmann, Julius and P. Sonneberg, Germany. Doll	477,892	June 28	2676	669	59	2007
Fleischmann, Paul. (See Fleischmann, Julius and P.)						
Fleisher, Ida M., Philadelphia, Pa. Carrier for umbrellas	485,922	Nov. 8	1168	308	61	827
Fleming, Caughey S., Shelbyville, Ind. Caster	468,195	Feb. 2	437	109	58	610
Fleming, Charles F. (See Fleming, George A. and C. F.)						
Fleming, George A. and C. F., San José, Cal. Fruit-grader	475,497	May 24	2569	654	59	1176
Fleming, Harve E. (See McAnlis and Fleming.)						
Fleming, John W., Brooklyn, N. Y. Boiler-tube cutter	484,852	Oct. 25	2086	536	61	460
Fleming, Samuel S., Sarversville, Pa. Feed-water mechanism for steam-boilers	468,014	Feb. 2	104	40	58	556
Fleming, Will A., Lewiston, Idaho. Bicycle	471,472	Mar. 22	2837	722	58	1676
Fleming, Will A., assignor of one-half to G. W. Morrison, Lewiston, Idaho. Vehicle-wheel	476,533	June 7	463	110	59	1529
Fleming, William B., Philadelphia, Pa. Electrically-controlled valve	476,376	June 7	237	58	59	1483
Fleming, Willom L., Humboldt, Iowa. Milk-strainer	477,796	June 28	2511	630	59	1977
Flemming, James, Buffalo, N. Y. Shifting device for elevators	487,559	Dec. 6	530	136	61	1426
Fler, John K., Leavenworth, Kans. Melon-carrier	466,670	Jan. 5	570	147	58	111
Fleshman, Benjamin F., Alvon, W. Va. Wagon-brake	484,001	Oct. 11	725	182	61	163
Fletcher, Andrew H., assignor of one-half to E. E. Harris, Kingsville, Canada. Thill-support	472,476	Apr. 5	732	187	59	139
Fletcher, Augustus, Minersville, Pa. Steam-blower	482,236	Sept. 6	510	{ 121 122 }	60	1434
Fletcher, Charles R., Boston, Mass. Apparatus for refining metals by electricity	484,416	Oct. 18	1367	350	61	301
Fletcher, Charles R., Boston, Mass. Method of and apparatus for electro-deposition of metals	485,343	Nov. 1	295	79	61	632
Fletcher, David H., et al. (See Franklin, Benjamin, assignor.)						
Fletcher, Edwin J., New York, N. Y. Trunk-stand	483,348	Sept. 27	2327	585	60	1828
Fletcher, Esten A. (See Mathie and Fletcher.)						
Fletcher, George, Derby, England, and W. P. A. Bell, Essequibo, British Guiana. Cut-off mechanism for slide-valves	485,267	Nov. 1	168	49, 50	61	607
Fletcher, George N., et al. (See Moore, Charles E., assignor.)						
Fletcher, John R., Dayton, Ohio. Windlass	468,563	Feb. 9	1037	264	58	736
Fletcher, Wendell C. (See Johnston and Fletcher.)						
Fluss, Henry A., London, England. Umbrella or parasol	483,212	Sept. 27	2097	532	60	1786
Flexner, Jacob A., Louisville, Ky. Syringe	478,583	July 12	804	198	60	175
Flick, Rudolph, Cleveland, Ohio. Vapor-stove	483,051	Sept. 20	1840	468	60	1723
Fligelman, Fred A., et al. (See Wein, John H., assignor.)						
Fligelman, Herman, et al. (See Wein, John H., assignor.)						
Flinn, Sydney, Caddo, Colo. Automatic food-gate	482,868	Sept. 20	1549	386	60	1664
Flinn, William B., San Francisco, Cal. Car-brake	471,635	Mar. 29	3057	778	58	1725
Flinn, William H., Nashua, N. H. Tool for cutting sheet metal and wire	472,210	Apr. 5	322	83	59	60

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Flint, Edward, Jr., Cambridge, assignor of one-half to C. F. Brown, Reading, and A. W. Crossley, Boston, Mass. Work-holder for variety molding-machines.	469,938	Mar. 1	433	109	58	1184
Flint, Edwin H., Cincinnati, Ohio. Stem winding and setting watch	472,987	Apr. 19	1504	383	59	313
Flocke, Robert, Newark, N. J., assignor to G. Bernheim, New York, N. Y. Satchel or bag frame	477,109	June 14	1375	335	59	1725
Floersheim, Berthold, Allegheny, Pa. Nut-lock	472,637	Apr. 12	970	251	59	198
Flohr, Otto, Buffalo, N. Y. Hoisting-machine	484,358	Oct. 11	1273	325	61	272
Flook, William A., Des Moines, Iowa, assignor of one-half to J. C. Hamrick, Princeton, Ill. Car-coupling	486,864	Nov. 29	2698	704	61	1181
Florence, Eva M. (See Hunter, Rudolph M., assignor.)						
Florsheim, Elizabeth, <i>et al.</i> (See Stone, James, assignor.)						
Flower, Albert H., Transfer, Pa. Saw-jointing machine	484,494	Oct. 18	1496	380	61	326
Flower, Francis S. (See Beauregard and Flower.)						
Flowers, William J., Chicago, Ill. Fire-escape	488,966	Dec. 27	2823	697	61	1936
Floyd, Frank W. (See Clark and Floyd.)						
Floyd, Wells & Company. (See Brooke, Isaac, assignor.)						
Flügge, Adolf, Frankfurt-on-the-Main, Germany. Solution of myrrh-resin and making the same	479,935	Aug. 2	251	.....	60	630
Flurey, James, and A. O'Leary, Lindsay, Canada; said O'Leary assignor to J. C. O'Brien.						
Feed-trough	485,580	Nov. 1	656	174	61	709
Flury, Paul, El Paso, Tex. Treating speiss	486,330	Nov. 15	1837	.....	61	920
Flynn Business Envelope Company. (See Flynn, Peter H., assignor.)						
Flynn, Edward W., Clinton, Iowa. Implement for chipping ice	475,978	May 31	3346	843	59	1340
Flynn, Henry, Leavenworth, Kans. Lock	474,955	May 17	1716	436	59	905
Flynn, John, Vail, Iowa. Washing-machine	480,083	Aug. 2	518	132	60	681
Flynn, Peter. (See Oldfield and Flynn.)						
Flynn, Peter H., Syracuse, N. Y. Garter attachment	482,629	Sept. 13	1177	284	60	1578
Flynn, Peter H., assignor to Flynn Business Envelope Company, Syracuse, N. Y. Envelope	484,733	Oct. 18	1868	475	61	402
Flynn, Thomas F. (See Carthy and Flynn.)						
Flynn, Thomas H., Cleveland, Ohio. Iron railing	485,268	Nov. 1	170	50	61	607
Fobes, Richard, deceased; L. A. Taylor, Worcester, Mass., executor. Machine for digging sewers, &c.	468,486	Feb. 9	909	231	58	710
Foehl, Charles, and C. A. Weeks, Philadelphia, Pa. Revolver	468,243	Feb. 2	504	124	58	624
Foehl, Charles, and C. A. Weeks, Philadelphia, Pa. Barrel-strap catch for revolvers	471,112	Mar. 22	2290	588	58	1572
Foerster, Henry. (See Hirschmann, Christoph, assignor.)						
Fogleman, John M. (See Gilpin, Eli J., assignor.)						
Fogerty, George. (See Fogerty, George F., assignor.)						
Fogerty, George F., assignor of one-half to G. Fogerty, Cambridge, Mass. Gun	482,305	Sept. 6	629	150	60	1458
Fogler, Frank. (See Fogler, William, assignor.)						
Fogler, William, assignor of one-half to F. Fogler, Jersey City, N. J. Rotary engine	471,816	Mar. 29	3361	855	58	1781
Folded Paper Carpet Lining Company. (See Gibb, Austin, assignor.)						
Foley, Frank, assignor of one-half to P. H. Kerwin, Westfield, Mass. Whip	472,869	Apr. 12	1300	334	59	260
Foley, John E. (See Foley, Thomas F. and J. E.)						
Foley, John P. (See Rockliff and Foley.)						
Foley, Nelson, Naples, Italy. Lubricator	473,921	May 3	57	10	59	647
Foley, Thomas F. and J. E. Jackson, Mich. Vehicle-wheel	479,495	July 26	2262	567	60	482
Folger, Arthur, Leavenworth, Kans. Former for making boxes	467,986	Feb. 2	120	29	58	547
Folk, Deborah C. (See Wilcox, Curtis N., assignor.)						
Folk, Jesse E., Brooklyn, N. Y., assignor to Aktiebolaget Separator, Stockholm, Sweden. Centrifugal liquid-separator	488,672	Dec. 27	2365	585	61	1840
Folk, Lawrence I. (See Dempsey and Folk.)						
Folk, Lawrence I., J. W. Nairn, and L. H. Dempsey, Dubuque, Iowa. Wrench	483,893	Oct. 4	421	104	61	88
Folkerth, Esty. (See Oaks, Isaiah, assignor.)						
Follenius, Reinhold H., St. Louis, Mo. Name-plate for monuments, signs, &c.	482,237	Sept. 6	511	122	60	1435
Follett, Charles, <i>et al.</i> (See Dowling, Robert H., assignor.)						
Follett, Charles H., <i>et al.</i> (See Dowling, Robert H., assignor.)						
Follett, Joseph L., New York, N. Y. Composite metal wheel	475,305	May 24	2256	581	59	1117
Follmer, Clogg & Co. (See Brown, Walton, and Rich, assignors.)						
Folsom, Lewis L., Stone House, Nev. Foot-lever for the cutter-bars of mowers	482,347	Sept. 13	718	171	60	1490
Fondu, Jean B., Vilvorde, Belgium. Lubricator	486,969	Nov. 29	2596	748	61	1220
Fontaine, Eugene, Auburndale, Ohio, assignor to Fontaine Safety Signal Company, Detroit, Mich. Railway time-signal	467,990	Feb. 2	124	30, 31	58	548
Fontaine, Eugene, assignor to Union Novelty Company, Auburndale, Ohio. Curling-tongs	472,446	Apr. 5	685	175	59	129
Fontaine, Isaac, assignor of one-half to F. X. Deroin, Chicopee, Mass. Let-off mechanism for looms	484,002	Oct. 11	727	182 } 183 }	61	163
Fontaine Safety Signal Company. (See Fontaine, Eugene, assignor.)						
Fontan, Bernard, Buenos Ayres, Argentine Republic. Clasp	469,237	Feb. 23	2079	534	58	958
Foose, George C., assignor of one-half to R. Horne, Warsaw, N. Y. Dust-pan	469,781	Mar. 1	185	48	58	1137
Foot, Charles W. (See Hosford, Henry H., assignor.)						
Foot, David M. (See Cameron, Ezra G., assignor.)						
Foot, Delavan S., assignor of one-half to Chicago Street Indicator and Advertising Company, Chicago, Ill. Advertising-card rack	475,726	May 24	2926	742	59	1244
Foot, Edward N. (See Saunders, Range, and Foot.)						
Foot, Edward N., Northampton, Mass. Cash-register	469,012	Feb. 16	1756	447	58	887
Foot, Edward N., assignor to Boston Cash Register Company, Northampton, Mass. Cash registering and indicating machine	487,215	Nov. 29	3278	837	61	1294
Foot, Edward N., and J. J. Range, assignors to Boston Cash Register Company, Northampton, Mass. Cash-register	469,194	Feb. 16	2001	510	58	936
Foot, Edward N., and J. J. Range, assignors to Boston Cash Register Company, Northampton, Mass. Cash registering and indicating machine	479,357	July 19	2000	500 } 501 }	60	417
Foot, John B., Hamilton, Ohio. Shearing-machine	474,832	May 17	1507	385	59	953
Foot, John B., Hamilton, Ohio. Can-seaming machine	476,258	June 7	44	10	59	1446
Foot, John B., Hamilton, Ohio. Stamping-press	487,730	Dec. 13	805	206	61	1498
Foot, John B., Hamilton, Ohio, assignor to E. and O. W. Norton, Chicago, Ill. Can-testing machine	471,353	Mar. 22	2654	674	58	1641
Foot, John B., Hamilton, Ohio, assignor to E. and O. W. Norton, Chicago, Ill. Can-machine	480,256	Aug. 9	810	208	60	748
Foot, Lewis A., Austin, Minn., assignor to Buckeye Car Seal and Manufacturing Company, Cleveland, Ohio. Car-seal press	475,211	May 17	2115	535	59	1073
Foot, Walter E., assignor to G. N. Todd, Chicago, Ill. Cotton-harvester	475,979	May 31	3348	814	59	1340
Foran, John R., <i>et al.</i> (See Wilson, William C., assignor.)						
Forbes, Alexander C., Corry, Pa., assignor of three-sevenths to G. T. Hanning, New York, N. Y. Tube-cutter	474,823	May 17	1508	385	59	953

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Forbes, Alexander G. (See Kemp, George W., assignor.)						
Forbes, Alexander G., and G. W. Kemp, Montgomery, Ala. Trimming attachment for sewing-machines	485,538	Nov. 1	591	158	61	694
Forbes, Charles S., London, England. Magnetic telephone	484,150	Oct. 11	937	241	61	205
Forbes, Edwin, Flatbush, N. Y. Apparatus for starting racers	481,260	Aug. 23	2453	604	60	1094
Forbos, George W., Guberville, Cal. Cultivator	468,986	Feb. 16	1708	435	58	877
Forbes, Horace B., Ogden, Utah Ter. Magazine-firearm	467,089	Jan. 12	1271	222	58	250
Forbes, John, assignor of two-thirds to W. T. Hildrup, Jr., and W. H. Forbes, Harrisburg, Pa. Machine for molding articles in sand	467,930	Feb. 2	41	9, 10	58	534
Forbes, John S. (See Adams and Forbes.)						
Forbes, John S., Philadelphia, Pa. Feed-controlling apparatus	467,717	Jan. 26	2302	584 585	58	460
Forbes Mine Car Appliance Company. (See Odorizzi, Joseph, assignor.)						
Forbes, Samuel D., Wilmington, Del. Spoke-socket	466,990	Jan. 12	1110	281	58	220
Forbes, Samuel D., Wilmington, Del. Hub	467,004	Jan. 12	1127	286	58	222
Forbes, Silas H., Clarendon Hill, assignor to E. O. Ely, trustee, Boston, Mass. Disinfecting device	474,597	May 10	1146	291	59	868
Forbes, Stephen M., St. Louis, Mo. Combination wire-fence tool	479,561	July 26	2355	588	60	500
Forbes, Walter T., Atlanta, Ga. Machine for decorticating ramie. &c.	480,084	Aug. 2	519	132	60	681
Forbes, Walter T., assignor of one-half to J. F. Lester, Atlanta, Ga. Wool-washing machine	478,419	July 5	555	134	60	108
Forbes, William D., Morristown, N. J. Rapid-firing arm	466,778	Jan. 12	760	197 198	58	154
Forbes, William D., Morristown, N. J. Breech-loading bolt-gun	466,779	Jan. 12	763	198	58	155
Forbes, William H., et al. (See Forbes, John, assignor.)						
Forbush, Walter R., assignor of one-half to W. M. Kasson, Boston, Mass. Fireproof flooring	469,082	Feb. 16	1845	472	58	905
Forbush, Walter R., assignor of one-half to W. M. Kasson, Boston, Mass. Building-block	469,083	Feb. 16	1848	473	58	905
Force, Alexander S., Jersey City, N. J., assignor to J. M. Carey, New York, N. Y. Disinfecting device	467,575	Jan. 26	2082	527	58	419
Force, Horace W., Newburg, N. Y. Attachment for stereopticons, magic lanterns, &c.	482,238	Sept. 6	513	122	60	1435
Force, William A., Brooklyn, N. Y. Composition for stereotype-plates	483,716	Oct. 4	287		61	60
Ford, Archibald, Golden Gate, Cal. Apparatus for reducing bituminous rock	479,496	July 26	2263	567	60	483
Ford, Bruce, Gloucester, N. J. Incandescent electric lamp and lamp-socket	481,019	Aug. 16	2018	504	60	997
Ford, Charles, Lowell, Mass. Pile-wire	479,211	July 19	1767	443	60	371
Ford, Charles, Lowell, Mass. Pile-wire for looms	487,417	Dec. 6	309	80	61	1382
Ford, Charles S., Jr., assignor to E. Burris, Philadelphia, and T. J. Duncan, Eden, Pa. Puzzle	483,912	Oct. 4	585	147	61	121
Ford, Edward C., and G. T. Jacobs, Washington, D. C. Roll-paper holding and severing machine	474,551	May 10	1076	275	59	855
Ford, Edward L. (See Ray, Miles E., assignor.)						
Ford, Edward L., Youngstown, Ohio. Platform for open-hearth furnaces	468,532	Feb. 9	987	252	58	725
Ford, Edward L., Youngstown, Ohio. Metallurgical plant	468,533	Feb. 9	998	253	58	726
Ford, Edward P., and A. B. Moffitt, Irving College, Tenn. Harrow	485,623	Nov. 8	718	188	61	735
Ford, Eugene A., New York, N. Y. Type-writing machine	472,870	Apr. 12	1301	334	59	260
Ford, George, New Harmony, Ind. Gate	480,085	Aug. 2	520	132	60	681
Ford, Henry B., Philadelphia, Pa. Apparatus for cooling water	477,893	June 28	2676	669	59	2007
Ford, Henry W., and R. M. Ferguson, assignors to Eclipse Wind Engine Company, Beloit, Wis. Hoop-coupling	477,173	June 14	1480	362	59	1747
Ford, Henry W., and R. M. Ferguson, assignors to Eclipse Wind Engine Company, Beloit, Wis. Hoop-coupling	477,174	June 14	1481	363	59	1747
Ford, Joseph S., Jr., and G. H. Lockhart; said Ford assignor, by mesne assignments, to G. W. Johnson, Philadelphia, Pa. Coin-controlled paper-supplying device	467,293	Jan. 26	2580	653 654	58	512
Ford, Matthew S., Blackburn, La. Index	484,151	Oct. 11	939	241	61	206
Ford, Simon P., Morrisonville, Ill. Grain elevating and measuring machine	471,965	Mar. 29	3503	910	58	1821
Ford, Summerfield, Chicago, Ill. Cleaning attachment for type-writing machines	480,257	Aug. 9	814	208	60	749
Ford-Washburn Storelectro Company. (See Washburn, George A., assignor.)						
Ford, William H., Watertown, N. Y., assignor to New York Air Brake Company. Locomotive-brake	473,112	Apr. 19	1710	433	59	349
Ford, William H., assignor of one-half to W. A. Stickney, St. Louis, Mo. Conduit system for electric railways	478,956	July 12	1354	335	60	283
Forde, Frank, et al. (See Pruner, Thomas H., assignor.)						
Fordham, Arthur, Chicago, Ill. Railway-car	487,918	Dec. 13	1123	280	61	1560
Fordham, Arthur, Chicago, assignor of one-half to R. H. Wiles, Freeport, and H. Bitner, Chicago, Ill. Car-vestibule	482,006	Sept. 6	135	33	60	1361
Fordham, Leonie. (See Stoner, John B., assignor.)						
Fore, William A. (See Rickabach, William H., assignor.)						
Forell, Carl von, Brunswick, Germany. Artificial Portland cement	486,706	Nov. 22	2432		61	1111
Forell, Carl von, Brunswick, Germany. Artificial Roman cement	486,707	Nov. 22	2432		61	1111
Forest, William E., New York, N. Y. Muscle-roller	472,572	Apr. 12	875	225	59	181
Forg, Peter, Somerville, Mass. Grinding attachment	471,380	Mar. 22	2692	686	58	1649
Fornander, Alfred, New York, N. Y. Pencil	480,188	Aug. 2	686	174	60	712
Fornander, Alfred, assignor of one-fourth to T. W. Ridsdale, New York, N. Y. Braiding-machine	468,649	Feb. 9	1157	295	58	760
Forney, Matthias N., New York, N. Y. Fire-grate	472,039	Apr. 5	41	9	59	10
Forney, Matthias N., New York, N. Y. Reversible back for car or other seats	482,447	Sept. 13	886	213 214	60	1521
Forney, Matthias N., New York, N. Y. Locomotive-engine	485,344	Nov. 1	297	79, 80	61	632
Forrest, Alfred, et al. (See Siero, Leonard, assignor.)						
Forrest, Earnest J., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob	472,805	Apr. 12	1214	312	59	242
Forrest, John W. (See Engels, Charles T. N., assignor.)						
Forrester, Peter C., Wilkeson, Wash. Mining coal	473,734	Apr. 26	2758	693	59	572
Forry, Charles E. (See Devoro and Forry.)						
Forsberg, Peter G., Minneapolis, Minn. Automatic stop for cracker-oven reels	467,536	Jan. 26	2013	510	58	407
Forsgard, Samuel J., Waco, Tex. Dumping-wagon	482,438	Sept. 13	975	236	60	1539
Forsghew, Mary J., New York, N. Y. Nursery-bag	485,098	Oct. 25	2476	636	61	539
Forsman, Leonard, Albina, Oreg. Drag-sawing machine	481,555	Aug. 30	2928	722	60	1201
Forster, Charles, Pittsburg, assignor to W. & H. Walker, Allegheny, Pa. Machine for marking or ornamenting candles	471,991	Mar. 29	3596	918	58	1828
Forster, Ferdinand E., New York, N. Y. Petroleum-burner	473,067	Apr. 19	1628	415	59	335
Forster, Frank, Etiwanda, Cal. Movable step	482,573	Sept. 13	1094	266	60	1563
Forster, Frederick J., Rochester, N. Y. Wooden pulley	469,517	Feb. 23	2517	646	58	1041
Forster, George H., Baltimore, Md. Barrel	481,350	Aug. 23	2601	639	60	1119

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Forster, Henry, New York, N. Y. Insertible tooth for diamond saws.....	474,084	May 3	322	76	59	699
Forster, Irene, <i>et al.</i> (See Green, John, assignor.)						
Forster, John R., and T. S. Rackhiff, assignors to Russell & Erwin Manufacturing Company, New Britain, Conn. Lock.....	466,918	Jan. 12	997	255	58	199
Forster, John W., <i>et al.</i> (See Green, John, assignor.)						
Forster, Thomas V., Avalon, assignor to W. & H. Walker, Allegheny, Pa. Ornamenting candles.....	471,499	Mar. 22	2870	731	58	1682
Forster, Thomas V., Avalon, assignor to W. & H. Walker, Allegheny, Pa. Ornamented candle.....	471,992	Mar. 29	3597	919	58	1828
Forster, Thomas V., Avalon, assignor to W. & H. Walker, Allegheny, Pa. Ornamenting candles.....	472,945	Apr. 12	1416	362	59	283
Forster, William E., Lynn, Mass. Sole-pressing machine.....	473,420	July 5	556	135	60	109
Forsyth, Joseph E., and E. R. Merrell, Chicago, Ill. Car-coupling.....	488,551	Dec. 27	2165	535	61	1800
Forsyth, Robert H., Washington, D. C. Box for holding coin.....	476,625	June 7	601	144	59	1556
Fort, Laurens A., Raleigh, N. C. Bird-trap.....	471,473	Mar. 22	2839	722	58	1676
Fort Wayne Organ Company. (See Trainer, John W., assignor.)						
Forter, Samuel, Allegheny, Pa. Hydraulic motor.....	482,732	Sept. 20	1334	327 328 329	60	1622
Fortier, Charles L., Milwaukee, Wis. Valve-controller.....	479,795	Aug. 2	30	8	60	588
Fortier, Charles L., assignor to G. Knowles, Jr., Milwaukee, Wis. Fire-extinguishing apparatus.....	468,439	Feb. 9	825	208	58	694
Fortier, Charles L., assignor to G. Knowles, Jr., Milwaukee, Wis. Automatic sprinkler system.....	468,440	Feb. 9	826	208 209	58	694
Fortimolite Metal Company. (See Cole, James W., assignor.)						
Fortin, Charles, Florissant, Mo. Guide for replacing electric trolleys.....	480,766	Aug. 16	1628	408	60	922
Fortin, Michel, Stillwater, Minn. Bag-holder.....	486,708	Nov. 22	2433	633	61	1111
Fortuno, Manuel, Mexico, Mexico. Fare-registering device.....	471,540	Mar. 29	2923	744	58	1701
Fosburgh, Robert L., and J. F. Milligan, St. Louis, Mo. Brake-handle.....	469,401	Feb. 23	2336	600	58	1007
Fosburgh, Robert L., and J. F. Milligan, St. Louis, Mo. Brake-handle.....	484,954	Oct. 25	2251	580	61	493
Foskett, William A., <i>et al.</i> (See Garland, Frank M., assignor.)						
Foss, John F., Lowell, Mass. Spinning machinery.....	472,477	Apr. 5	733	187	59	139
Foss, Lewis T., Boston, Mass. Tooth-brush.....	479,796	Aug. 2	33	8	60	588
Foster, Albert W., Seville, Ohio. Stovepipe-collar and fastening device therefor.....	470,327	Mar. 8	1089	278	58	1317
Foster, Benjamin F., assignor of two-thirds to J. M. Propst and G. Graves, Neosho, Mo. Tongue-support.....	470,931	Mar. 15	2003	512	58	1504
Foster, Benjamin O., Chicago, Ill. Attachment for suspenders.....	472,040	Apr. 5	43	9	59	10
Foster Bros. (See Foster, William S., assignor.)						
Foster, Charles E., Washington, D. C., and J. W. Hine, assignors to Fenton Metallic Manufacturing Company, Jamestown, N. Y. Case for books.....	480,693	Aug. 9	1516	377	60	883
Foster, Charles H., Omaha, Neb. Warm-air register.....	486,865	Nov. 29	2700	704	61	1181
Foster, Charles J., Westbrook, assignor to C. R. Milliken, Portland, Me. Pulp-screening machine.....	488,067	Dec. 13	1384	344	61	1615
Foster, Edward L. D. (See Chipman and Foster.)						
Foster Engineering Company. (See Foster, John M., assignor.)						
Foster, Ephraim A., Port Clinton, Ohio. Rack for displaying goods.....	481,942	Sept. 6	34	8	60	1341
Foster, Festus, Mount Hope, Kans. Washing-machine.....	471,541	Mar. 29	2925	745	58	1702
Foster, Frank. (See Terry, David C., assignor.)						
Foster, Fred D. (See Hastings and Foster.)						
Foster, George C. H. (See Smith and Foster.)						
Foster, George H., and P. H. Farrell, Brooklyn, N. Y. Inkstand.....	481,649	Aug. 30	3080	752	60	1228
Foster, Horatio A., New York, N. Y. System of arc lighting.....	472,346	Apr. 5	535	139	59	100
Foster, James C. (See Luther, Areons B., assignor.)						
Foster, John E., Monmouth, Ill. Street-car.....	486,034	Nov. 8	1354	359	61	866
Foster, John F., Marceline, Mo. Combination-lock.....	479,412	July 26	2100	526	60	451
Foster, John M., Cranford, assignor to Foster Engineering Company, Newark, N. J. Automatic regulating-valve.....	483,979	Oct. 4	688	172	61	142
Foster, John W., assignor to Foster Machine Company, Westfield, Mass. Spooling-machine.....	473,417	Apr. 19	2231	560	59	450
Foster, Joseph M., assignor of one-half to R. Bruce, Boston, Mass. Kerf-spreader.....	482,507	Sept. 13	986	239	60	1542
Foster, Lebbus H., Adrian, Mich. Hinge.....	479,936	Aug. 2	251	62	60	630
Foster Machine Company. (See Foster, John W., assignor.)						
Foster, Michael A., St. Louis, Mo. Boiler-furnace.....	471,966	Mar. 29	3564	910	58	1822
Foster, Oscar S. (See Frank and Foster.)						
Foster, Parks, <i>et al.</i> (See Weller, George L., assignor.)						
Foster, Percy R., Buffalo, N. Y. Valve for steam-engines.....	476,457	June 7	355	82	59	1506
Foster, Reginald L., Bradford, near Manchester, and J. S. Crowley, Paignton, England. Bottle-stopper.....	472,041	Apr. 5	44	9	59	10
Foster, Robert F., New York, N. Y., assignor to C. Goodall & Son, London, England. Game-marker.....	478,694	July 12	953	237	60	205
Foster, Samuel L., assignor to J. T. Ahrens, Wilmington, Del. Electric stop-motion for textile machinery.....	479,358	July 19	2003	501	60	418
Foster, Timothy H. (See Ayres and Foster.)						
Foster, Washington H., assignor of one-half to H. C. Howell and W. H. Brafford, Concord, N. C. Car-coupling.....	480,459	Aug. 9	1151	288	60	811
Foster, William, Tungamah, Victoria. Machine for molding or shaping butter.....	472,921	Apr. 12	1380	354	59	277
Foster, William R., Birmondsey, England. Pneumatic tire.....	468,196	Feb. 2	438	109	58	610
Foster, William S., assignor to Foster Bros., Utica, N. Y. Combined spiral spring and support.....	486,773	Nov. 22	2538	662	61	1132
Fosteria Steel Roofing Company. (See Bonbrake, Lewis S., assignor.)						
Fothergill, John R. (See Dadds and Fothergill.)						
Foulds, Albert, <i>et al.</i> (See Hartley, Richard, assignor.)						
Foulds, Henry, <i>et al.</i> (See Hartley, Richard, assignor.)						
Fountain, Vincent, assignor of one-sixteenth to T. F. Ryder, West New Brighton, N. Y. Bell-buoy.....	488,552	Dec. 27	2166	535	61	1801
Fouquet & Franz. (See Lieb, Robert, assignor.)						
Fowler, Anderson. (See Duechting, William, assignor.)						
Fowler, Arthur H., Buffalo, N. Y. Semi-direct radiator.....	479,413	July 26	2104	527	60	451
Fowler, Benjamin F., assignor of one-half to C. R. Waterman, Minneapolis, Minn. Fume-drainer for cooking-vessels.....	481,901	Aug. 30	3504	858	60	1309
Fowler, Benjamin F., assignor of one-half to C. R. Waterman, Minneapolis, Minn. Frying-pan or skillet.....	482,630	Sept. 13	1177	284	60	1578
Fowler, Charles M., Salem, Mass. Fire-escape.....	481,693	Aug. 30	3148	768	60	1241
Fowler, Charles S., Brooklyn, N. Y. Cracker-machine.....	474,168	May 3	434	105	59	722

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Fowler, Charles S., Brooklyn, N. Y. Valve mechanism for cracker-machines	485,863	Nov. 8	1068	284	61	807
Fowler, Charles W., Baltimore, Md. Noise-deadening cover for openings in pavements	469,501	Feb. 23	2493	639	58	1036
Fowler, Charles W., Baltimore, Md. Elevator	472,113	Apr. 5	163	44	59	31
Fowler, Charles W., Baltimore, Md. Elevator	486,709	Nov. 22	2434	634	61	1111
Fowler, Charles W., Baltimore, Md., and J. Gustafson, Rockaway, N. J.; said Gustafson, assignor to N. Hiss, Baltimore, Md. Automatic safety device for elevators	467,590	Jan. 26	2102	{ 532 533 }	{ 58 58 }	423
Fowler, Charles W., and A. M. Coyle, assignors to Standard Screw Elevator Company, Baltimore, Md. Automatic safety device for elevators	467,591	Jan. 26	2104	533	58	423
Fowler, Elizabeth R., Chetopa, Kans. Ironing-board	482,348	Sept. 13	718	171	60	1490
Fowler, Frank G., Bridgeport, Conn. Boiler-feeder	467,749	Jan. 26	2353	596	58	470
Fowler, George A., Kansas City, Mo. Refrigerator-car	478,995	July 19	1432	{ 354 355 }	{ 60 60 }	308
Fowler, George E. (See Gwynne and Fowler.)						
Fowler, George L., New York, N. Y. Sash-cord fastener	469,639	Mar. 1	28	10	58	1104
Fowler, Green L., Clarksburg, Mo. Weather-strip	469,556	Feb. 23	2580	661	58	1054
Fowler, Henry A., Northbridge, and J. H. Lingley, Worcester, assignors of one-third to S. Fowler, Northbridge, Mass. Curtain-rod	466,940	Jan. 12	1028	262	58	504
Fowler, Henry A., Northbridge, J. H. Lingley and C. W. Dodge, Worcester, assignors to said Fowler and Lingley and S. Fowler, Northbridge, Mass. Curtain-rod	468,987	Feb. 16	1710	435	58	878
Fowler, Herbert E., New Haven, Conn. Metal-bending machine	473,455	Apr. 26	2290	{ 578 579 580 }	{ 59 59 59 }	483
Fowler, John. (See Wood and Fowler.)						
Fowler, John, Louisville, Ky. Antifriction alloy	474,295	May 3	640		59	761
Fowler, John E., Chicago, Ill. Monthpiece for musical instruments	474,118	May 3	364	87	59	707
Fowler, John W. (See Grady, James, assignor.)						
Fowler, John W., Brooklyn, N. Y. Fare-register	487,731	Dec. 13	810	{ 206 207 }	{ 61 61 }	1498
Fowler, Jonathan O., Jr., New York, N. Y., assignor to A. E. Hunt, Scranton, Pa. Glass-tube cutter	476,626	June 7	603	144	59	1556
Fowler, Joseph C., Washington, D. C. Paper-folding mechanism	473,068	Apr. 19	1629	{ 415 416 709 }	{ 59 59 59 }	335
Fowler, Joseph C., Washington, D. C. Perfecting printing-press	477,999	June 28	2833	{ 710 711 }	{ 59 59 }	2040
Fowler, Joseph C., assignor of one-half to L. G. Hine, Washington, D. C. Spacer for type-matrices	470,649	Mar. 8	1570	408	58	1411
Fowler, Joseph C., assignor of one-half to L. G. Hine, Washington, D. C. Machine for producing type-bars	481,920	Aug. 30	3536	{ 866 867 868 869 }	{ 60 60 60 60 }	1317
Fowler, Lewis H., Vallejo, Cal. Fire-ladder	478,278	July 5	346	83, 84	60	70
Fowler, Samuel. (See Fowler and Lingley, assignors.)						
Fowler, Samuel. (See Fowler, Lingley, and Dodge, assignors.)						
Fowler, Samuel S., Elizabeth City, N. C. Traveler for ring-spinning frames	478,256	July 5	315	76	60	63
Fowler, Thomas W., Washington, D. C. Document-file	475,212	May 17	2116	{ 535 536 }	{ 59 59 }	1073
Fowler, Walter B., assignor of one-half to L. Saunders, Lawrence, Mass. Boiler	482,999	Sept. 20	1760	444	60	1706
Fowler, Walter B., assignor of one-half to L. Saunders, Lawrence, Mass. Boiler for marine engines	484,000	Sept. 20	1761	444	60	1706
Fowler, William, Colorado Springs, Colo. Electrical hose signaling apparatus	470,752	Mar. 15	1730	446	58	1451
Fowler, William, Colorado Springs, Colo. Electrical hose signaling apparatus	486,807	Nov. 22	2587	674	61	1142
Fowler, William M., Milford, Conn. Apparatus for dispensing drinks	468,481	Feb. 9	899	{ 228 229 }	{ 58 58 }	708
Fowler, William M., Milford, Conn. Apparatus for dispensing drinks	477,797	June 28	2512	630	59	1977
Fowlkes, Mary R., Selma, Ala. Adjustable palette for artists	486,710	Nov. 22	2435	634	61	1112
Fox, Clarence W., Saugus, Mass. Spatula	479,937	Aug. 2	252	62	60	631
Fox, Cyrus D., Roscoe, Ill. Riding attachment for plows, harrows, &c	485,184	Nov. 1	47	15	61	582
Fox, Ethelbert C. (See Miles, George D., assignor.)						
Fox, Frank A., San Francisco, Cal., assignor to Empire Car Coupler Company, Weehawken, N. J. Car-coupling	467,882	Jan. 26	2564	649	58	510
Fox, Frank A., San Francisco, Cal., assignor to C. E. Bishop, Brooklyn, N. Y. Car-coupling	468,765	Feb. 9	1337	338	58	796
Fox, Henry. (See Kellogg, Fortunatus G., assignor.)						
Fox, James T., assignor to W. H. Torian, Sherman, Tex. Gate-latch	480,189	Aug. 2	687	174	60	712
Fox, John, New York, N. Y. Double-blade bevel-gage	482,888	Sept. 20	1587	399	60	1670
Fox Machine Company. (See Fox, William R., assignor.)						
Fox, Richard N., et al. (See Anderson, Henry C., assignor.)						
Fox, Samuel S., Marion, Ohio. Tooth-brush case and pencil-holder combined	482,631	Sept. 13	1178	285	60	1578
Fox Solid Pressed Steel Company. (See Barnes, David L., assignor.)						
Fox Solid Pressed Steel Company. (See Mackenzie-Hughes, Edward W., assignor.)						
Fox, Thomas H., Ashland, Va. Axle-lubricator	470,998	Mar. 15	2114	543	58	1525
Fox, William R., Grand Rapids, Mich. Miter-cutter	476,045	May 31	3439	868	59	1360
Fox, William R., Grand Rapids, Mich. Miter-cutter	477,526	June 21	2069	515	59	1873
Fox, William R., Grand Rapids, Mich. Miter-cutter	483,436	Sept. 27	2455	618	60	1853
Fox, William R., assignor to Fox Machine Company, Grand Rapids Mich. Milling-machine	483,838	Oct. 4	474	118	61	98
Foy, Thomas, assignor of two-thirds to J. P. Walker and G. F. Ward Freehold N. J. Pencil-sharpener	471,216	Mar. 22	2454	623	58	1602
Fraas, Gustav A., Dresden, Germany. Vehicle-shaft	480,869	Aug. 16	1783	446	60	953
Fraim, Edward T., Lancaster, Pa. Padlock	478,850	July 12	1207	300	60	255
Fraim, Edward T., Lancaster, Pa. Padlock	479,414	July 26	2107	527	60	452
Fraizer, Perry, New Castle, Ind. Filing and supply case	478,584	July 12	805	198	60	175
Fraleigh, Isaac, and F. L. Hemmer, Poughkeepsie, N. Y. Rotary stock-cutter	485,792	Nov. 8	967	259	61	788
Fraleigh, Joseph C., Philadelphia, Pa. Rendering iron, steel, and other similar metals homogeneous	475,498	May 24	2571	654	59	1177
Fralinger, Joseph F., Atlantic City, N. J. Roundabout	485,495	Nov. 1	524	139	61	679
Fralinger, Joseph F., assignor of one-half to L. A. Haines, Atlantic City, N. J. Cable roundabout	472,211	Apr. 5	323	83, 84	59	61
Fralinger, Joseph F., assignor of one-half to L. A. Haines, Atlantic City, N. J. Roundabout	472,212	Apr. 5	324	84	59	61
France, A. L. (See Cheeseman, Samuel E., assignor.)						
France, Albert L., Milldale, assignor to Kenton Can Company, Covington, Ky. Supplementary lens for bicycle or carriage lamps	467,227	Jan. 19	1512	386	58	304

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
France, Albert L., Milldale, assignor to Kenton Can Company, Covington, Ky. Supple- mentary lens for bicycle and carriage lamps.....	480,661	Aug. 9	1469	366	60	874
France, Joseph R., New York, N. Y. Toilet or other article of plastic material.....	478,851	July 12	1209	300	60	255
France, Joseph R., New York, N. Y. Waterproof fabric.....	481,485	Aug. 23	2318	692	60	1162
Francis, Edward W. (See Thayer and Francis.)						
Francis, Henry A., Toronto, Canada. Garment-fastening.....	488,068	Dec. 13	1386	344	61	1615
Francis, Samuel H., Houston, Tex. Vine-cutter.....	483,627	Oct. 4	164	40	61	34
Francisco, Charles H., <i>et al.</i> (See Eger, William, assignor.)						
Francisco, George W., <i>et al.</i> (See Eger, William, assignor.)						
Franccke, Otto, Dresden, Germany. Developing-dish.....	471,542	Mar. 29	2927	745	58	1702
François, Hector. (See Rolland and François.)						
Frank, Albert E., and E. H. Hoad, Pittsburg, Pa. Transferring designs to glass, porce- lain, or other surfaces.....	467,090	Jan. 12	1273	-----	58	250
Frank, Gustave, New York, N. Y. Fuel press and cutter.....	473,534	Apr. 26	2901	728	59	600
Frank, Gustavus J. H., Chicago, Ill. Overalls.....	467,931	Feb. 2	46	11	58	534
Frank, Henry C., New York, N. Y. Hook and eye.....	482,473	Sept. 13	927	226	60	1529
Frank, Jerome W., New York, assignor of three-fifths to L. S. Langville, Troy, N. Y. Ad- hesive.....	478,229	July 5	261	-----	60	53
Frank, Johnston H., Eden, Ind. Picket-wiring fence-machine.....	488,310	Dec. 20	1777	{ 447 448 }	61	1708
Frank, Leopold, London, England. Glove.....	468,149	Feb. 2	367	91	58	596
Frank, Leopold, New York, N. Y. Waistband for trousers.....	471,967	Mar. 29	3565	910	58	1822
Frank, Salomon. (See Rosenthal and Frank.)						
Frank, William E., St. Louis, Mo., and O. S. Foster, Utica, N. Y. Spring bed-bottom.....	466,535	Jan. 5	361	90	58	69
Franke, Adolf, assignor to Urania-Uhren- und Säulen-Commandit-Ges. Breslauer & Dr. Von Orth, Berlin, Germany. Electrical stop-valve.....	483,108	Sept. 20	1927	488	60	1741
Franko, Charles S., Brooklyn, N. Y. Button.....	487,389	Dec. 6	247	66	61	1369
Frankel, Alexander C., Newark, N. J. Leaf-turner.....	475,393	May 24	2401	613	59	1145
Frankel, Jerome W., Baltimore, Md. Roll-paper holder and cutter.....	474,598	May 10	1147	292	59	868
Frankey, James F., Dodge City, Kans. Type-writing machine.....	472,042	Apr. 5	45	{ 10 11 12 }	59	10
Franklin, Benjamin, assignor of three-fourths to D. H. Fletcher, C. R. Beach, and G. H. Merriell, Chicago, Ill. Electric alarm-clock.....	477,206	June 21	1543	378	59	1772
Franklin, Edward A., Brenham, Tex. Liquid-transferring device for vessels.....	466,336	Jan. 5	42	11	58	11
Franklin, Elhanan H., assignor of one-half to W. A. Dorsey, Berrett, Md. Cultivating-plow.....	468,743	Feb. 9	1303	331	58	789
Franklin, James, Montverde, Fla. Apparatus for irrigating and sprinkling land.....	479,105	July 19	1597	400	60	339
Franklin, John J., <i>et al.</i> (See Ripson, John D., assignor.)						
Franklin, Rhodolph H., Brooklyn, N. Y. Pocket-knife.....	475,396	May 24	2257	582	59	1118
Franks, Madison S., Alexander, Tex. Earth-auger.....	471,605	Mar. 29	3015	767	58	1718
Fransmann, John, New York, N. Y. Wheel-shoe.....	479,708	July 26	2590	645	60	543
Frantz, Amendes. (See Frantz, Hiram A., assignor.)						
Frantz, Amendes, Lehigh, Pa. Car-coupling.....	469,340	Feb. 23	2236	574	58	987
Frantz, Hiram A., Tamaqua, assignor of one-half to A. Frantz, Lehigh county, Pa. Car- coupling.....	472,290	Apr. 5	442	114	59	83
Frantz, Andrew. (See Eichhorn, Andreas, assignor.)						
Francel, Carl, Domstadt, Austria-Hungary. Cleaner, sheller, and peeling-machine.....	466,402	Jan. 5	142	39	58	29
Frash, Hans A., assignor to Grasselli Chemical Company, Cleveland, Ohio. Method or process of treating sludge.....	488,528	Dec. 27	2293	568	61	1826
Frash, Herman, London, Canada, assignor to Solar Refining Company, of Ohio. Retin- ing Canadian or similar petroleum-oils.....	487,119	Nov. 29	3130	803	61	1267
Frash, Herman, Cleveland, Ohio, assignor to Solar Refining Company, of Ohio. Purify- ing petroleum.....	487,216	Nov. 29	3279	837	61	1294
Fraser, Andrew, San Francisco, Cal. Ore-concentrating machine.....	487,261	Dec. 6	34	11, 12	61	1328
Fraser & Chalmers. (See Ross, Frank A., assignor.)						
Fraser, John, Reinton, Canada, assignor to American Harrow Company, Detroit, Mich. Fertilizer-distributor.....	485,269	Nov. 1	171	51	61	607
Fraser, Peter, Plymouth, Mass., assignor to Atlas Tack Corporation, of Massachusetts. Ma- chine for making spiral springs.....	481,395	Aug. 23	2668	{ 654 655 656 }	60	1131
Fraser, Peter, Trenton, N. J., assignor to Atlas Tack Corporation, of Massachusetts. Ma- chine for knotting the ends of spiral springs.....	481,396	Aug. 23	2675	{ 656 657 }	60	1132
Fraser, William, Sparkbrook, near Birmingham, assignor of one-half to J. G. Chapman, Birkenhead, England. Hose-pipe fitting.....	475,213	May 17	2118	536	59	1074
Frawley, Thomas F., <i>et al.</i> (See Wolfe, George C., assignor.)						
Frayer, Charles A., Keithsburg, Ill. Pipe or flue beader and expander.....	474,956	May 17	1717	437	59	995
Frayer, Charles A., Keithsburg, Ill. Pipe or flue beader and expander.....	478,000	June 28	2843	711	59	2041
Frazar, Everett W., Orange, N. J., and T. Thuman, Chicago, Ill. Device for moistening air.....	470,424	Mar. 8	1248	320	58	1346
Frazee, David F., <i>et al.</i> (See Bierley, Henry A., assignor.)						
Frazee, Fremont, and J. L. Wintersteen, Chicago, Ill. One-wheeled vehicle.....	486,456	Nov. 22	2034	{ 537 538 }	61	1032
Frazer, Walter L., and W. E. Brown, National City, Cal. Adjustable spindle-nut.....	475,762	May 31	2984	757	59	1270
Frazeur, David C., New Market, assignor of one-half to J. A. Frech, Somerville, N. J. Power-transmitting mechanism.....	487,615	Dec. 6	604	155	61	1442
Frazier, Edward S., Aurora, Ill. Sulky.....	481,556	Aug. 30	2940	722	60	1202
Frazier, Edward S., Aurora, Ill. Ball-bearing for vehicle-wheels.....	482,896	Sept. 20	1604	402	60	1674
Frazier, Joseph W., assignor to R. F. Montgomery, New York, N. Y. Acconterment.....	469,444	Feb. 23	2400	{ 614 615 }	58	1019
Frazier, William J., New York, N. Y. Gas-radiator.....	479,977	Aug. 2	319	78	60	643
Frear, William H. (See Germann, Frank C., Jr., assignor.)						
Frech, John A. (See Frazeur, David C., assignor.)						
Frechette, Isaïe, Montreal, Canada. Lasting-machine.....	482,349	Sept. 13	720	{ 172 173 174 175 }	60	1490
Frederick, Charles, Columbiana, Ohio. Cash-carrier.....	468,650	Feb. 9	1159	295	58	760
Frederick, Edwin E., Allegheny, Pa. Hand-rest.....	467,991	Feb. 2	128	31	58	548
Frederick, William B., assignor to Atmospheric Paint Compound Company, San Francisco, Cal. Paint compound.....	477,110	June 14	1377	-----	59	1725
Fredericks, John H., Lock Haven, Pa. Hammer.....	470,889	Mar. 15	1944	497	58	1493
Fredericks, Thomas J., Audubon, Iowa. Draft-equalizer.....	479,088	July 19	1574	394	60	335
Frederiksen, Johan D., assignor of one-half to D. H. Burrell, Little Falls, N. Y. Making cheese.....	482,897	Sept. 20	1605	-----	60	1674

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Fredlihp, Joseph L., Portersville, Cal. Clasp	479,938	Aug. 2	253	62	60	631
Fredrikson, Andrew J., assignor of one-half to J. Tonrnell, Grand Rapids, Mich. Combined pocket-lighter and match-safe	479,756	July 26	2674	664	60	559
Free, John R., Ovid, Mich. Inking device for type-writers	474,236	May 3	542	133	59	742
Freelove, Carrie H., and C. E. Welch, McPherson, Kans. Stove	472,755	Apr. 12	1148	294	59	229
Freeman, Charles A., Steubenville, Ohio. Conduit for electric wires	470,237	Mar. 8	912	225	58	1255
Freeman, David W., Fishhawk, Oreg. Adjustable clutch or coupling device	470,648	Mar. 8	1568	408	58	1411
Freeman, E. F., <i>et al.</i> (See St. John, James E., assignor.)						
Freeman, Horace L., Lexington, N. C. Tobacco-hanger	471,474	Mar. 22	2810	723	58	1676
Freeman, Horace L., Lexington, N. C. Lawn-mower	483,913	Oct. 4	586	147 148	61	121
Freeman, Horace L., assignor to B. Shemwell, Lexington, N. C. Furniture-brace tightener	488,333	Dec. 20	1817	455	61	1716
Freeman, James B., Los Angeles, Cal. Machine for separating gold, silver, &c.	471,731	Mar. 29	3218	819	58	1754
Freeman, James P., assignor of two-thirds to M. C. Stone and P. T. Dodge, Washington, D. C. Lightning-arrester cut-out	481,617	Aug. 30	3034	741	60	1219
Freeman, Oscar F., Drifton, Pa. Method of and apparatus for making leaf-springs	488,533	Dec. 27	2168	536	61	1801
Freeman, Simon J., Bradford, Pa. Car-coupling	474,730	May 10	1355	344	59	910
Freeman, Thomas R., assignor of one-half to W. D. Roberts, Sioux Falls, S. D. Furnace	480,086	Aug. 2	521	133	60	681
Freese, Claus, assignor of one-half to H. Giessenbier, St. Louis, Mo. Fender for vehicles	478,585	July 12	806	199	60	175
Freese, Egbert M., Plymouth, Ohio. Brick or tile machine	468,651	Feb. 9	1161	296	58	760
Freese, Egbert M., Plymouth, Ohio. Tile or brick cutter	476,027	June 7	604	144 145 146	59	1557
Freese, J. M., <i>et al.</i> (See Vandament, George A., assignor.)						
Frei, Gustav A., Springfield, Mass. Incandescent electric lamp	486,457	Nov. 22	2035	538	61	1033
Frei, Gustav A., Springfield, Mass. Incandescent electric lamp	487,477	Dec. 6	407	105	61	1401
Frei, Gustav A., Springfield, Mass. Mercurial air-pump	487,478	Dec. 6	408	105	61	1401
Frei, Gustav A., Springfield, Mass. Incandescent electric lamp	487,479	Dec. 6	410	106	61	1402
Freismuth, F., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Frelinghuysen, Theodore, New York, N. Y. Spool-holder	486,866	Nov. 29	2701	705	61	1181
Fremerey, Felix B., Galveston, Tex. Machine for decorticating jute, ramie, and other fibrous plants	472,988	Apr. 19	1506	383 384 385	59	313
French, Adams C., Seattle, Wash. Snatch-block	481,020	Aug. 16	2020	505	60	998
French, Adams C., Rapid City, S. D. Derrick-drum	483,052	Sept. 20	1843	468	60	1724
French, Adams C., Rapid City, S. D. Stump-puller	486,248	Nov. 15	1708	450 451	61	953
French, Adams C., Rapid City, S. D. Stump puller	488,001	Dec. 13	1255	313	61	1587
French, Albert F. (See Blackmon, Frank A., assignor.)						
French, Alexander B. (See Lamarre, Charles B. de, assignor.)						
French, Charles A., Boston, Mass., assignor to Singer Manufacturing Company of New Jersey. Clamp for buttonhole sewing-machines	478,586	July 12	807	199	60	175
French, Earl B., Oakland, Cal. Feed-trough	473,735	Apr. 26	2760	694	59	572
French, Frank B., Cincinnati, Ohio. Sharpening device	477,592	June 21	2168	537	59	1893
French, George F. (See Bolding, Arch, assignor.)						
French, George F., assignor to L. E. French, Evanston, Ill. Heating-furnace	474,316	May 3	681	177	59	768
French, George M. (See Atwood, George F., assignor.)						
French, Horace O., Washington, D. C. Ammunition-measure	482,120	Sept. 6	323	77	60	1398
French, John M. (See Hynes, Michael J., assignor.)						
French, Lulu E. (See French, George F., assignor.)						
French, Oell S. (See Hawk and French.)						
French, P. O., <i>et al.</i> (See Vandament, George A., assignor.)						
French, Philo N., assignor to Morris Box Lid Company, Pittsburg, Pa. Axle-box lid	476,194	May 31	3659	932	59	1408
French, Samuel A., New York, N. Y. Police-nippers	469,557	Feb. 23	2581	661	58	1054
French, Samuel A., New York, N. Y. Police-nippers	470,117	Mar. 1	709	175	58	1237
French, Zachary T., and W. C. Meyer, Boston, Mass. Cam-cutter	471,381	Mar. 22	2693	686 687 688	58	1649
French, Zachary T., and W. C. Meyer, Boston, Mass., assignors to Goodyear Shoe Machinery Company, Hartford, Conn. Sole-sewing machine	473,870	Apr. 26	2963	746 747 748	59	612
French, Zachary T., and W. C. Meyer, Boston, Mass., assignors to Goodyear Shoe Machinery Company, Hartford, Conn. Sole-sewing machine	474,774	May 10	1420	361	59	923
Freund, Isaac. (See Stillians, Charles W., assignor.)						
Freund, Louis. (See Louvier, Oscar, assignor.)						
Freund, Philipp, Brooklyn, N. Y. Pulley-block	471,519	Mar. 22	2892	736	58	1687
Frey, Charles W. (See Hill and Frey.)						
Frey, Friedrich, Stuttgart, Germany. Stem-winding watch	480,814	Aug. 16	1702	425	60	936
Frey, James A., and J. Thompson, assignors to Frey-Sheckler Company, Bucyrus, Ohio. Re-pressing brick-machine	472,618	Apr. 12	946	244 245	59	194
Frey-Sheckler Company. (See Frey and Thompson, assignors.)						
Frey-Sheckler Company. (See Johnson, Oliver W., assignor.)						
Frey-Sheckler Company. (See Thompson, John, assignor.)						
Friant, Thomas, <i>et al.</i> (See Raymond, Silas H., assignor.)						
Friar, John, Hartford, Conn. King-bolt	485,496	Nov. 1	526	139	61	679
Fricke, Philip, Jr., Birmingham, Kans. Hog-trap	469,558	Feb. 23	2582	662	58	1054
Fridley, George W. (See Paugh and Fridley.)						
Fridley, Jacob, assignor of one-half to W. A. Darr, Carlisle, Pa. Hot-air furnace	476,877	June 14	999	243	59	1649
Fried, Calvin T., assignor to himself and C. J. Everett, Allentown, Pa. Combined cradle and chair	469,131	Feb. 16	1904	488	58	917
Friedel, Robert, Stuttgart, Germany. Glass-grinding machine	474,119	May 3	364	87	59	707
Friedel, Robert, Stuttgart, Germany. Glass-grinding machinery	477,839	June 28	2589	648	59	1991
Friedenwald, Isaac. (See Lindemeyer, Philip, assignor.)						
Friedheim, Emil. (See Pollak, Simon, assignor.)						
Friedly, George W., <i>et al.</i> (See Rush, John T., assignor.)						
Friedly, Michael, assignor of one-half to H. Schindewolf, Ada, Ohio. Collar	477,207	June 21	1545	379	59	1773
Friedmann, Joseph, Chicago, Ill. Fountain-pen	470,408	Mar. 8	1223	312	58	1341
Friedrich Georg Winkler Machine Company. (See Winkler, Friedrich G., assignor.)						
Friedrich, Pancratius, <i>et al.</i> (See Schmid, Charles, assignor.)						
Friedrichs, Joseph, St. Louis, Mo. Crowning floor-joists and apparatus therefor	487,406	Dec. 6	290	75	61	1378
Friel, Charles E., Boston, Mass. Trolley for electric railways	474,552	May 10	1077	276	59	855
Friel, Charles E., assignor of one-half to A. H. Gilson, Boston, Mass. Artificial tooth	470,332	Mar. 8	1097	280	58	1318
Friedrich, Emanuel, Kansas City, Mo. Show-fixture	488,757	Dec. 27	2489	619	61	1865

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Frierson, Luther L. (See Rich, Charles W., assignor.)						
Fries, Charles, W. H. Richardson, and I. W. Hackett, assignors of one-fourth to A. H. Luuneman, Philadelphia, Pa. Car-brake.	472,965	Apr. 12	1450	370	59	289
Fries, John, New York, N. Y. Powder-distributor.	466,337	Jan. 5	43	11	58	11
Frigon, Louis A., assignor of one-half to F. C. Smith, Baltimore, Md. Spring-bed.	475,763	May 31	2985	757	59	1270
Frikart, Johann R., Munich, Germany. Valve-gear.	482,007	Sept. 6	136	33	60	1362
Frings, Bertha O. (See Frings, Charles H. and B. O.)						
Frings, Charles H., New York, N. Y., assignor to Brewing Improvement Company, Maywood, N. J. Apparatus for impregnating liquids with carbonic acid.	486,225	Nov. 15	1667	{ 440 441 }	61	945
Frings, Charles H. and B. O., New York, N. Y., assignors to Brewing Improvement Company, Maywood, N. J. Brewing beer.	478,188	July 5	184	.....	60	39
Frings, Charles H. and B. O., New York, N. Y., assignors to Brewing Improvement Company, Maywood, N. J. Hopping malt liquors.	478,189	July 5	185	.....	60	39
Frings, Charles H. and B. O., New York, N. Y., assignors to Brewing Improvement Company, Maywood, N. J. Obtaining extracts from hops.	478,508	July 5	686	167	60	136
Frink, Urban W., assignor of one-half to C. W. Spalding, Chicago, Ill. Watchmaker's tool.	488,069	Dec. 13	1387	344	61	1615
Frisbie, Hamlin F., Covington, Ky. Valve for steam-engines.	486,099	Nov. 15	1480	390	61	909
Frisbie, Henry R., Bridgeport, Conn. Steam-whistle.	471,171	Mar. 22	2378	608	58	1589
Frisbie, Henry R., assignor of one-half to F. Kinsley, Bridgeport, Conn. Steam-whistle.	466,403	Jan. 5	143	39, 40	58	29
Frisbie, Henry R., assignor of one-half to F. Kinsley, Bridgeport, Conn. Chime-whistle.	466,404	Jan. 5	144	40	58	29
Frisbie, Henry R., assignor of one-half to F. Kinsley, Bridgeport, Conn. Door-check.	469,968	Mar. 1	494	122	58	1194
Frisbie, Henry R., assignor of one-half to F. Kinsley, Bridgeport, Conn. Chime-whistle.	472,946	Apr. 12	1416	362	59	283
Frisbie, Melvin T., Lincoln, Nebr. Rubber-overshoe retainer.	488,194	Dec. 20	1584	397	61	1671
Frisbie, Russel, Cromwell, Conn. Toy pistol.	472,573	Apr. 12	876	225	59	181
Frisbie, William L., assignor of one-half to W. E. Lape, Syracuse, N. Y. Bench-hook.	483,684	Oct. 4	241	60	61	50
Frisbie, William L., assignor of one-half to W. E. Lape, Syracuse, N. Y. Lawn-mower.	483,685	Oct. 4	243	60, 61	61	51
Frist, Robert P., assignor to Delaware Hard Fibre Company, Wilmington, Del. Tube of parchmentized fiber and apparatus for making the same.	467,248	Jan. 19	1548	395	58	311
Frist, Robert P., assignor to Delaware Hard Fibre Company, Wilmington, Del. Washer-cutter.	468,613	Feb. 9	1104	281	58	748
Frist, Robert P., assignor to Delaware Hard Fibre Company, Wilmington, Del. Apparatus for making cylindrical rods of parchmentized fiber.	469,238	Feb. 23	2081	535	58	958
Frist, Robert P., assignor to Delaware Hard Fibre Company, Wilmington, Del. Art of and apparatus for making parchmentized-fiber tubes.	479,263	July 19	1845	462	60	386
Frist, Robert P., assignor, by mesne assignments, to Delaware Hard Fibre Company, Wilmington, Del. Manufacture of parchmentized-fiber tubes.	485,408	Nov. 1	402	108	61	655
Frist, Robert P., and C. G. Rupert, assignors to Delaware Hard Fibre Company, Wilmington, Del. Art of and apparatus for making parchmentized-fiber tubes.	479,264	July 19	1847	463	60	387
Fristoe, Richard H., Sheridan, Ind. Fence.	482,037	Sept. 6	186	45	60	1372
Frith, Arthur J., New York, N. Y. Hoisting-bucket.	468,652	Feb. 9	1163	296	58	761
Fritsche, Louis E. (See Meier and Fritsche.)						
Fritsche, Max, New York, N. Y. Tapering-tool for lead pipes.	481,169	Aug. 23	2291	565	60	1062
Fritz, Harvey. (See Rider, John T., assignor.)						
Fritz, Joseph, Baltimore, Md. Suspender-buckle.	474,599	May 10	1149	292	59	869
Fritzsch, Oswald, Annaberg, Germany. Manufacturing pearl ribbons.	473,309	Apr. 19	2040	512	59	413
Frizzell, John W., Brainerd, Minn. Hot-air furnace.	478,001	June 28	2845	{ 711 712 }	59	2041
Frizzell, Nathan L., Fair Dealing, Ky. Tobacco-hoisting device.	476,140	May 31	3598	909	59	1391
Frobird, Henry, Osnauburg, Ohio. Nut-lock.	479,065	July 19	1535	383	60	328
Froehley, William C. (See Hardenbergh and Froehley.)						
Froehlich, Amadens A., Brooklyn, assignor of one-half to W. Hodgson, New York, N. Y. Thill-coupling.	478,957	July 12	1361	335	60	284
Frölich, Oscar, assignor to Siemens & Halske, Berlin, Germany. Ozone-tube.	487,390	Dec. 6	248	67	61	1369
Fronmel, Julius. (See Hoff and Fronmel.)						
Fronheiser, James J., and C. S. Price, Johnstown, Pa. Manufacture of coke.	486,100	Nov. 15	1482	.....	61	909
Frosch, William, Ballard Vale, Mass. Filler-cap for oil-receptacles.	478,421	July 5	558	135	60	109
Fross, Jasper M., Sleeth, Ind. Gate.	480,460	Aug. 9	1152	288	60	811
Frost, Abel H., Chicago, Ill. Bed-bottom.	468,054	Feb. 2	222	54	58	567
Frost, Artemesia F., Shubert, Nebr. Holder for fruit-jars.	476,790	June 14	852	210	59	1620
Frost, Edward J., and W. C. Squire, Philadelphia, Pa. Apparatus for carbureting air or gas.	485,185	Nov. 1	48	15	61	582
Frost, Eli C., assignor to N. J. Thompson, Elmira, N. Y. Cooking-stove.	472,533	Apr. 12	828	211	59	171
Frost, George, et al. (See Smith, Edward S., assignor.)						
Frost, George A., et al. (See Smith, Edward S., assignor.)						
Frost, Henry A., New York, N. Y. Pulley clothes-line tightener and fastener.	471,251	Mar. 22	2501	634	58	1611
Frost, James H. (See Marsden and Frost.)						
Frost, James R., Cleveland, Ohio. Type-cleaning device for type-writing machines.	467,797	Jan. 26	2422	615	58	483
Frost, Robert, Olympia, Wash. Blotting-pad.	474,237	May 3	543	133	59	743
Frost, Samuel G., and R. J. Bolt, Boston, Mass.; said Bolt assignor to said Frost. Game-counter.	471,354	Mar. 22	2655	674	58	1642
Frost, William R., North Evans, N. Y. Fire-kindler.	471,172	Mar. 22	2380	608	58	1589
Fruehanf, Eduard. (See Basel and Fruehanf.)						
Fruen, Walter L., assignor of one-third to W. H. Fruen, Minneapolis, Minn. Bicycle.	479,757	July 26	2676	664	60	559
Fruen, William H. (See Fruen, Walter L., assignor.)						
Fruen, William H., Minneapolis, Minn. Water-cooler.	488,473	Dec. 20	2039	508	61	1761
Frumviller, Frank A., Detroit, Mich. Beer-faucet.	482,474	Sept. 13	928	226	60	1529
Fry, Edwin C., Sherman, Tex. Docket, record, or similar book.	473,219	Apr. 19	1899	479	59	385
Fry, Frederick D., Danbury, Conn. Machine for blocking hats.	487,442	Dec. 6	357	91, 92	61	1392
Fry, Mary, et al. (See Fickett, William S., assignor.)						
Fry, William V., Lambayeque, Peru. Purifying cane-juice.	472,989	Apr. 19	1509	.....	59	313
Frye, John H., and B. Pitman, Cincinnati, Ohio. Ladder.	488,428	Dec. 20	1973	493	61	1746
Fryer, Aaron, Bath, N. Y. Machine for grinding.	483,249	Sept. 27	2153	{ 545 546 }	60	1796
Fryer, Charles H., et al. (See Tefft, Emory N., assignor.)						
Fryer, William J., New York, N. Y. Clay pipe.	474,006	May 3	190	45	59	675
Fuchs, Arthur A., Tiffin, Ohio. Box-clamping machine.	468,094	Feb. 2	275	67	58	578
Fuchs, Arthur A., Tiffin, Ohio. Crayon-molding machine.	479,212	July 19	1768	443	60	371
Fuchs, Charles, Jr. (See Keseling and Fuchs.)						
Fuchs, Charles H., Tiffin, Ohio. Machine for trimming box-corners.	468,095	Feb. 2	277	67	58	578
Fuchs, Charles H., Tiffin, Ohio. Box-tenoning machine.	468,096	Feb. 2	278	68	58	578
Fuchs, Charles H., Tiffin, Ohio. Machine for tonguing and cutting box-bottoms.	469,059	Feb. 16	1816	464	58	899
Fuchs, Charles H., Tiffin, Ohio. Pool rack and spotter.	479,213	July 19	1770	444	60	371
Fuchs, Oscar J., assignor of one-half to S. E. Mosher, Chillicothe, Ohio. Speed-recorder and odometer.	484,152	Oct. 11	940	{ 241 242 }	61	206

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Disg.	Vol.	Page.
Fuchs, Peter. (See Renber, Stone, and Fuchs.)						
Fuchs, Rudolph, Chicago, Ill. Watch-holder	484,003	Oct. 11	730	183	61	164
Fuel Gas and Manufacturing Company. (See Rund, Edwin, assignor.)						
Fuerth, William G., assignor to Pomeroy Duplicator Company, Newark, N. J. Duplicating stenciling material	467,890	Jan. 26	2577	-----	58	512
Fugman, Godfrey, Cleveland, Ohio. Roof, floor, or ceiling	475,854	May 31	3151	799	59	1302
Fuhrmann, Philip H., Mahanoy City, Pa. Stool	482,553	Sept. 13	1070	260	60	1558
Fulbright, William D., assignor to himself and H. E. Patton, Nichols, Mo. Wire-stretcher	479,265	July 19	1848	463	60	387
Fulcher, Edwin C., Staunton, Va. Harvester-knotter	468,244	Feb. 2	505	{ 124 125 }	58	624
Fuld, William, Baltimore, Md. Game-board	476,046	May 31	3441	869	59	1360
Fuld, William, Baltimore, Md. Game apparatus	479,266	July 19	1849	463	60	387
Fulghum, Elisha J., assignor of one-half to L. Roberts, Traverse City, Mich. Log-loader	484,788	Oct. 25	1979	505	61	439
Fulghum, Elisha J., and L. Roberts, Traverse City, Mich. Wire coiling and cutting machine	483,321	Sept. 27	2294	577	60	1521
Fullard, William, Brooklyn, N. Y. Tilting device for barrels or casks	482,574	Sept. 13	1096	266	60	1563
Fullen, James, Pawtucket, R. I. Washboiler	484,417	Oct. 18	1369	350	61	302
Fullen, Thomas, Angel's Camp, Cal. Safety device for mining cages or elevators	469,346	Feb. 23	2244	576	58	990
Fuller, Alexander, and W. B. Hahenshell, Streator, Ill. Tool-holder for lathes	488,554	Dec. 27	2169	536	61	1801
Fuller, Allen J. (See Connor, Joseph, assignor.)						
Fuller, Andrew, Buffalo, N. Y. Combined spittoon lifter and cleaner	475,275	May 17	2213	566	59	1093
Fuller Brothers Manufacturing Company, <i>et al.</i> (See Blood, Maurice E. and C. C., assignors.)						
Fuller, Clark S., Lafayette, Ind., assignor, by mesne assignments, to Geo. T. Smith Middlings Purifier Company, Jackson, Mich. Flour-bolt	479,589	July 26	2391	596	60	506
Fuller, Clark S., Lafayette, Ind., assignor to R. H. Emerson and Z. C. Eldred, Jackson, Mich., receivers of the G. T. Smith Middlings Purifier Company. Flour-bolt	479,775	July 26	2721	{ 676 677 }	60	569
Fuller, Darius, Chicago, Ill. Car-starter	483,349	Sept. 27	2330	{ 585 586 }	60	1828
Fuller, David. (See Steinbanser, Alois, assignor.)						
Fuller, Francis E. (See Ellery, Robert L., assignor.)						
Fuller, Frank H., Springfield, and C. B. Perkins, Holyoke; said Fuller assignor, by mesne assignments, to E. P. Cross, West Springfield, Mass. Messenger-call system for buildings	486,282	Nov. 15	1768	465	61	966
Fuller, George C., Minneapolis, Minn. Rein-holder	466,405	Jan. 5	146	40	58	30
Fuller, Harvey R., Butler, Ind. System of penmanship	477,653	June 28	2286	572	59	1932
Fuller, Henry C. (See Deming and Fuller.)						
Fuller, Herbert M., Philadelphia, Pa. Plumb-bob	485,376	Nov. 1	352	94	61	645
Fuller, James C., and W. A. Lee, Winfield, Kans. Grain-drill	486,035	Nov. 8	1353	360	61	866
Fuller, James W., St. Paul, Minn. Means for sealing jars or similar vessels	487,366	Dec. 6	211	58	61	1362
Fuller & Johnson Manufacturing Company. (See Starks and Felland, assignors.)						
Fuller, Joseph W. (See Marble, James E., assignor.)						
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Key for musical instruments	483,378	Sept. 27	2378	597	60	1837
Fuller, Levi K., assignor to Estey Organ Company, Brattleborough, Vt. Making tuning-forks	483,513	Sept. 27	2564	643	60	1874
Fuller, Louis T., <i>et al.</i> (See Tanner, David W., assignor.)						
Fuller, Oscar B., assignor of one-half to J. A. Ellsworth, Pittsburg, Kans. Plumb-level	469,132	Feb. 16	1906	488	58	917
Fuller, Samuel B. (See Miller, Lee A., assignor.)						
Fuller, Willard H., Passaic, N. J., assignor to Scovill & Adams Company, New York, N. Y. Photographic camera	466,338	Jan. 5	44	11, 12	58	11
Fuller, William C. (See Capwell and Fuller.)						
Fulton, Charles B., Edgemont, Pa. Cloth-cutting machine	469,837	Mar. 1	275	72	58	1154
Fulton Foundry Co. (See Robertson, Soren, assignor.)						
Fulton, Henry T. (See Weymouth and Fulton.)						
Fulton, John R., Wa Keeney, Kans. Coffee-pot	483,839	Oct. 4	475	119	61	98
Fulton, Joseph H., West Lebanon, N. H. Straw-carrier for thrashing-machines	485,099	Oct. 25	2477	637	61	539
Fultz, John E., Coatesville, Ind. Stem winding and setting watch	484,359	Oct. 11	1274	325	61	272
Fulwider, Horace M. (See Henn and Fulwider.)						
Funk, Carl, Charlottenburg, assignor to H. Funk, Berlin, Germany. Fermenting	471,309	Mar. 22	2588	-----	58	1628
Funk, Charles E. (See Mendenhall, James E., assignor.)						
Funk, Charles E. (See Schnarrenberger, John F., assignor.)						
Funk, George W., Sedalia, Mo. Device for watering stock	478,745	July 12	1040	255	60	222
Funk, Hugo. (See Funk, Carl, assignor.)						
Funkhouser, Martin L., Carlisle, Pa. Hedge fence	483,322	Sept. 27	2296	577	60	1822
Funkhouser, Munroe, <i>et al.</i> (See Rinker, Robert S., assignor.)						
Furay, John B. (See McArdle and Furay.)						
Furber, John E., Lawrence, Mass. Liquid substitute for eggs	471,236	Mar. 22	2480	-----	58	1607
Furer, C. J. (See Tobey, Samuel W., assignor.)						
Furgang, Rudolph, Boston, Mass. Safety attachment for electric conductors	481,665	Aug. 30	3105	{ 757 758 }	60	1232
Furgang, Rudolph, Boston, Mass. Safety attachment for electric conducting-wires	481,666	Aug. 30	3106	758	60	1233
Furgang, Rudolph, assignor of one-half to I. Kaffenburgh, Boston, Mass. Safety cut-out	480,009	Aug. 2	392	97	60	656
Furgason, Charles M., Oto, Iowa. Check-row attachment for planters	469,205	Feb. 16	2031	518	58	939
Furgason, Charlie O. (See Raynor, Irwin H., assignor.)						
Furnas, Robert W., Indianapolis, Ind. Street-cleaning machine	484,191	Oct. 11	999	255	61	218
Furnas, Robert W., Indianapolis, Ind. Street-cleaning machine	484,192	Oct. 11	1001	256	61	218
Furnas, Walter S., Lisbon, Iowa. Apparatus for killing poultry	487,180	Nov. 29	3225	826	61	1285
Furnas, Walter S., and T. Kenderdine, Lisbon, Iowa; said Kenderdine assignor to said Furnas. Apparatus for killing poultry	487,560	Dec. 6	531	137	61	1426
Furness, Henry B. (See Weir and Furness.)						
Fusch, William H. (See Seymour, George H., assignor.)						
Fustian Cutting Machine Company. (See Smith, James H., assignor.)						
Fustian Cutting Machine Company. (See Smith, Goddard, Higginbottom, and Mannock, assignors.)						
Fux, Joseph. (See Faist and Fux.)						
Fyfe, John C., Denver, Colo. Inclosed supply system for electric railways	472,447	Apr. 5	686	{ 175 176 }	59	129
Fyfe, William W., London, England. Amalgamating apparatus for crushed ores and like reduced bodies	480,366	Aug. 9	995	250	60	783
Fyles, Franklin, New York, N. Y. Device for producing scenic effects upon the stage	466,750	Jan. 5	701	180	58	135
Fyrberg, Andrew, Worcester, Mass. Combined sear and rebound catch for revolvers	469,387	Feb. 23	2310	594	58	1002
G. J. Dickson Manufacturing Company. (See Dickson, Gilbert J., assignor.)						
G. S. Foos Company. (See Leedle, George D., assignor.)						
G. S. Foos Company. (See Slager, Albert L., assignor.)						
Gabb, George, London, England. Broaching device for casks	478,852	July 12	1210	300	60	255

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Gabel, Henry M., Avondale, Ohio. Mixing or separating machine	478,587	July 12	808	199	60	176
Gabele, Lawrence, and H. Mattes, New York, (Bedloe's Island,) N. Y. Self-acting gate for drawbridges	470,118	Mar. 1	710	176	58	1237
Gabriel, Elizabeth, administratrix. (See Gabriel, Peter.)						
Gabriel, Peter, deceased, Helena, Mont.; E. Gabriel, administratrix. Window-screen	484,418	Oct. 18	1370	350	61	302
Gadberry, Merrel, Leon, Kans. Neck-yoke	466,406	Jan. 5	147	40	58	30
Gaetje, John, Fort Wayne, Ind. Counter	473,002	June 28	2816	712	59	2042
Gage, Charles M., Pepperell, Mass. Machine for surface-coating paper	486,638	Nov. 22	2319	606	61	1088
Gage, John P., Vineland, N. J. Truing device for bench-planes	485,923	Nov. 8	1168	308	61	827
Gagle, John H., Seattle, Wash. Tramway-switch	484,706	Oct. 18	1823	464	61	394
Gagne, P. C. (See Eldridge, Hilliary, assignor.)						
Gagnebin, William T., assignor of one-half to W. T. Graham, Omaha, Nebr. Stair-builder's tool	482,350	Sept. 13	730	175	60	1493
Gagnelins, J. E., et al. (See Englin, Eric A., assignor.)						
Gagnon, Cyrille, and L. Lefebvre, Montreal, Canada. Latch	481,557	Aug. 30	2942	723	60	1202
Gaige, Joseph M. (See Gribben and Gaige.)						
Gaillard, Ella N., New York, N. Y. Dress-shield	480,574	Aug. 9	1314	328	60	845
Gaines, Charles K., Canton, N. Y. Book-rest and writing-slab	469,133	Feb. 16	1907	488 489	58	918
Gaines, George B. (See Merry, Henry G., assignor.)						
Gaines, Micajah D., Colorado Springs, Colo. Curtain-fixture	485,270	Nov. 1	172	51	61	608
Galbraith, Robert S., et al. (See Stewart, James, assignor.)						
Galbraith, William A., San Diego, Cal. Ratchet-washer for bolt-nuts	474,731	May 10	1356	344	59	910
Galbreath, George W., Sedalia, Mo. Sash-fastener	466,672	Jan. 5	572	148	58	111
Galbreath, George W., Sedalia, Mo. Inkstand	470,119	Mar. 1	711	176	58	1237
Galbreath, George W., Sedalia, Mo. Toy	473,736	Apr. 26	2761	694	59	573
Gale, Charles E., Northville, N. Y. Churn	466,671	Jan. 5	571	148	58	111
Gale, Edward R., Chicago, Ill. Ore-crusher	478,588	July 12	809	199	60	176
Gale, George W., Greeley, Colo. Well-excavator	479,149	July 19	1670	417	60	352
Gale Manufacturing Company. (See Mallory and Youngs, assignors.)						
Gall, John S., assignor to Steam Gauge and Lantern Company, Rochester, and R. E. Dietz Company, New York, N. Y. Tubular lantern	481,276	Aug. 23	2484	611	60	1099
Gallacher, James, and G. Lang, Chickasaw, Ala. Coal-washing machine	488,429	Dec. 20	1974	493	61	1747
Gallagher, Francis J., Philadelphia, Pa. Loom	468,133	Feb. 2	342	85	58	591
Gallagher, Henry, Savannah, Ga. Car-coupling	488,885	Dec. 27	2687	665	61	1906
Gallagher, James, assignor of one-half to J. A. Britton, Oakland, Cal. Electric-light crane	471,968	Mar. 29	3566	911	58	1822
Gallagher, John C., Elmira, N. Y. Preventing shoes from squeaking	471,355	Mar. 22	2658	674	58	1642
Gallaher, William E., Crugers, N. Y. Car-coupling	482,121	Sept. 6	325	77	60	1398
Galland-Henning Pneumatic Malting Drum Manufacturing Company. (See Giesler, Franklin B., assignor.)						
Galland-Henning Pneumatic Malting Drum Manufacturing Company. (See Giesler and Smith, assignors.)						
Galland, Joseph, assignor to Aultman & Taylor Machinery Company, Mansfield, Ohio. Combined thrashing-machine and grain-separator	482,554	Sept. 13	1071	260	60	1558
Gallant, John W., assignor of one-half to P. Mundry, Delta, Colo. Combination fence-tool	482,827	Sept. 20	1479	368	60	1650
Gallatin, Oliver A., Galt, Mo. Weather-strip	467,830	Dec. 13	973	245	61	1533
Galloway, John P., administrator. (See Wood and Gordon.)						
Galle, Charles, St. Louis, Mo. Portfolio or pocket-case	480,087	Aug. 2	523	133	60	682
Gallon, John P., Albert, Kans. Check-valve	485,740	Nov. 8	906	243	61	775
Gallond, Merrick, et al. (See Coulter, William B., assignor.)						
Galloway, Emmet L., assignor of one-half to A. F. Skeer, Jr., La Grange, Ind. Reclining-chair	487,919	Dec. 13	1124	281	61	1561
Galloway, James B., Chicago, Ill. Musical instrument	481,694	Aug. 30	3149	768	60	1241
Galloway, John C., Ballinger, Tex. Quilting attachment for sewing-machines	485,100	Oct. 25	2479	637	61	539
Galloway, Samuel J., and G. P. Cramer, Plainview, Oreg. Car-coupling	483,922	Dec. 27	2752	679	61	1919
Gallup, Henry J., Poquetanuck, Conn. Cartridge-reloading tool	472,990	Apr. 19	1510	385	59	313
Gallup, Jasper E., assignor of one-half to B. W. Cole, Mellette, S. D. Planter attachment for disk harrows	482,632	Sept. 13	1179	285	60	1578
Galvin, James A., Steelton, assignor of two-thirds to C. Dull, Harrisburg, and J. A. Weimer, Lebanon, Pa. Compressing or blowing engine	484,495	Oct. 18	1498	380 381	61	327
Galvin, James P., Bridgeport, Conn. Suspenders	478,958	July 12	1362	336	60	284
Gamage, Henry A., and W. N. Schmidt, Boston, Mass. Fender for cars	488,353	Dec. 20	1853	463	61	1723
Gambee, William Y. (See Macdonell and Gambee.)						
Gambetta, John, Stockton, Cal. Axle-nut	485,497	Nov. 1	527	140	61	679
Gambetta, John, and C. D. Harsin, Stockton, Cal. Compound rotary engine	487,217	Nov. 29	3281	838	61	1295
Gamble, Alphonso A., Griswold, Iowa. Baling-press	469,737	Mar. 1	107	29	58	1120
Gamble, James. (See Saxton, Harry J., assignor.)						
Gamble, James N. (See Dean, Francis W., assignor.)						
Gamble, James N. (See Strong, George S., assignor.)						
Gamble, Joseph W., assignor of one-half to J. T. R. Green, Des Moines, Iowa. Draft-equalizer	472,448	Apr. 5	690	176	59	130
Gamble, William H., and D. H. Allen, Miamisburg, Ohio. Collapsible pneumatic boat	486,597	Nov. 22	2251	589	61	1074
Gamgee, John, London, England. Steam-boiler	466,780	Jan. 12	765	198 199	58	155
Gamlen, George, Scipioville, N. Y. Combined fruit squeezer and strainer	473,220	Apr. 19	1900	479	59	325
Gammeter, Harry C., Akron, Ohio. Sled	484,632	Oct. 18	1708	433	61	369
Gammons, Welcome P., Jr., New York, N. Y. Machine for sewing sweat-bands in hats	477,750	June 28	2443	610	59	1964
Gammons, Welcome P., Jr., New York, N. Y. Seam for securing sweat-bands to hat-bodies	477,751	June 28	2446	610	59	1965
Gandini, Giovanni, Lodi, Italy. Electric accumulator	480,575	Aug. 9	1315	329	60	846
Ganey, Jeremiah, Chicago, Ill. Folding bed	486,867	Nov. 29	2702	705	61	1181
Ganss, Albert, Austin, Tex. Stringed instrument	474,120	May 3	365	87, 88	59	707
Ganss, Jacob, Brooklyn, N. Y. Time-stamp	486,458	Nov. 22	2036	538 539	61	1033
Gantt, Henry L. (See Chase and Gantt.)						
Gantt, John Q. A., and J. D. Bloomhardt, Altoona, Pa. Hot-water heater	466,673	Jan. 5	573	148	58	111
Ganzlin, Paul, Schwerin, Mecklenburg, Germany. Combined bookcase and desk	483,669	Oct. 4	221	55	61	46
Garaghty, Joseph H., Columbus, Ohio, and G. J. Worthington, Indianapolis, Ind. Rail-way cattle-guard	470,801	Mar. 15	1812	465	58	1467
Garber, Peter J., Potwin, Kans. Corn-harvester	471,475	Mar. 22	2841	723	58	1676
Garbrance, George C., Watervliet, N. Y. Fastening for basket-covers	479,797	Aug. 2	34	8	60	588
Garbutt, Henry J., London, England. Portable shampooing apparatus	485,924	Nov. 8	1169	308	61	828

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Garbutt, Hiram J., assignor of one-half to G. Smith, Lexington, Mich. Counter-shaft-supporting jack	481,486	Aug. 23	2820	693	60	1162
Garbutt, James, <i>et al.</i> (See Woods, Robert, assignor.)						
Garcia, Louis N., Woonsocket, R. I. Overshoe	471,476	Mar. 22	2842	723	58	1677
Garcia, Manuel R., London, England. Recovering tin from tin-plate	480,920	Aug. 16	1862	465	60	968
Gard, Horatio V., <i>et al.</i> (See Lycan, William S., assignor.)						
Gard, William J., S. S. Dalzell, and W. A. Shafer, Moab, Utah Ter. Amalgamator	476,955	June 14	1137	274	59	1677
Gardiner, Charles B., <i>et al.</i> (See Keith, Jeremiah, assignor.)						
Gardiner, Clement E., Hempstead, N. Y. Apparatus for the manufacture of tubular articles of confectionery	478,279	July 5	347	84	60	70
Gardiner, James C. (See Scott and Gardiner.)						
Gardiner, Barney, Chippewa Falls, Wis. Book or copy holder	487,561	Dec. 6	532	137	61	1426
Gardner, Andrew D., Lynn, Mass. Electrical curling-iron	484,532	Oct. 18	1554	394	61	338
Gardner, David, White Wright, Tex. Washing-machine	484,892	Oct. 25	2150	552	61	474
Gardner, Edward. (See Gardner, Thomas H. and E.)						
Gardner, Edward V., London, England. Apparatus for vaporizing acids in the manufacture of white lead	477,527	June 21	2072	515	59	1874
Gardner, Frank B., Lima, Ohio. Cuff-holder	478,101	July 5	37	12	60	10
Gardner, Frederick N. (See Besly and Gardner.)						
Gardner, Fulton, Chicago, Ill. Apparatus for sinking shafts	473,570	Apr. 26	2499	631	59	523
Gardner, Fulton, Chicago, Ill. Electrically-propelled vehicle	473,871	Apr. 26	2968	749	59	613
Gardner, Fulton, assignor of one-half to S. T. White, Chicago, Ill. Apparatus for boring wells	478,791	July 12	1120	276 277	60	237
Gardner, Fulton, assignor of one-half to S. T. White, Chicago, Ill. Boring apparatus	488,354	Dec. 20	1854	464	61	1723
Gardner, George, Bolivar, Mo. Oil-stove	485,539	Nov. 1	592	158	61	694
Gardner, George C., Hinsdale, Ill. Sash-balance	469,690	Mar. 1	29	10	58	1104
Gardner, George C., Hinsdale, Ill. Sash-cord fastener	474,522	May 10	1028	264	59	846
Gardner, George W., Alvaton, Ky. Car-coupling	471,853	Mar. 29	3409	869	58	1791
Gardner, Henry C., Nashville, Tenn. Current-wheel	485,624	Nov. 8	719	188	61	736
Gardner, Horace C., assignor to himself and G. F. Swift, Chicago, Ill. Liquid-cooler	484,955	Oct. 25	2252	580	61	493
Gardner, James L., Waxpool, Va. Friction fire-escape	469,239	Feb. 23	2083	535	58	958
Gardner, John, Bloomingdale, assignor to F. C. Austin, Chicago, Ill. Well-drilling machine	480,906	Aug. 16	1843	458	60	965
Gardner, John, Sr., and J. A. Coburn, Canton, Ohio. Mechanism for grinding and polishing gear-wheels	468,400	Feb. 9	779	193	58	685
Gardner, John H., Providence, R. I. Cooker	482,898	Sept. 20	1606	403	60	1674
Gardner, John W., Atkins, Mich. Car-coupling	474,533	May 10	1078	276	59	855
Gardner, Levi S., Detroit, Mich. Railway surface stock-guard	472,574	Apr. 12	877	226	59	181
Gardner, Prince A., Spartanburg, S. C. Oscillating hydraulic motor	474,238	May 3	544	134	59	743
Gardner, Richard M., Chicago, Ill. Sash-cord fastener	469,691	Mar. 1	30	10	58	1104
Gardner Sewing Machine Company. (See Levedahl, Axel, assignor.)						
Gardner, Sylvanus A. (See Groves, Thomas F., assignor.)						
Gardner, Thomas H. and E., Cornbrook, Manchester, England. Chair	479,415	July 26	2109	527 528	60	452
Gardner, William. (See Mosher, Charles D., assignor.)						
Gardner, William, Gloucester, England, assignor, by mesne assignments, to Hughes Manufacturing Company, Hamilton, Ohio. Sifting and mixing machine	466,751	Jan. 5	703	180	58	134
Gardner, William F., Washington, D. C. Method of and apparatus for testing circuits for electric time systems	480,576	Aug. 9	1315	329	60	846
Gardner, William F., Washington, D. C. Clock-synchronizing device and system	480,577	Aug. 9	1318	329 330	60	846
Garee, Albert, New Cumberland, W. Va. Device for handling sewer-pipe	484,707	Oct. 18	1825	464	61	394
Gareis, John G., Brooklyn, N. Y. Pocketbook-support	471,854	Mar. 29	3410	870	58	1792
Gareis, John G., Brooklyn, N. Y. Bellows	476,740	June 7	769	189	59	1591
Garey, Caleb E. (See Örtlieb and Garey.)						
Garey, Caleb E., assignor of one-half to W. White, New York, N. Y. Railway-switch	473,387	Apr. 19	2184	548 549 550	59	441
Garfield, John M. (See Grothgar and Garfield.)						
Garford, Arthur L., Elyria, Ohio. Elastic wheel-tire	467,164	Jan. 19	1420	362	58	286
Garford, Arthur L., Elyria, Ohio. Velocipede-saddle	467,402	Jan. 19	1779	454	58	354
Garford, Arthur L., Elyria, Ohio. Velocipede-saddle	467,403	Jan. 19	1780	454	58	354
Garford, Arthur L., Elyria, Ohio. Velocipede-saddle	473,388	Apr. 19	2190	550	59	442
Garford, Arthur L., Elyria, Ohio. Bicycle-saddle	481,538	Aug. 23	2907	714	60	1180
Garford, Arthur L., Elyria, Ohio. Velocipede-saddle	485,186	Nov. 1	49	15	61	582
Garland, Charles F., Chelsea, Mass., assignor to R. P. Elliott, Nashua, N. H. Door-lock	480,236	Aug. 2	769	194	60	728
Garland, Charles M., Brooklyn, N. Y. Toy bank	467,404	Jan. 19	1782	454	58	354
Garland, Frank M., New Haven, Conn. Electric steam-engine governor	466,781	Jan. 12	766	199 200 566	58	155
Garland, Frank M., New Haven, Conn. Machine-gun	475,276	May 17	2214	567 568	59	1093
Garland, Frank M., assignor of two-thirds to E. B. Beecher, W. A. Foskett, F. P. Newton, New Haven, Conn., and T. H. Sherman, Washington, D. C. Ammunition-belt	479,798	Aug. 2	36	8	60	589
Garland, Frank M., assignor of two-thirds to E. B. Beecher, W. A. Foskett, F. P. Newton, New Haven, Conn., and T. H. Sherman, Washington, D. C. Machine-gun	479,799	Aug. 2	37	9, 10	60	589
Garland, George D. (See Walters, William, assignor.)						
Garland, James G., Biddeford, Me. Atomizer	466,978	Jan. 12	1090	276	58	216
Garland, Jeremiah B., Osage City, assignor of one-half to J. N. Craig, Coyville, Kans. Egg-tester	481,487	Aug. 23	2821	693	60	1162
Garland, Jeremiah B., Osage City, assignor of one-half to J. N. Craig, Coyville, Kans. Combined dumping-tray and egg-tester	481,488	Aug. 23	2822	694	60	1162
Garland, John W., Pittsburg, Pa. Chain-link	472,166	Apr. 5	241	64	59	46
Garland, Michael, Bay City, Mich. Cable-driven-gondola system	467,346	Jan. 19	1699	435	58	339
Garland, Michael, Bay City, Mich. Carrier attachment for bucket-elevators	478,322	July 5	410	98	60	82
Garland, Michael, Bay City, Mich. Sprocket device for conveyers	480,010	Aug. 2	393	97	60	656
Garland, Michael, Bay City, Mich. Conveyer for handling lumber, &c.	480,496	Aug. 9	1201	301	60	822
Garland, Michael, Bay City, Mich. Sprocket-cable elevator	482,239	Sept. 6	515	123	60	1435
Garland, William H., Chelsea, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric connector	470,820	Mar. 15	1849	474	58	1474
Garlick, Reuben L., Watertown, S. D. Car-coupling	472,534	Apr. 12	829	211	59	171
Garn, Franz von, Cologne, Germany. Car-coupling	484,419	Oct. 18	1371	351	61	302
Garner, Aubrey D., Lansing, Mich. Bank check, draft, &c.	485,925	Nov. 8	1171	308	61	828
Garner, James, T. Cockerill, and C. Porrett, Manchester, England. Hoist	479,087	July 19	1572	394	60	335

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Garner, John M. (See Todd, Jefferson D., assignor.)						
Garner, Samuel H. (See Wall, William E., assignor.)						
Garner, William R., Galveston, Tex. Sign.	468,766	Feb. 9	1338	238	58	796
Garnett, Charles J., and A. Moore, Keighley, England, assignors to T. Horn, Toronto, Canada. Workman's time-recorder.	486,399	Nov. 15	1945	515	61	1002
Garnsey, Frederick A., Southborough, Mass. Picker-check for looms.	466,560	Jan. 5	403	102	58	77
Garusey, Frederick A., Southborough, Mass. Loom-temple.	469,467	Feb. 23	2435	625	58	1026
Garren, Edward, Glenwood, Ill. Lifting-jack.	475,764	May 31	2987	757	59	1270
Garretson, Amos, Fall Creek, Ind. Safety-coupling for gas-mains.	481,397	Aug. 23	2678	657	60	1133
Garrett, Corydon, Columbia, Mo. Game-board.	466,891	Jan. 12	958	244	58	191
Garrett, Henry H., Pittsburg, Pa. Guide for molder's flasks.	477,300	June 21	1709	418	59	1802
Garrett, John T. (See McLeod and Garrett.)						
Garrett, Noah P., Covington, Tenn. Nut-lock.	474,380	May 10	803	210	59	803
Garrett, Robert T. (See Burgis and Garrett.)						
Garrett, Thomas A. (See Lucas and Garrett.)						
Garrettsen, Miles F. (See Lawrence and Garrettsen.)						
Garrigues, Harry B., Massillon, Ohio. Molding plastic material.	468,222	Feb. 2	469	116	58	617
Garrison, George H., Kent, Wash. Gun-cleaning device.	471,477	Mar. 22	2843	724	58	1677
Garrison, George H., Sumas City, Wash. Gun-swab.	486,331	Nov. 15	1837	483	61	980
Garsed, Robert P., Norristown, Pa. Ship.	472,991	Apr. 19	1511	386	59	314
Garsed, Robert P., Norristown, Pa. Pneumatic pump.	487,090	Nov. 29	3085	792	61	1258
Garstang, William. (See Goode and Anthony, assignors.)						
Garland, Francis X., Philadelphia, Pa. Apparatus for funeral decoration.	467,405	Jan. 19	1783	454	58	355
Gartner, Alfred, Newark, N. J. Gum-moistener.	472,017	Mar. 29	3631	928	58	1836
Garton, William R., Keokuk, Iowa. Lightning-arrester.	488,002	Dec. 13	1257	313	61	1588
Garvey, James, <i>et al.</i> (See Dow, Charles H., assignor.)						
Garwick, Harrison, Morrison, Ill. Gambrel.	482,633	Sept. 13	1180	285	60	1578
Garwood, Sarah H., Southsea, England. Darning-last.	482,351	Sept. 13	731	176	60	1493
Garwood, Sarah H., Southsea, England. Spout attachment for bottles.	483,670	Oct. 4	222	55	61	46
Garwood, Willie. (See Richards, Garwood, and Rosebrook.)						
Gary, William E., Philadelphia, Pa. Calendar-holder.	479,876	Aug. 2	155	39	60	612
Gas Lighting Improvement Company. (See Maxim, Hiram S., assignor.)						
Gas-Motoren-Fabrik-Deutz. (See Schumm, Hermann, assignor.)						
Gasche, Ferd G., Chicago, Ill. Boiler-setting.	488,241	Dec. 20	1669	417	61	1687
Gash, Edgar. (See Chapman and Gash.)						
Gash, Edgar, Macomb, Ill. Combined cane and flag.	477,359	June 21	1804	441	59	1820
Gash, Edgar, Macomb, Ill. Combined cane and flag.	479,590	July 26	2393	596	60	507
Gaskill, Alfred, Millville, N. J. Fountain-inkstand.	472,703	Apr. 12	1076	276	59	216
Gaskill, William H., Canton, Ill. Fence.	480,401	Aug. 9	1051	264	60	793
Gaskill, William H., Wilson, N. Y. Knot-tying mechanism for harvesters.	483,914	Oct. 4	588	148 149	61	122
Gaskill, William H., assignor to S. W. Evans, Jr., Philadelphia, Pa. Device for fastening umbrella-runners.	470,890	Mar. 15	1945	498	58	1493
Gaskill, William H., assignor to S. W. Evans, Jr., Philadelphia, Pa. Ferrule.	481,753	Aug. 30	3263	794	60	1263
Gaskins, Hatten, Morrisonville, Ill. Pump.	484,496	Oct. 18	1499	381	61	327
Gass, Henry, Mobile, Ala. Box.	472,114	Apr. 5	165	45	59	31
Gasser, Sanford, Trout Creek, Mich. Rotary cultivator.	479,800	Aug. 2	39	10	60	569
Gasser, William B., Chicago, Ill. Car-coupling.	479,497	July 26	2265	567	60	483
Gassett, Arthur L., Cleveland, Ohio. Capo tasto for stringed instruments.	470,560	Mar. 8	1445	376	58	1385
Gaston Electric Head Light Company. (See Gaston, James E., assignor.)						
Gaston Electric Manufacturing Company. (See Gaston, James E., assignor.)						
Gaston, James E., assignor to Gaston Electric Head Light Company, Sparta, Ill. Electric-arc lamp.	475,727	May 24	2927	743	59	1244
Gaston, James E., assignor to Gaston Electrical Manufacturing Company, Sparta, Ill. Electric-arc lamp.	482,240	Sept. 6	517	123 124 125	60	1435
Gastrell, James P. H., Wiesbaden, Germany. Sash-fastener.	475,765	May 31	2988	757 758	59	1271
Gateley, John H., Janesville, Wis. Circular sawing machine.	487,947	Dec. 13	1168	291	61	1569
Gately, Barna, and D. Skinner, Braidwood, Ill. Miner's register.	480,843	Aug. 16	1742	435	60	944
Gates, Calvin M. (See Johnston and Gates.)						
Gates, Curtis, Lyndon, Vt. Car-coupling.	472,871	Apr. 12	1303	334	59	261
Gates, Eugene N. (See Gates, Fannie A. and E. N.)						
Gates, Eugene N. (See Gates, John N. and E. N.)						
Gates, Fannie A. and E. N., assignors to E. N. Gates Heating Company, Fitchburg, Mass. Water-heating system.	484,193	Oct. 11	1002	256	61	218
Gates, George, Jackson, Cal. Concentrator.	477,111	June 14	1377	336	59	1726
Gates, George, Jackson, Cal. Separating sand and slimes.	482,241	Sept. 6	521	124	60	1436
Gates, Henry L., Milwaukee, Wis. Sheet-metal coal-hod.	488,758	Dec. 27	2491	619 620	61	1865
Gates Iron Works. (See Gates, Philetus W., assignor.)						
Gates Iron Works. (See Gates, Ryerson D., assignor.)						
Gates Iron Works. (See Spring, William A., assignor.)						
Gates, John N., Holyoke, and E. N. Gates, Fitchburg, assignors to E. N. Gates Heating Com- pany, Boston, Mass. Heating apparatus.	482,679	Sept. 13	1245	308 304	60	1592
Gates, Merrit C., Denison, Kans. Corn-harvester.	474,007	May 3	192	45	59	675
Gates, Philemon T., New York, N. Y. Applying ferrules to handles.	474,061	May 3	287	69	59	693
Gates, Philemon T., Brooklyn, N. Y. Parer and corer.	481,528	Aug. 23	2887	709	60	1176
Gates, Philetus W., assignor to Gates Iron Works, Chicago, Ill. Removable tread for screening and assorting machines.	488,760	Dec. 27	2493	620	61	1866
Gates, Ryerson D., Ridgeland, assignor to Gates Iron Works, Chicago, Ill. Ore-pulverizer.	485,864	Nov. 8	1071	285	61	807
Gates, Ryerson D., assignor to Gates Iron Works, Chicago, Ill. Stone breaking or crush- ing machine.	488,759	Dec. 27	2493	620	61	1866
Gates, William, Upton Manor, England. Stair-rod and securer.	484,708	Oct. 18	1826	465	61	394
Gates, William H., Detroit, Mich. Brush-fiber clamp.	471,606	Mar. 29	3016	768	58	1718
Gates, William H., Baltimore, Md., assignor to M. Bray, Newton, Mass. Shoe-lacing.	470,376	Mar. 8	1172	300	58	1332
Gates, William T., and G. H. Sharp, Fairchance, Pa. Coke-oven.	472,115	Apr. 5	166	45	59	31
Gatfield, James A., Durham, Canada. Device for automatically closing and opening slid- ing doors.	485,926	Nov. 8	1172	309	61	828
Gatgens, John F. F., and R. C. Dowdin, Central House, Cal. Weed-puller.	466,674	Jan. 5	574	148 149	58	111
Gatling, Richard J., Hartford, Conn. Apparatus for cleansing wool or other material by the use of steam or other fluid.	469,822	Mar. 1	254	65	58	1150
Gaudelas, John B. G. (See Pabl and Gaudelas.)						
Gandie, William R., Jarrow, England. Pie raising and lidding machine.	483,549	Oct. 4	50	12, 13	61	12

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	De'g.	Vol.	Page.
Gaudin, Eugène, Paris, France. Device for waving or crimping hair.....	472,449	Apr. 5	691	176	59	130
Gandrie, Francis X., Port Hope, Canada. Can-labeling machine.....	488,273	Dec. 20	1717	433	61	1697
Gaumer, Charles E., Lawn Ridge, Ill. Straw-stacker.....	483,213	Sept. 27	2098	532 533	60	1786
Gaunt, John W., Bramley, England. Automatic stop mechanism for drawing-frames, &c.....	472,043	Apr. 5	53	12	59	13
Gans, Henry, Jr. (See Mark, Henry J., assignor.)						
Gauthier, Paul. (See Rotté and Gauthier.)						
Gauthier, Pierre. (See Rotté and Gauthier.)						
Gautschi, Henry A., assignor to H. Gautschi & Sons, Philadelphia, Pa. Musical box.....	476,458	June 7	357	83	59	1506
Gautschi & Sons, Henry. (See Gautschi, Henry A., assignor.)						
Gavin, John H. (See Clifford and Gavin.)						
Gawley, Hector, Le Roy, Mich. Networks for sawmills.....	484,360	Oct. 11	1276	325	61	272
Gay, George E. and J. H. Parsons, Augusta, Me. Screw-driver.....	484,004	Oct. 11	731	183	61	164
Gay, Isaac E., Camden, S. C. Cotton-chopper.....	476,628	June 7	609	146	59	1558
Gay, Isaac E., Camden, S. C. Cotton-chopper.....	487,831	Dec. 13	974	246	61	1533
Gay, Levi. (See Burrows, Arba G., assignor.)						
Gaylord, Charles H., Cleveland, Ohio. Detachable commutator.....	477,175	June 14	1482	363	59	1747
Gayman, George G. and S. B., Racine, Pa. Combined sheep box and vat.....	477,894	June 28	2677	669	59	2008
Gayman, Samuel B. (See Gayman, George G. and S. B.)						
Gaynor, John, Salem, N. J. Mold for glass battery-jars.....	478,792	July 12	1124	277	60	237
Gaynor Electric Company. (See Gaynor, Thomas F., assignor.)						
Gaynor, Peter F., Greenbush, N. Y. Beer drawing apparatus.....	473,737	Apr. 26	2762	694	59	573
Gaynor, Thomas F., Louisville, Ky. Ear-ring.....	483,214	Sept. 27	2101	533	60	1787
Gaynor, Thomas F., assignor to Gaynor Electric Company, Louisville, Ky. Electrical signal-box.....	466,604	Jan. 5	471	121 122	58	91
Gayon, Leon, Paris, France. Handle attachment for shovels, hoes, &c.....	474,121	May 3	366	88	59	708
Gayon, Leon, Paris, France. Propeller.....	480,945	Aug. 16	1899	475	60	975
Géant, Eugene, assignor to himself and S. Sutton, Fort Logan, Colo. Car-coupling.....	483,437	Sept. 27	2457	618	60	1853
Gearhart, John C., Williamsport, Pa. Washboard.....	483,438	Sept. 27	2458	618	60	1853
Gearhart, Joseph E., Clearfield, Pa. Mold for casting knitting-machine cylinders.....	468,171	Feb. 2	400	99	58	602
Gearhart, Joseph E., Clearfield, Pa. Circular-knitting machine.....	479,639	July 26	2468	614	60	521
Gearty, Hugh, Springfield, Ill. Barb for wire fences.....	472,044	Apr. 5	54	13	59	13
Geary, James, assignor of three-fourths to L. Emery, Jr., Bradford, Pa. Lamp-filling oil-can.....	482,680	Sept. 13	1248	304	60	1592
Geb, Jacob F., Franklin, Mass., assignor to Woonsocket Machine and Press Company, Woonsocket, R. I. Feeder for carding-engines.....	469,206	Feb. 16	2032	519	58	940
Geddes, John H. (See Howard and Geddes.)						
Gedeohn, Jacob, Cleveland, Ohio. Cultivator.....	482,919	Sept. 20	1634	410	60	1680
Gee, Fannie L., Burnsville, Ala. Sidesaddle.....	488,733	Dec. 27	2455	610	61	1858
Gee, Joseph F., assignor to E. H. Godshalk, Philadelphia, Pa. Knit fabric.....	481,351	Aug. 23	2602	639	60	1119
Geer, Henry W., assignor of one-half to B. B. Morgan, Ypsilanti, Mich. Garment-stay.....	471,607	Mar. 29	3017	768	58	1718
Geer, S. Ella, <i>et al.</i> (See Wilcox, Alfred B., assignor.)						
Geertz, Charles, Brooklyn, N. Y. Adjustable couch.....	476,922	June 14	1075	259	59	1665
Gelnrich, Hermann, assignor to E. T. Mason & Co., New York, N. Y. Fabric-holding frame for embroidering-machines.....	478,853	July 12	1211	301	60	255
Gehring, William, San Diego, Cal. Chiseling, drilling, or prospecting machine.....	473,549	Apr. 26	2445	619	59	512
Gehrke, Heinrich C. J., Berlin, Germany. Beer-filter.....	477,208	June 21	1546	379	59	1773
Gehrt, Albert A. (See Brown and Gehrt.)						
Geib, Bernard D., Cleveland, Ohio. Toe-weight.....	488,311	Dec. 20	1779	448	61	1708
Geiger, John J., Sr., Chicago, Ill. Registering device for photographic cameras.....	487,262	Dec. 6	36	12	61	1328
Geisendorfer, Edward, Pittsfield, Ill. Land-roller.....	482,406	Sept. 13	818	197	60	1509
Geitz, George W., New York, N. Y. Dental plugger.....	468,653	Feb. 9	1164	297	58	761
Gelabert, William P. (See Nelson and Gelabert.)						
Geldowsky, Ferdinand, deceased; M. C. Geldowsky, Cambridge, Mass., executrix. Wardrobe-bedstead.....	482,122	Sept. 6	326	78	60	1399
Geldowsky, Martha C., executrix. (See Geldowsky, Ferdinand.)						
Geldowsky, Martha C., St. Louis, Mo. Belt for women's undergarments.....	488,886	Dec. 27	2688	665	61	1906
Geldowsky, Martha C., St. Louis, Mo. Undergarment.....	488,887	Dec. 27	2689	666	61	1907
Gelin, Peter, assignor of one-half to B. R. Baker, Toledo, Ohio. Metal wheel.....	484,586	Oct. 18	1630	414	61	354
Gellenbeck, Frank C., assignor, by mesne assignments, to C. E. Padgett and C. C. Denton, Chicago, Ill. Meal-check.....	482,899	Sept. 20	1609	408	60	1675
Gellhaus, Frank. (See Gnethler and Gellhaus.)						
Gendor & Paeschke Manufacturing Company (See Munsgröve, Joseph, assignor.)						
Gendron, Fernand, Bordeaux, France Galvanic battery.....	467,372	Jan. 19	1734	443 444	58	346
Gendron Iron Wheel Company. (See Gendron Peter, assignor.)						
Gendron, Joseph T., Worcester, Mass. Guard for chimney-thimbles.....	478,422	July 5	559	135	60	109
Gendron, Peter, assignor to Gendron Iron Wheel Company Toledo, Ohio. Elastic tire.....	466,822	Jan. 12	827	213	58	168
Gendron, Peter, assignor to Gendron Iron Wheel Company Toledo, Ohio. Tire-punching machine.....	466,823	Jan. 12	828	213 214	58	168
Gendron, Peter, assignor to Gendron Iron Wheel Company Toledo, Ohio. Velocipede.....	466,824	Jan. 12	832	214	58	169
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Electric welding.....	466,825	Jan. 12	833	214	58	169
Gendron, Peter, assignor to Gendron Iron Wheel Company, Toledo, Ohio. Wrench.....	476,629	June 7	610	146	59	1558
Genese, David, Baltimore, Md. Dental drill.....	467,799	Jan. 26	2425	616	58	484
Genese, David, Baltimore, Md. Mute for musical instruments.....	480,578	Aug. 9	1326	330	60	847
Geneva Optical Company. (See Gilbert, Benjamin A., assignor.)						
Genin, John B. (See Robertson and Genin.)						
Geunert, Emil F. and J. F. Cunningham, New York, N. Y. Shade-holder.....	480,425	Aug. 9	1095	273	60	800
Genovese, Dominick, Washington, D. C. Coin-controlled device for musical instruments.....	470,041	Mar. 1	595	148	58	1215
Gensinger, Daniel, Teegarden, Ind. Gate.....	479,498	July 26	2266	568	60	483
Gentry, James C., Monroe City, Mo. Rail-joint.....	474,499	May 10	988	255	59	838
Geo. F. Blake Manufacturing Company. (See Hall, Albert F., assignor.)						
Geo. T. Smith Middlings Purifier Company. (See Fuller, Clark S., assignor.)						
Geo. W. Stafford Manufacturing Company. (See Morton, James, assignor.)						
Geoghegan, Samuel. (See Tichborne, Darley, Purcell, and Geoghegan.)						
George, Carl G., Toronto, Canada. Transposing piano-action.....	478,323	July 5	411	99	60	82
George, Charles, Berlin, Germany. Manufacturing artificial stones.....	470,333	Mar. 8	1098	58	58	1319
George, Charles, Berlin, Germany. Manufacturing artificial granite and marble.....	477,326	June 21	1750	59	59	1811
George, Cortis K. (See Perry and George.)						
George, Francis L., Lincoln, Nebr. Pipe-wrench.....	470,042	Mar. 1	598	148	58	1215
George, Henry, Manchester, England, assignor to E. A. Godding, Providence, R. I. Temporary file or binder.....	472,018	Mar. 29	3632	929	58	1836
George, Jacob H., White Pigeon, Ill. Crane.....	486,283	Nov. 15	1770	465	61	967

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Georgé, James C., Coffeyville, Kans. Churn.....	476,047	May 31	3442	869	59	1360
George, John. (See Simpson and George.)						
George M. Newhall Engineering Company. (See Newhall and Müller, assignors.)						
George, Staughton, Williamsport, Pa. Parlor game.....	481,859	Aug. 30	3434	843	60	1297
George, Walter L., Camden, Ind. Pile or fence-post driver.....	487,920	Dec. 13	1127	281	61	1561
Georgii, Max, Washington, D. C. Means for justifying matrices.....	472,966	Apr. 12	1451	282	59	290
Geraci, Ignatius, Baltimore, Md. Tailor's measure.....	480,579	Aug. 9	1327	330	60	847
Gerard, John J., Minneapolis, Minn. Dust-collector.....	484,090	Oct. 11	847	331	61	188
Gérard, Joseph, Dôle, France. Pinchers.....	484,550	Oct. 4	51	13	61	13
Gerber, Daniel S. (See Howlett, Charles W., assignor.)						
Gerber, Edward J., Paterson, N. J. Apparatus for dyeing.....	483,607	Oct. 4	135	34	61	28
Gerber, Joseph. (See Tanner and Burch, assignors.)						
Gerdorn, Gregory, West Troy, assignor of one-half to J. H. Reynolds, Troy, N. Y. Breech-loading ordnance.....	466,848	Jan. 12	873	224	58	176
Gerdorn, Gregory, assignor of one-half to J. H. Reynolds, West Troy, N. Y. Tool for boring breech-loading ordnance.....	466,869	Jan. 12	915	234	58	184
Gerdorn, Gregory, West Troy, assignor of one-half to J. H. Reynolds, Troy, N. Y. Tool for boring breech-loading ordnance.....	481,300	Aug. 23	2525	620	60	1105
Gere, George H., Grand Rapids, Mich. Wash-stand.....	484,956	Oct. 25	2253	580	61	494
Gereke, Edward G., assignor of one-half to C. E. Withall, St. Louis, Mo. Combined ink-stand, envelope, and card holder.....	474,317	May 3	683	177	59	769
Gerhard, David M., deceased, Minneapolis, Minn.; E. D. Gerhard, administratrix. Self-acting safety-brake.....	466,339	Jan. 5	48	12	58	12
Gerhard, Elizabeth D., administratrix. (See Gerhard, David M.)						
Gerhard, William, Milwaukee, Wis. Supporting-rack for trousers.....	486,459	Nov. 22	2040	540	61	1033
Gerike, Franz. (See Gerike, Hugo, assignor.)						
Gerike, Hugo, assignor to F. Gerike, Klein-Schoenebeck, Germany. Bottle-stopper attachment.....	470,187	Mar. 8	835	206	58	1270
Gerlach, Christian S., Elgin, Ill. Indicator for doors.....	472,787	Apr. 12	1191	305	59	233
Gerlitz, Henry. (See Menze, Charles T., assignor.)						
Germaun, Frank C., Jr., assignor of one-half to W. H. Frear, Albany, N. Y. Trousers-hanger.....	476,195	May 31	3690	932	59	1409
Gernshym & Brother, Henry. (See Beyer, Albin, assignor.)						
Gernshym, Max, Brooklyn, N. Y. Knitted fabric.....	467,091	Jan. 12	1275	323	58	250
Gerrans, Alfred T., et al. (See Cochran, John J., assignor.)						
Gerrish, Samuel S., Wilsonville, Neb. Cultivator.....	485,271	Nov. 1	173	51, 52	61	608
Gerry, James H., Brooklyn, and C. E. Long, New York, N. Y., assignors to Gerry-Long Manufacturing Company, Jersey City, N. J. Secondary battery.....	473,230	July 5	262	65	60	53
Gerry-Long Manufacturing Company. (See Gerry and Long, assignors.)						
Gerson, Walter. (See Cane, Henry, assignor.)						
Gerstenkorn, Paul, Milwaukee, Wis., assignor to himself, and O. Budde, Chicago, Ill. Machine for grinding cocks.....	480,258	Aug. 9	816	209	60	749
Gerstle & Löffler. (See Meier, Silvan, assignor.)						
Geschwindner, Charles, Brooklyn, assignor of one-half to A. Sinn, New York, N. Y. Car-coupling.....	472,992	Apr. 19	1513	386	59	314
Gessert, Charles F., New York, N. Y., assignor to C. F. Gessert Company, of New Jersey. Radiator.....	486,400	Nov. 15	1946	515	61	1002
Gessner, David, Worcester, Mass. Cloth-pressing machine.....	469,372	Feb. 23	2287	516	58	998
Gethins Electrical Manufacturing Company. (See Gethins, James L., assignor.)						
Gethins, James L., Boston, Mass., assignor to Gethins Electrical Manufacturing Company, of Maine. Galvanic battery.....	487,324	Dec. 6	145	42	61	1349
Getten, Albert C., Chicago, Ill. Paper-bag machine.....	481,650	Aug. 30	3081	752	60	1228
Getten, Albert C., Chicago, Ill. Paper-bag machine.....	482,170	Sept. 6	413	98	60	1416
Getten, Albert C., Chicago, Ill. Mechanism for delivering bags from paper-bag machines, and for other purposes.....	485,006	Oct. 25	2338	602	61	510
Getty, James, Jr., et al. (See Harvey, George H., assignor.)						
Geurtz, Peter, and M. V. Wildenberg, Freedom, Wis. Fire-escape.....	466,714	Jan. 5	650	167	58	124
Gevers, Christopher A., Cedar Rapids, Iowa. Horse-blanket.....	483,980	Oct. 4	689	172	61	142
Giant Powder Company. (See Roller, Frank, assignor.)						
Gibb, Austin, Milwaukee, Wis., assignor to Folded Paper Carpet Lining Company, of Illinois. Machine for making box-plaited paper for carpet-linings, &c.....	476,791	June 14	853	210	59	1620
Gibboney, John W., Lynn, Mass. Apparatus for maintaining constant speed in motor mechanisms.....	474,008	May 3	194	46	59	675
Gibboney, John W., Lynn, Mass. Electric speed-regulator.....	474,447	May 10	912	235	59	824
Gibboney, John W., Lynn, Mass. Electrical indicator.....	474,523	May 10	1028	264	59	846
Gibboney, John W., Lynn, Mass. Envelope-fastener.....	478,538	July 5	740	180	60	146
Gibboney, John W., Lynn, Mass. Telephone.....	481,529	Aug. 23	2888	709	60	1176
Gibbons, Henry W., Jersey City, N. J., assignor to Hitchings & Co., New York, N. Y. Horticultural building.....	471,356	Mar. 22	2658	674	58	1642
Gibbons, John, West Troy, assignor of three-fourths to S. J. Brown, J. H. Reynolds, and G. E. Waldron, Troy, N. Y. Roller-bearing.....	487,699	Dec. 6	746	191	61	1468
Gibbons, Nelson, Tiskilwa, Ill. Halter.....	487,145	Nov. 29	3172	813	61	1274
Gibbs, Albert E., et al. (See Hamill, Robert J., assignor.)						
Gibbs, Albert L., et al. (See Dunham, John J., assignor.)						
Gibbs, Charles, assignor to Perhacs & Gibbs Manufacturing Company, New York, N. Y. Cash-register.....	467,092	Jan. 12	1275	323	58	250
Gibbs, Frank, Bridgeton, Me. Shelf-support.....	472,347	Apr. 5	538	139	59	100
Gibbs, George, Milwaukee, Wis. Electric connector.....	468,654	Feb. 9	1165	297	58	761
Gibbs, George, Milwaukee, Wis. Car-spring.....	488,474	Dec. 20	2041	508	61	1762
Gibbs, Jacob S., Hartford, Conn. Vibrating electric switch.....	471,237	Mar. 22	2481	330	58	1607
Gibbs, Jacob S., Hartford, Conn., assignor to Perkins Electric Switch Manufacturing Company, of Connecticut. Reciprocating snap-switch.....	471,993	Mar. 29	3598	919	58	1828
Gibbs, Jacob S., assignor to Perkins Electric Switch and Manufacturing Company, Hartford, Conn. Incandescent-electric-lamp socket.....	477,407	June 21	1876	462	59	1835
Gibbs, Jacob S., assignor to Perkins Electric Switch and Manufacturing Company, Hartford, Conn. Electric switch.....	480,694	Aug. 9	1517	377	60	884
Gibbs, Marian R., Cherry Creek, N. Y. Washing-machine.....	483,439	Sept. 27	2459	618	60	1854
Gibbs, Robert R., et al. (See McNally, Richard J., assignor.)						
Gibbs, William E., New York, N. Y. Valve for pneumatic tires.....	485,540	Nov. 1	594	158	61	695
Gibbs, William E., New York, N. Y. Pneumatic percussion-tool.....	486,774	Nov. 22	2539	663	61	1132

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Gibbs, William F., Auburn, N. Y. Car-brake	478,003	June 28	2847	712	59	2042
Gibeault, Uldarique, St. Isidore Junction, Canada. Hay-press	471,113	Mar. 22	2201	588 589	58	1572
Giblin, Francis T. (See Calder, Robert, assignor.)						
Gibney, John. (See Myers, William J., assignor.)						
Gibney, John, <i>et al.</i> (See Weller, Chester A., assignor.)						
Gibson, Chauncey W., Detroit, Mich. Safety-valve	469,853	Mar. 1	303	78	58	1159
Gibson, Everett, Providence, R. I. Top-flat-adjusting device for carding-machines	474,340	May 3	752	196	59	780
Gibson, Everett, assignor of one-half to E. G. Durfee, Providence, R. I. Card-stripping apparatus	474,318	May 3	684	178	59	769
Gibson, Ezra B., assignor of one-fourth to H. Wood, Cadillac, Mich. Railway-crossing	482,352	Sept. 13	732	176	60	1493
Gibson, Francis M., Good Hope, Ohio. Scoop-board for wagons	486,529	Nov. 22	2138	564	61	1053
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	473,389	Apr. 19	2191	550	59	443
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	473,390	Apr. 19	2192	550	59	443
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	473,418	Apr. 19	2233	561	59	450
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	473,419	Apr. 19	2234	561	59	451
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	484,709	Oct. 18	1827	465	61	394
Gibson, Gerolt, St. Louis, Mo. Sash-fastener	484,710	Oct. 18	1829	465	61	395
Gibson, John, and J. Cameron, Glasgow, Scotland. Cheese-cutter	471,716	Mar. 29	3191	814	58	1749
Gibson, Levi L. (See Nixon and Gibson.)						
Gibson, Myron B., Ukiah, Cal. Ice-velocipede	485,345	Nov. 1	302	81	61	633
Gibson, Nat. B., Thorp's Spring, Tex. Adjustable fire guard and screen	474,239	May 3	545	134	59	743
Gibson, Nathaniel, <i>et al.</i> (See Thomas, George W., assignor.)						
Gibson, Sallie E., Princess, Ky. Washing-machine	478,004	June 28	2849	712	59	2042
Gibson, Thomas, London, England. Printing-machine	482,733	Sept. 20	1337	329 330 331 332	60	1622
Gibson, Thomas C., Washington, D. C. Car-coupling	487,367	Dec. 6	213	58, 59	61	1362
Gibson, Wyatt, assignor of one-half to J. F. Sadler, Dodd, Tex. Beer-cooler	488,144	Dec. 13	1494	376	61	1637
Giddens, Abraham, Gypsum, Kans. Tenoning-machine	475,447	May 24	2488	635	59	1161
Giddings, Myron A., <i>et al.</i> (See Kendall, Francis B. and J. T., assignors.)						
Gidley, Samuel H., assignor to J. and J. Dobson, Philadelphia, Pa. Rubbing-apron for condensing carding-engines	480,088	Aug. 2	524	133	60	682
Gierding, Thomas N. (See Russell and Gierding.)						
Giesberg, John G., and E. Scheultz, Jr., Houston, Tex. Box-fastener	479,416	July 26	2112	529	60	453
Giese, Henry. (See Schanman, John, assignor.)						
Giese, James A. (See Richards and Giese.)						
Giese, James A., assignor to Adams & Westlake Company, Chicago, Ill. Latch and lock combined	481,261	Aug. 23	2454	604	60	1094
Giese, Robert W., Philadelphia, Pa. Hoisting-hook	476,534	June 7	465	110	59	1529
Giesey, James H., Highland, Ohio. Window	488,761	Dec. 27	2494	620 621	61	1866
Giesler, Franklin B., Milwaukee, Wis. Grain-treating apparatus	482,790	Sept. 20	1435	355	60	1641
Giesler, Franklin B., Milwaukee, Wis. Malt-kiln floor	483,781	Oct. 4	392	97, 98	61	82
Giesler, Franklin B., assignor to Galland-Henning Pneumatic Malting Drum Manufacturing Company, Milwaukee, Wis. System of pneumatic malting	475,550	May 24	2656	675	59	1193
Giesler, Franklin B., and H. Smith, assignors to Galland-Henning Pneumatic Malting Drum Manufacturing Company, Milwaukee, Wis. Pneumatic malting-drum	476,997	June 14	1195	290 291	59	1689
Giesler, Jacob J. and W. H. Meadow View, Va. Coat-adjuster	469,134	Feb. 16	1910	489	58	918
Giesler, William H. (See Giesler, Jacob J. and W. H.)						
Giessenbier, Henry. (See Freese, Claus, assignor.)						
Giessenbier, Henry, St. Louis, Mo. Pressure-regulator	473,069	Apr. 19	1632	416	59	336
Giessmann, Max C. J. G., London, England. Inflatable wall-tent	468,455	Feb. 9	851	215 216	58	699
Giffard, Paul, Paris, France. Compressed-air motor	480,089	Aug. 2	526	133 134	60	682
Giffard, Paul, Paris, France, assignor to International (Giffard) Gun and Ordnance Company, Limited, London, England. Apparatus for charging magazines with liquefied gas	475,728	May 24	2931	744	59	1245
Gifford, Ezra N., assignor of one-half to L. W. Pitcher, Chicago, Ill. Penholder	478,073	June 28	2950	738	59	2061
Gifford, Fred S., assignor of one-half to A. G. Baker, New Bedford, Mass. Cheese-safe	469,692	Mar. 1	31	10	58	1104
Gifford, John H., Springfield, Mass. Inkstand	483,840	Oct. 4	477	119	61	99
Gilberds, James, Jamestown, N. Y. Bottle and stopper-cap for the same	475,448	May 24	2490	635	59	1161
Gilbert, Abijah H., Birmingham, Conn. Stallion-guard	476,998	June 14	1198	291	59	1689
Gilbert, Benjamin A., Boston, Mass., assignor to Geneva Optical Company, of Illinois. Eye-glasses	488,312	Dec. 20	1780	448	61	1709
Gilbert, Charles P., and H. W. Thomas, assignors to Union Metallic Cartridge Company, Bridgeport, Conn. Tool for finishing edges of cartridge shells and heads	476,009	May 31	3389	855	59	1349
Gilbert, Edmund D. (See Gordon and Gilbert.)						
Gilbert, Edward T., <i>et al.</i> (See Phillips, Edward, assignor.)						
Gilbert, Frank C. (See Jeffery, John W., assignor.)						
Gilbert, Franklin T., Walla Walla, assignor to S. M. Russell, Seattle, Wash. Gravel-screening machine	468,134	Feb. 2	343	85	58	591
Gilbert, Franklin T., Walla Walla, assignor to S. M. Russell, Seattle, Wash. Gravel-screening machine	468,197	Feb. 2	439	109	58	610
Gilbert, Frederick A., Boston, Mass. Game-counter	482,961	Sept. 20	1700	429	60	1633
Gilbert, George H., Philadelphia, Pa., assignor to Kilbourn Knitting Machine Company. Knitting machine	468,513	Feb. 9	953	242 243	58	718
Gilbert, Henry G., Dayton, Ohio. Nutmeg-grater	484,880	Oct. 25	2126	546	61	468
Gilbert, Jabez C., <i>et al.</i> (See Shephard, John H., assignor.)						
Gilbert, Jacob P., New York, N. Y. Horseshoe	474,554	May 10	1079	276	59	855
Gilbert, James, Crystal Brook, assignor of one-half to H. A. Begg, Semaphore, South Australia. Share attachment	487,120	Nov. 29	3135	804	61	1267
Gilbert, Perry R., assignor of one-half to A. Wolf, Chambersburg, Pa. Clutching, reversing, and speed-changing device for shafts and pulleys	469,468	Feb. 23	2437	625	58	1026
Gilbert, Silvanus G., Orlinda, Tenn. Feeder and spreader for thrashing-machines	470,932	Mar. 15	2004	513 514	58	1504
Gilbert, Truman H., assignor of one-half to C. A. Babcock, Buffalo, N. Y. Car-coupling	467,249	Jan. 19	1550	395	58	312
Gilbert, William H., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental chair	478,589	July 12	811	200	60	176
Gilbreth, Frank B., Boston, Mass. Scaffold	479,591	July 26	2394	596	60	507
Gilcher, Henry J., Cleveland, Ohio. Door-mat	486,178	Nov. 15	1599	424	61	931
Gilchrist, Robert, Louisville, Ky. Fire-grate	479,089	July 19	1575	394 395	60	335

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Gilchrist, Raymond B., assignor to R. Whitehead, Chicago, Ill. Cork-extractor.....	478,545	July 5	751	183	60	149
Gildard, Henry. (See Scrimgeour and Gildard.)						
Gildersleeve, Ezra B., New York, N. Y. Window-chair	483,608	Oct. 4	137	34	61	29
Giles, Edwin A., Chicago, Ill. Button-fastening	484,853	Oct. 25	2086	537	61	460
Giles, Frederick, South Yarra, near Melbourne, Victoria. Elevator	483,145	Sept. 27	1982	502	60	1762
Giles, Frederick, South Yarra, near Melbourne, Victoria. Propeller for boats	487,012	Nov. 29	2965	764	61	1232
Giles, Harry S., Philadelphia, Pa. Vapor-burner	482,920	Sept. 20	1635	410	60	1680
Giles, Jason, Indian Orchard, Mass. Valve-indicator	486,610	Nov. 22	2275	593	61	1078
Giles, Joseph S., assignor to M. J. Whittall, Worcester, Mass. Oiling device for looms	481,558	Aug. 30	2943	723	60	1202
Giles, Joseph S., assignor to M. J. Whittall, Worcester, Mass. Oiling device for looms	481,559	Aug. 30	2944	723	60	1202
Gillfillan, William, Brooklyn, N. Y. Door-check	470,188	Mar. 8	837	206	58	1270
Gillfillan, William, New Britain, Conn. Combined door spring and check	473,456	Apr. 26	2297	580 581	59	485
Gillfillan, William, New Britain, Conn. Combined door check and spring	488,651	Dec. 27	2330	576 577	61	1834
Gilgenberg, Martin, Cologne, Germany. Apparatus for cutting off angle-iron	475,214	May 17	2119	536	59	1074
Gilham, Charles D. (See Hamer, James A., assignor.)						
Gilham, William C., assignor to J. V. Fisher, Morristown, Ohio. Fruit-evaporator	484,910	Oct. 25	2185	563	61	480
Gilkey, Albert S., Burlington, Kans. Cultivator attachment	481,667	Aug. 30	3108	758	60	1233
Gill, John. (See Howe, Daniel K., assignor.)						
Gill, John, Edinburgh, Scotland. Blast-furnace and means for operating the same	470,481	Mar. 8	1338	348	58	1363
Gill, John M. (See Shirreff, Charles J., assignor.)						
Gill, Thomas, Waltham, Mass. Banking-pin for watches	476,956	June 14	1138	275	59	1677
Gill, Thomas, Waltham, Mass. Piano-string	478,746	July 12	1041	256	60	222
Gill, Thomas, assignor of one-half to J. Stark, Waltham, Mass. Machine for truing jewel- settings	485,410	Nov. 1	406	109 110	61	655
Gill, Webster, Camden, N. J. Rubbing-motion for carding-engines	467,093	Jan. 12	1280	324	58	251
Gill, William E., assignor to J. F. Wollensak, Chicago, Ill. Connector for electric circuits	479,323	July 19	1930	483	60	404
Gillen, Albert L., Bradford, Mass. Bed-lounge	480,190	Aug. 2	688	174	60	712
Gillespie, Alfred J., Atlantic, Iowa, assignor to Bostedo Package and Cash Carrier Com- pany, Chicago, Ill. Store-service apparatus	469,014	Feb. 16	1759	448	58	887
Gillespie, Charles S., et al. (See Gillespie, Cyrus E., assignor.)						
Gillespie, Cyrus E., assignor of two-thirds to C. E. Tindall and C. S. Gillespie, Edwards- ville, Ill. Lock-hinge	484,361	Oct. 11	1277	325 326	61	272
Gillespie, Edwin G., Artesia, Cal. Music-leaf turner	472,170	Apr. 5	248	65, 66	59	47
Gillespie, Francis W., Burton, Kans. Break-plow	469,693	Mar. 1	31	11	58	1104
Gillespie, George C., Brooklyn, N. Y. Device for cutting square holes	477,528	June 21	2073	516	59	1874
Gillespie, Richard S., and H. James, New York, N. Y. Wrench	481,110	Aug. 16	2177	539	60	1027
Gillespie, Richard T. (See Peterson, Charles J., assignor.)						
Gillespie, William S., Brooklyn, N. Y. Hinge	470,043	Mar. 1	599	149	58	1216
Gillespie, William S., Brooklyn, N. Y. Lead-pencil sharpener	477,529	June 21	2074	516	59	1875
Gillespie, William S., Bath Beach, N. Y. Hinge	486,952	Nov. 29	2874	742	61	1215
Gillet, Celebrate F., Corvallis, Oreg. Potato-planter	466,849	Jan. 12	877	224	58	176
Gillette, Charles F., assignor to J. F. Bray, New York, N. Y. Indicator for electrical sig- naling systems	478,324	July 5	412	99	60	83
Gillette, George H., et al. (See Cafferty, Ridner P., Jr., and W. N., assignors.)						
Gillette, Luther. (See Snell and Gillette.)						
Gillette, Thomas S., Evanston, Ill. Photographic roll-holder	487,520	Dec. 6	472	124	61	1414
Gillette, Wilbur L., Yalesville, assignor of one-half to S. D. Johnson, Wallingford, Conn. Bed-spring	471,500	Mar. 22	2872	731	58	1683
Gilliam, John W. T., Baltimore, Md. Inside window-blind	484,957	Oct. 25	2254	581	61	494
Gillies, Alexander. (See Jones and Gillies.)						
Gilliland, Ezra T. (See Edison and Gilliland.)						
Gillin, Robert F., Brooklyn, N. Y. Rotary measure	468,318	Feb. 2	639	159	58	648
Gillingham, John, Wilmington, Del. Folding fire-escape	468,722	Feb. 9	1273	323 324	58	783
Gilischewski, Gustav. (See Schmidt, Carl, assignor.)						
Gillman, Ed. H., et al. (See Hoff, Peter, assignor.)						
Gilmer, Julius, New York, N. Y. Shirt	471,683	Mar. 29	3134	799	58	1739
Gilpatrick, George, Martinez, assignor of one-half to G. W. Ellis, Oakland, Cal. Animal- exterminator	473,872	Apr. 26	2969	749	59	613
Gilman, Farley B., Springfield, Vt. Last-turning lathe	469,084	Feb. 16	1848	473	58	906
Gilman, Lowell J., assignor of one-half to A. Westrup, Santa Rosa, Cal. Pruning implement	474,085	May 3	322	76	59	699
Gilman, Myron A., Westfield, Mass. Toy	479,119	July 19	1626	407	60	344
Gilman, Willard H., Boston, Mass. Electrically-operated stringed musical instrument	488,520	Dec. 20	2126	526	61	1777
Gilman, Willard H., Boston, Mass., assignor to United States Cash Register Company, Portland, Me. Cash indicator, register, and check-printer	477,840	June 28	2589	649	59	1991
Gilman, Willard H., Boston, assignor to W. S. Reed Toy Company, Leominster, Mass. Coin-holder	486,639	Nov. 22	2321	607	61	1089
Gilman, Willard H., Boston, assignor to E. P. Shaw, R. S. Dodge, Newburyport, F. P. Har- low, Medford, C. F. Adams and E. O. Bicknell, Boston, Mass. Electric fare-register	468,172	Feb. 2	402	100	58	602
Gilmore, J. F. (See Scott, William W., assignor.)						
Gilmore, John A., Boston, Mass. Cutting-off machine	480,461	Aug. 9	1153	289	60	812
Gilmore, Robert J., Providence, R. I. Automatic fire-extinguisher	488,003	Dec. 13	1258	312	61	1588
Gilmore, Steele F., Princeton, Ind., assignor to S. S. White Dental Manufacturing Com- pany, Philadelphia, Pa. Dental disk-holder	470,670	Mar. 15	1610	418	58	1428
Gilmore, William M., Valley Stream, N. Y. Interchanging word or number chart	474,732	May 10	1357	344	59	910
Gilmore, William M., Boggsstown, Ind. Valve for air-brakes	479,978	Aug. 2	320	78	60	643
Gilmour, Alexander J. (See Morden and Gilmour.)						
Gilmour, George H., et al. (See Mikesell, Azariah H., assignor.)						
Gilmour, James M., East Orange, N. J. Faucet	480,090	Aug. 2	527	134	60	682
Gilpin, Eli J., assignor of one-half to J. M. Fogleman, Fowler, Ind. Hay elevator and car- rier	468,614	Feb. 9	1105	281	58	749
Gilpin, Joseph F. (See Cowles and Gilpin.)						
Gilson, Alfred H. (See Friel, Charles E., assignor.)						
Gilstrap, John, and M. L. Brown, Moscow, Idaho. Switch-shifter	483,053	Sept. 20	1844	468	60	1724
Giltner, Amos C. (See Rourke, John, assignor.)						
Gimson, John E., et al. (See Newton, John M., assignor.)						
Ginalsky, Vladislav, Kiev, Russia. Gun-cartridge	487,028	Nov. 29	2988	769	61	1237
Ginger, George W., Huntersville, W. Va. Wrench	471,855	Mar. 29	3411	870	58	1792
Gingras, Timothy, Buffalo, N. Y. Rack for axle-washers	486,640	Nov. 22	2322	608	61	1089
Ginna, Stephen A., et al. (See Hipperling, William, assignor.)						
Ginther, Augustus J., Buffalo, N. Y. Self-acting windproof damper	479,801	Aug. 2	42	10	60	590
Gintz, Benjamin V., Akron, Ohio. Tea-pot or coffee-pot handle	474,905	May 17	1637	418	59	979

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Gipe, Emanuel C., assignor of one-half to O. J. Ziegler, Freeport, Ill. Cash-carrier	479,417	July 26	2113	529	60	453
Gipperich, Adolphus, Richmond, Va. Telegraph system	486,332	Nov. 15	1839	484	61	980
Girard, Charles, Paris, France. Ungumming and decorticating textile material	475,551	May 24	2658	.....	59	1193
Girard, Charles L. (See Krouse, Myers, and Girard.)						
Girard, Jules J. (See Beauchamp, Aimé, assignor.)						
Giraud, Louis H., Roston, Mass. Building-cell	486,284	Nov. 15	1770	466	61	967
Giraud, Paul, Cbantilly, France. Thermo-electric battery	483,782	Oct. 4	394	98	61	83
Giroux, Joseph E., Alpena, Mich. Holder for tools	486,285	Nov. 15	1772	466	61	967
Giroux, Joseph L., Jerome, Ariz. Ter. Cable tramway	488,734	Dec. 27	2456	{ 610 611 }	61	1858
Gisi, Emile. (See Rahn, Rudolph, assignor.)						
Gist, Grant G. G., Wilmington, Del., assignor to McLoughlin Brothers, New York, N. Y. Game apparatus	488,762	Dec. 27	2496	621	61	1866
Gisvold, Erik J., Eagle Mills, Mich. Mortising-machine	482,242	Sept. 6	522	125	60	1436
Githens, George M., Brooklyn, N. Y. Channeling-tool for rocks	479,499	July 26	2267	568	60	483
Githens, George M., Brooklyn, N. Y. Blasting stone	479,500	July 26	2268	568	60	483
Githens, George M., Brooklyn, N. Y. Rock drilling and splitting	486,101	Nov. 15	1483	391	61	909
Githens, Joseph C., New York, N. Y. Mechanical movement	485,625	Nov. 8	721	189	61	736
Given, Charles E., et al. (See Rodecker, Peter W., assignor.)						
Given, John F., et al. (See Rodecker, Peter W., assignor.)						
Givens, James R. (See McMartin, Martin A., assignor.)						
Givens, John W. (See Hicks, Shelby, assignor.)						
Gjermundson, Christopher. (See Murdock, Edwin R., assignor.)						
Glad, George H., Boston, Mass. Shutter-fastener	481,111	Aug. 16	2179	{ 539 540 }	60	1028
Gladden, George. (See Hanley, Patrick F., assignor.)						
Glader, William, Chicago, and H. Schmidt, Elgin, Ill.; said Glader assignor to said Schmidt. Trussing-machine	477,195	June 14	1511	{ 370 371 }	59	1753
Gladius, Francis M., Higginsville, Mo. Drop-scale for measuring grain	468,173	Feb. 2	403	100	58	603
Glasecock, Giles T., Greensborough, N. C. Combined fire-dog and grate	484,091	Oct. 11	849	215	61	188
Glasgo Thread Company. (See Howe and Bush, assignors.)						
Glasgow, William, Chicago, Ill. Signaling appliance for railway-trains	474,578	May 10	1120	287	59	864
Glass and Metal Engraving Company. (See Bryce and Knox, assignors.)						
Glattly, Charles, Buck Creek, Iowa. Equalizer for buggy-springs	484,309	Oct. 11	1203	306	61	257
Glatz, Joseph. (See Bornholdt, Adolph, assignor.)						
Glauber, Joseph H., Cleveland, Ohio. Basin-clamp	483,804	Oct. 4	422	104	61	88
Glave, Frederick C., Irving Park, Ill. Tag	476,259	June 7	46	10	59	1447
Glazier, George W., Salem, assignor of one-half to H. Lockwood, Boston, and J. B. Rollins, Lynn, Mass. Door-guard	474,633	May 10	1201	306	59	879
Glazier, John M. (See McKendree, Albert C., assignor.)						
Gleason, Albert H., assignor to Perfection Manufacturing Company, Warsaw, Ind. Corn-popper	471,994	Mar. 29	3600	919	58	1828
Gleason, Duane N., Brooklyn, N. Y. Globe or shade holder	473,550	Apr. 26	2447	619	59	512
Gleason, Francis, Philadelphia, Pa. Bicycle-support	483,146	Sept. 27	1984	502	60	1762
Gleason, Francis, Philadelphia, Pa. Variable-pitch sprocket-wheel	484,005	Oct. 11	732	183	61	164
Gleason, Francis, Philadelphia, Pa. Sectional pneumatic tire	484,420	Oct. 18	1372	351	61	302
Gleason, John, deceased, Dearborn, Mich.; M. Gleason, administrator. Mail-bag catcher	475,307	May 24	2258	582	59	1118
Gleason, John K. (See Gleason, Martin H., assignor.)						
Gleason, Marcellus, administrator. (See Gleason, John.)						
Gleason, Martin H., assignor to J. K. Gleason, Fitchburg, Mass. Game apparatus	480,662	Aug. 9	1469	366	60	875
Gleason, John R., Chico, Cal. Elastic cushion for hubs	484,552	Oct. 18	1584	402	61	345
Gleissner, August J. (See Reiss, George, assignor.)						
Glen Cove Machine Company. (See Hutchinson, Alfred B., assignor.)						
Glen Cove Machine Company. (See Welch, James F., assignor.)						
Glen, Elias B. (See Main, Marvin D., assignor.)						
Glendinning, David W., Denver, Colo. Automatic damper for furnaces, &c	487,521	Dec. 6	473	124	61	1414
Glenn, Chester E., et al. (See Bailey, Archibald, assignor.)						
Glenn, Coulter E. (See Glenn, Harve S. and C. E.)						
Glenn, Dayton W. (See Morrow and Glenn.)						
Glenn, George P., Jacksonville, Fla. Tank-feeder	473,571	Apr. 26	2502	632	59	524
Glenn, George S., Nashville, Tenn. Sprinkling apparatus	479,979	Aug. 2	322	79	60	643
Glenn, Harve S. and C. E., Butler, Pa. Portable drilling apparatus	472,619	Apr. 12	948	245	59	194
Glenn, James F., Glenham, N. Y. Bookbinder's extensible glue-block	485,760	Nov. 8	928	{ 248 249 }	61	780
Glenn, William F. (See Vose, Harry A., assignor.)						
Glenn, William F., Lexington, assignor of one-half to H. A. Vose, Natick, Mass. Over-head trolley-carrier	472,756	Apr. 12	1149	294	59	230
Glennon, William H., Quincy, Mass. Autographic register	488,004	Dec. 13	1260	314	61	1588
Glidden, Carlos, deceased; P. J. Glidden, executrix, Milwaukee, Wis. Type-writing machine	470,874	Mar. 15	1925	{ 492 493 }	58	1488
Glidden, Darwin H., Brooklyn, Wis. Corn-harvester	477,050	June 14	1280	311	59	1706
Glidden, Joseph F., De Kalb, Ill. Horse-collar pad	474,524	May 10	1032	265	59	847
Glidden, Mary A. (See Glidden, Oscar F., assignor.)						
Glidden, Oscar F., Grand Rapids, Mich., assignor to M. A. Glidden. Washing-machine	477,752	June 28	2447	611	59	1965
Glidden, Phebe J., executrix. (See Glidden, Carlos.)						
Glinkie, Frank V., Rochester, N. Y. Clippers	466,407	Jan. 5	148	41	58	30
Glisson, Amos A., Memphis, Tenn. Baggage-check	488,334	Dec. 20	1818	455	61	1717
Globe Buttonhole Machine Company. (See Dahl, Charles A., assignor.)						
Globe Furniture Company. (See Lancaster, Morris, assignor.)						
Globe Manufacturing Company. (See Brown, Francis R., assignor.)						
Globig, John, Spokane, Washington. Car-coupling	486,460	Nov. 22	2042	540	61	1034
Glocker, Carl F., Albany, N. Y. Opera-glass	468,337	Feb. 9	681	168	58	665
Glocker, Carl F., Albany, N. Y. Opera-glass	477,360	June 21	1804	442	59	1820
Gloekler, Charles A., Pittsburg, Pa. Gate-operating device for elevators	488,605	Dec. 27	2256	560	61	1820
Gloekner, Ludwig. (See Kircher, Frederick, assignor.)						
Gloninger, John H., Pittsburg, Pa. Hose-bridge	488,888	Dec. 27	2630	666	61	1907
Glossop, Gilbert, Sheffield, England, assignor to F. C. Brooksbank and J. B. Perkins, Cleveland, Ohio. Pneumatic hammer	485,498	Nov. 1	529	140	61	680
Glover, Edgar, Schenectady, N. Y. Piston-lubricator	470,189	Mar. 8	840	{ 206 207 }	58	1271
Glover, Evelyn. (See Miller, Samuel, assignor.)						
Glover, George T., Chicago, Ill. Vehicle-spring	481,695	Aug. 30	3150	{ 768 769 }	60	1241
Glover, James M., Richmond, Ind. Molding	485,377	Nov. 1	353	95	61	645

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Glover, John M. (See Lundstedt, Olof E., assignor.)						
Glover, John V., Springfield, Mass. Slow-closing valve for tanks	478,793	July 12	1125	277	60	238
Glover, William H., St. Louis, Mo. Lid and supporting-frame work for ice-cans	467,406	Jan. 19	1784	455	58	355
Glynn, Michael, Otterbein, Ind. Sulky-plow	482,734	Sept. 20	1342	332	60	1623
Gnehm, Robert, and J. Schmid, assignors to Society of Chemical Industry, Basle, Switzerland. Violet dye	478,005	June 28	2850	-----	59	2042
Gnehm, Robert, and J. Schmid, assignors to Society of Chemical Industry in Basle, Basle, Switzerland. Basic yellow dye	488,430	Dec. 20	1975	-----	61	1747
Gobey, John R., et al. (See Johnston and Egan, assignors.)						
Goddard, Andrew. (See Smith, Goddard, Higginbottom, and Mannock.)						
Goddard, Calvin L., New York, N. Y. Cloth-stretching machine	479,501	July 26	2269	568	60	484
Goddard, Frederick B. (See Crowell, Albert L., assignor.)						
Goddard, William, Oshkosh, Wis. Safety-gate for drawbridges	482,499	Sept. 13	976	236	60	1539
Goddard, Edward A. (See George, Henry, assignor.)						
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Work-holding device	475,729	May 24	2933	744	59	1245
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Nail-making machine	478,054	June 28	2919	{ 729 730 }	59	2055
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Machine for inserting screw-threaded wire into the soles of boots or shoes	478,055	June 28	2926	731	59	2056
Goddu, Louis, Winchester, assignor to J. W. Brooks, Cambridge, and F. F. Stanley, Swampscott, Mass., trustees. Machine for inserting screw-threaded wire into the soles of boots or shoes	478,056	June 28	2928	731	59	2056
Godefroy, Richard, Philadelphia, Pa. T-square	467,764	Jan. 26	2373	603	58	474
Godefroy, Alexandre F., St. Louis, Mo. Electric curling-iron	469,135	Feb. 16	1911	489	58	918
Godfrey, Alexander, assignor of one-half to J. A. Godfrey, Haverhill, Mass. Bead attachment	474,122	May 3	367	88	59	708
Godfrey, Charles B., Milford, Mass., assignor to McKay & Copeland Lasting Machine Company, Portland, Me. Tack or nail driver	473,873	Apr. 26	2970	749	59	613
Godfrey, Charles B., Milford, assignor to Library Bureau, Boston, Mass. Adjustable shelving	478,509	July 5	687	167	60	136
Godfrey, Charles B., Milford, assignor to Library Bureau, Boston, Mass. Type-writing-machine card-holder	486,036	Nov. 8	1355	361	61	867
Godfrey, Henry W., C. F. Leake, and C. E. Lucas, assignors to Linoleum Manufacturing Company, Limited, Staines, England. Manufacturing floor-cloth or like fabrics	469,240	Feb. 23	2083	536	58	958
Godfrey, John A. (See Godfrey, Alexander, assignor.)						
Godfrey, John C. (See Bowman and Godfrey.)						
Godfrey, Jonathan, assignor of one-half to W. E. Baillie, Bridgeport, Conn. Machine for stripping paste or strawboard boxes	475,552	May 24	2658	{ 676 677 }	59	1193
Godfrey, Jonathan, assignor of one-half to W. E. Baillie, Bridgeport, Conn. Box-machine	483,649	Oct. 4	195	49	61	40
Godfrey, Jonathan, assignor of one-half to W. E. Baillie, Bridgeport, Conn. Machine for making paper boxes	483,957	Oct. 4	652	163	61	135
Godfrey, Jonathan, assignor of one-half to W. E. Baillie, Bridgeport, Conn. Making boxes from paste or straw board	483,958	Oct. 4	654	164	61	136
Godley, George F., Philadelphia, Pa. Journal-box	471,069	Mar. 15	2216	569	58	1545
Godshalk, Edward H. (See Gee, Joseph F., assignor.)						
Goebler, John, assignor to Indiana Bicycle Manufacturing Company, Indianapolis, Ind. Threading-machine	466,605	Jan. 5	475	122	58	91
Goehring, Charles L. (See Van Houten, Frank H., assignor.)						
Goehring, Charles L., Allegheny, Pa. Means for ornamenting wood	480,462	Aug. 9	1154	{ 289 290 }	60	812
Goehring, Charles L., Allegheny, Pa. Cutter-head	480,463	Aug. 9	1157	290	60	813
Goetz, John H., Chicago, Ill. Bracket for incandescent electric lamps	471,732	Mar. 29	3321	820	58	1754
Goetze, Frank A., Chicago, Ill. Burglar-alarm	475,101	Oct. 25	2480	638	61	540
Goering, Hermann, Birkenfeld-on-the-Nahe, Germany. Steam-generator	480,719	Aug. 16	1561	389	60	907
Goerte, Frederick, New York, N. Y. Postage-stamp moistener	486,611	Nov. 22	2277	594	61	1078
Goertz, August. (See Langfeld, Solomon C., assignor.)						
Goertz, August, Newark, N. J. Pocketbook-fastening	477,798	June 28	2513	631	59	1977
Goertz, August, Newark, N. J. Purse and pocketbook-frame and catch	477,799	June 28	2515	631	59	1978
Goertz, August, Newark, N. J. Stamp and match box	484,092	Oct. 11	850	216	61	189
Goese, Hermann, Milwaukee, Wis. Window-frame	472,757	Apr. 12	1150	295	59	230
Goesel, John G. (See Kletzker and Goesel.)						
Göetsche, John H., San Francisco, Cal. Grinding-wheel attachment	478,854	July 12	1212	301	60	255
Goettel, John, et al. (See Dolloff, Orville C., assignor.)						
Goetz & Brada. (See Brada, Charles, assignor.)						
Goetz, Jacob, trustee. (See Avery, Russell F., assignor.)						
Goetz, Victor J., assignor of one-half to W. C. Kidd and J. B. Suffern, Hillburn, N. Y. Switch-stand	479,268	July 19	1852	464	60	388
Goetze, Max, Fort Meade, S. D. Railway-coach	482,634	Sept. 13	1181	285	60	1578
Goetze, Max, Sturgis, S. D. Lamp-extinguisher	484,362	Oct. 11	1278	326	61	272
Goff, Darius L., Pawtucket, R. I. Mechanism for delivering and cutting roll-paper	478,231	July 5	263	65, 66	60	54
Goff, Darius L., Pawtucket, R. I. Mechanism for delivering and cutting roll-paper	486,102	Nov. 15	1484	391	61	909
Goff, Darius L., Pawtucket, R. I. Mechanism for delivering and cutting roll-paper	486,103	Nov. 15	1486	391	61	910
Goff, Hubbard S., Arch Beach, Cal. Trap	475,215	May 17	2120	536	59	1074
Goff, Samuel B., Camden, N. J. Water-motor	470,190	Mar. 8	842	207	58	1271
Gogerty, John, Decatur, Ill. Gutter-protector	486,868	Nov. 29	2703	705	61	1182
Gohl, Christian H., assignor of one-half to E. Rust, Saginaw, Mich. Car-coupling	482,353	Sept. 13	735	{ 176 177 }	60	1494
Goins, William P., Paragould, Ark. Corn-planting attachment	479,269	July 19	1854	465	60	388
Gold Car Heating Company. (See Gold and Sisum, assignors.)						
Gold, Edward E. (See Baltimore and Gold.)						
Gold, Edward E., New York, N. Y. Hose-coupling	466,561	Jan. 5	404	{ 102 103 }	58	77
Gold, Edward E., New York, N. Y. Steam-trap	472,116	Apr. 5	168	46	59	32
Gold, Edward E., New York, N. Y. Drainage-trap	481,727	Aug. 30	3214	{ 784 785 }	60	1253
Gold, Edward E., New York, and W. H. H. Sisum, Brooklyn, assignors to Gold Car Heating Company, New York, N. Y. Pipe-coupling	466,340	Jan. 5	50	13	58	12
Gold, Joseph S., assignor to Gold Telephone Tablet Company, Columbus, Ohio. Telephone-tablet	477,931	June 28	2732	685	59	2019
Gold, Joseph S., and A. H. McAlpine, assignors to Gold Telephone Tablet Company, Columbus, Ohio. Telephone-tablet support	477,932	June 28	2734	685	59	2020
Gold, Samuel F., Englewood, N. J. Valve	485,626	Nov. 8	723	189	61	737

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Gold, Sidney C. G. (See Renold, Goolden, Atkinson, and Gold.)						
Gold Telephone Tablet Company. (See Gold, Joseph S., assignor.)						
Gold Telephone Tablet Company. (See Gold and McAlpine, assignors.)						
Goldberg, Harry, <i>et al.</i> (See Parks, Dana, assignor.)						
Goldberg, Jacob, Chicago, Ill. Machine for casting sash-weights	487,263	Dec. 6	37	12	61	1329
Golden, Charles, assignor of one-half to S. Jacobson, Chicago, Ill. Mock pistol	476,878	June 14	1001	243	59	1650
Golden Gate Safety Fancet Company. (See Anthony, Mark, assignor.)						
Golden Gate Safety Fancet Company. (See Savage, Granville L., assignor.)						
Golden, John W. (See Hathaway and Golden.)						
Goldenberg, Benjamin, New York, N. Y. Lock	483,147	Sept. 27	1985	503	60	1763
Golder, Evan R., <i>et al.</i> (See Keene, George A., assignor.)						
Goldie, William, West Bay City, Mich. Tie-plate	485,030	Oct. 25	2381	612	61	518
Goldie, William, West Bay City, Mich. Railway-rail fastening	488,195	Dec. 20	1585	397	61	1671
Golding, Charles T., Newton, Iowa. Camp-stool cane	474,240	May 3	546	134	59	743
Golding, John H., Bay Shore, N. Y. Can-opener	482,057	Sept. 6	220	52	60	1378
Golding, William, assignor to C. Macintosh & Company, Limited, Manchester, England. Pneumatic tire	487,522	Dec. 6	476	124	61	1415
Goldkind, Isaac, assignor to L. Stirn and J. Somborn, New York, N. Y. Incandescent-lamp socket	479,359	July 19	2008	502	60	419
Goldman, Edward, assignor of one-half to I. Löwenthal, Baltimore, Md. Muff-bed	470,044	Mar. 1	600	149	58	1216
Goldman, Edward, Baltimore, Md., assignor to Eureka Coat Pad Company, of Maryland. Dress-pad	481,788	Aug. 30	3320	811	60	1275
Goldman, Moses, Pittsfield, Mass. Sprinkler	473,310	Apr. 19	2041	512	59	413
Goldsberry, William H., Chicago, Ill. Folding square	482,900	Sept. 20	1609	403	60	1675
Goldschmid, Theodore J., Philadelphia, Pa. Shipping-flask for anhydrous ammonia	479,592	July 26	2396	597	60	507
Goldsmit, Julian. (See Riatti, Vincenzo, assignor.)						
Goldsmith, Byron B., New York, N. Y. Lead-pencil or other article of fibrous material. (Reissue)	11,259	Aug. 16	2265	559	60	1043
Goldsmith, Edwin M., Philadelphia, Pa. Lamp-chimney raiser	477,930	June 28	2731	684	59	2019
Goldsmith, Edwin M., Philadelphia, Pa. Bank	484,310	Oct. 11	1204	306	61	257
Goldsmith, Jacob M., Chicago, Ill. Gas or steam generator	476,260	June 7	47	11	59	1447
Goldsmith, Jacob M., Chicago, Ill. Gas-generator	476,261	June 7	50	11	59	1447
Goldsmith, John S., New York, N. Y. Combined corset and dress-shield	480,426	Aug. 9	1095	273	60	800
Goldsmith, Max S., Cincinnati, Ohio. Burglar-proof safe	470,482	Mar. 8	1343	349	58	1363
Goldsmith, Max S., Cincinnati, Ohio. Safe	477,800	June 28	2516	631	59	1978
Goldstein, Albert, assignor of one-half to A. A. Lehmann, Baltimore, Md. Fire-alarm apparatus	479,709	July 26	2591	645	60	543
Goldstein, Harry, <i>et al.</i> (See Rosenthal, Adolph, assignor.)						
Goldstein, Jacob. (See Block and Goldstein.)						
Goldstein, Joseph, New York, N. Y. Oil-stove	485,378	Nov. 1	354	95	61	645
Goldstein, Philip, Newark, N. J. Machine for pointing and punching shoe-laces	476,999	June 14	1199	291	59	1690
Goldsworthy, Orlando A., Chicago, Ill. Bending vehicle-shafts	482,475	Sept. 13	929	227	60	1529
Goldthwaite, Joseph G., assignor to Rembert Roller Compress Company, Galveston, Tex. Apparatus for baling cotton	467,860	Jan. 26	2527	640	58	503
Goldy, Samuel N., San Francisco, Cal. Sash-balance	466,941	Jan. 12	1029	262	58	204
Golubart, Francis L., Indianapolis, Ind. Grass-receiver for lawn-mowers	481,277	Aug. 23	2485	611	60	1099
Golling, Charles H., and F. D. Lea, Nevada, Ohio. Rolling or sliding door	470,191	Mar. 8	843	207	58	1271
Golling, Robert. (See Thompson and Golling.)						
Gollins, Edwin, Columbus, Ohio. Dado or molding bit	487,921	Dec. 13	1128	282	61	1561
Goltermann, Ada V., New York, N. Y. Fire-escape	484,093	Oct. 11	851	216	61	189
Goltstein, Ewald. (See Guilleaume and Goltstein.)						
Gombault, Joseph E., and E. C. Sonnet, Paris, France. Ship's log or apparatus for indicating and recording the speed of vessels	477,530	June 21	2075	516	59	1875
Gonser, Jacob E., La Otto, Ind. Gate roller and hinge	470,045	Mar. 1	601	149	58	1216
Gonzalez, Alfred, San Francisco, Cal. Ore-concentrator	487,523	Dec. 6	477	125	61	1415
Good, Charles E., and C. S. Whipple, Sunbury, Pa. Table	473,151	Apr. 19	1770	447	59	361
Good, David H., Canada, Kans. Corn-shock loader	480,767	Aug. 16	1630	408	60	922
Good, George W., Renovo, Pa. Gate-hinge	488,070	Dec. 13	1388	344	61	1616
Good, Israel F., Allentown, Pa. Air cooling and purifying apparatus	469,207	Feb. 16	2034	519	58	940
Good, William E., Philadelphia, Pa. Pumping-engine	469,661	Feb. 23	2724	700	58	1085
Good, William E., assignor to Southwark Foundry and Machine Company, Philadelphia, Pa. Steam-engine	482,038	Sept. 6	187	45	60	1372
Goodacre, Henry, Lexington, Ky. Flower-pot	473,836	Apr. 26	2904	729	59	601
Goodall, George B., <i>et al.</i> (See Poole, George, assignor.)						
Goodall, Joshua H., Castleford, England. Middlings-purifier	484,633	Oct. 18	1709	434	61	369
Goodall & Son, Charles. (See Foster, Robert F., assignor.)						
Goode, Joseph H., and W. H. Anthony, assignors of one-third to W. Garstang, Richmond, Va. Car-coupling	477,176	June 14	1483	363	59	1747
Goodell, Albert D., Worcester, Mass. Bit-brace	488,691	Dec. 27	2399	594	61	1846
Goodell, Albert D. and H. E., Shelburne Falls, Mass. Shoe float or rasp	472,259	Apr. 5	397	103	59	74
Goodell Company. (See Thompson, Edward J., assignor.)						
Goodell, Emilius S. (See Brown, Theodore H., assignor.)						
Goodell, Gorham B., Cheyenne, Wyo., and B. S. Hopkins, Lexington, Ky. Bridle	485,685	Nov. 8	815	217	61	756
Goodell, Henry C., Atchison, Kans. Ventilated refrigerator-car	483,551	Oct. 4	52	13	61	13
Goodell, Henry C., Atchison, Kans. Combined refrigerator and fruit car	483,552	Oct. 4	54	13, 14	61	13
Goodell, Henry E. (See Goodell, Albert D. and H. E.)						
Goodenberger, John, and L. Akins, Akron, Ohio. Cash-register	487,922	Dec. 13	1129	282	61	1561
Goodfellow, John H., Lansingburg, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	479,502	July 26	2270	569	60	484
Goodfellow, John H., Lansingburg, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	479,503	July 26	2275	569	60	485
Goodfellow, John H., Lansingburg, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	479,504	July 26	2277	569	60	485
Goodfellow, John H., Lansingburg, N. Y., assignor, by mesne assignments, to Lamson Consolidated Store Service Company, of New Jersey. Store-service apparatus	479,505	July 26	2279	570	60	485
Goodhue, Charles F., Boston, Mass. Automatic heat-regulating apparatus	473,699	Apr. 26	2701	679	59	562
Goodhue, Frank M. and J. E., St. Charles, Ill. Bicycle	485,187	Nov. 1	51	16	61	582
Goodhue, James E. (See Goodhue, Frank M. and J. E.)						
Goodhue, William F., assignor of one-half to C. Paulus, Milwaukee, Wis. Sewage separating and purifying apparatus	478,539	July 5	741	181	60	147

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
Gooding, Charles S. (See Metcalf and Gooding.)						
Gooding, Charles S., Brookline, Mass. Button	486,461	Nov. 22	2043	540	61	1034
Gooding, Charles S., Brookline, assignor to Seaver Sewing Machine Company, Boston, Mass. Work-compressing mechanism for sewing-machines	488,629	Dec. 27	2295	568	61	1827
Gooding, Charles S., Brookline, and T. K. Keith, Boston, Mass., assignors to Seaver Sewing Machine Company, of Maine. Boot or shoe sewing machine	484,958	Oct. 25	2256	581 582 583	61	494
Gooding, Charles W., and B. Crossan, Wilmington, Del. Dashboard	472,450	Apr. 5	692	176	59	131
Goodkind, Milton B., New York, N. Y. Coin-operated device	488,196	Dec. 20	1588	397	61	1672
Goodman, Adam C., assignor of one-half to J. K. Bowers, Canton, Ohio. Safety-bolt	470,238	Mar. 8	913	226	58	1285
Goodman, George L., San Francisco, Cal. Prescription-file	471,856	Mar. 29	3412	870	58	1792
Goodman, Henry M. (See Goodman, John and H. M.)						
Goodman, Henry M., Louisville, Ky. Dust-guard for axle-boxes	471,969	Mar. 29	3567	911	58	1822
Goodman, Henry M., Louisville, Ky. Axle-lubricator	487,181	Nov. 29	3226	826	61	1285
Goodman, John and H. M., Louisville, Ky. Water or gas meter	474,241	May 3	548	134 135	59	744
Goodman, Louis, New York, N. Y. Jacket, &c.	483,686	Oct. 4	245	61	61	51
Goodman, Morton A., Richmond, Va. Shoe-brush	469,633	Feb. 23	2678	689	58	1075
Goodman, William R., et al. (See Kemmerer, John N., assignor.)						
Goodnow, Frank E., Northville, Mich. Device for detachably securing desks, seats, &c., to floors	483,841	Oct. 4	479	119	61	99
Goodrich, Abram. (See Hubbard and Goodrich.)						
Goodrich, Benjamin F., Homer, Mich. Oil-stove for heating purposes. (Reissue)	11,225	Feb. 23	2744	705	58	1089
Goodrich, Benjamin F., Homer, Mich. Wick-fastener for oil-burners	488,788	Dec. 27	2540	630	61	1875
Goodrich, Charles E., Chicago, Ill., assignor of one-half to J. G. Thompson, Milwaukee, Wis. Insulator	474,319	May 3	687	178	59	769
Goodrich, Harry C., assignor to Velocity Manufacturing Company, Chicago, Ill. Velocipede	468,798	Feb. 16	1392	353	58	816
Goodrich, Harry C., assignor to Velocity Manufacturing Company, Chicago, Ill. Saddle for velocipedes	468,799	Feb. 16	1394	354	58	816
Goodrich, Henry T., Peoria, Ill. Running-gear for vehicles	483,717	Oct. 4	288	71, 72	61	60
Goodrich, John E. (See Cooley, Franklin S., assignor.)						
Goodrich, Paul C., Peterson, Iowa. Nose-ringer	468,174	Feb. 2	405	100	58	603
Goodrick, Edward W., assignor to Appleton Machine Company and S. R. Wagg, Appleton, Wis. Paper-pulp screen	475,041	May 17	1853	470	59	1021
Goodridge, Charles L., Portland, Me. Keyhole-guard	474,906	May 17	1638	418	59	980
Goodridge, Ezra R., et al. (See Bunch, Henry G., assignor.)						
Goodridge, Henry W., and C. Jonsson, Chicago, Ill. Smoke-funnel	477,209	June 21	1547	380	59	1773
Goodridge, James F., Boston, Mass. Cash indicator and recorder	467,592	Jan. 26	2106	534	58	424
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Cable-rack	472,947	Apr. 12	1418	362 363	59	284
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Electric switch	476,792	June 14	861	212	59	1621
Goodridge, William M., Highland Park, assignor to Western Electric Company, Chicago, Ill. Metallic-circuit house-telephone system	476,793	June 14	862	212 213 213	59	1622
Goodsell, Alfred T. (See Harris and Goodsell.)						
Goodson, George A., Minneapolis, Minn. Magnetic toy	468,274	Feb. 2	563	138	58	633
Goodson, George A., Minneapolis, Minn. Magnetic toy	468,338	Feb. 9	682	169	58	666
Goodson, George A., Minneapolis, Minn. Toy boat	472,291	Apr. 5	443	114	59	84
Goodson, George A., Minneapolis, Minn. Puzzle	472,292	Apr. 5	445	115	59	84
Goodson, George A., Minneapolis, Minn. Matrix-making machine	478,257	July 5	316	77	60	63
Goodson, George A., Minneapolis, Minn. Matrix-making machine	478,258	July 5	317	77	60	63
Goodson, George A., Minneapolis, Minn., assignor, by mesne assignments, to T. S. Bassford, New York, N. Y., receiver of the Minneapolis Electro-Matrix Company. Matrix-making machine	479,773	July 26	2715	675 676	60	568
Goodson, George A., and A. S. Capehart, Minneapolis, Minn., assignors, by mesne assignments, to T. S. Bassford, New York, N. Y., receiver of the Minneapolis Electro-Matrix Company. Matrix-making machine	479,772	July 26	2706	674 675 676	60	565
Goodson, William T., assignor of one-half to B. F. Allen, Homer, La. Planter	485,188	Nov. 1	52	16	61	583
Goodspeed, Charles E., Chicago, Ill. Leggin	476,377	June 7	238	58	59	1483
Goodwin, Charles H., assignor to Waterbury Button Company, Waterbury, Conn. Glove-fastener	477,857	June 28	2616	655	59	1996
Goodwin, Henry D., et al. (See Wickham, Horace, assignor.)						
Goodwin, John B., Pittsburg, Pa. Metallic standing-seam roofing	466,850	Jan. 12	878	225	58	176
Goodwin, Joseph G., Lexington, Ky. Corn-planter	477,531	June 21	2078	517	59	1875
Goodwin, Phebe C., Boston, Mass. Spoon	483,379	Sept. 27	2381	597	60	1838
Goodwin, William W., Bordentown, N. J. Gas-range	477,408	June 21	1877	462	59	1835
Goodyear Shoe Machinery Company. (See Bigelow, Austin W., assignor.)						
Goodyear Shoe Machinery Company. (See French and Meyer, assignors.)						
Goodyear Shoe Machinery Company. (See La Chapelle, Israel, assignor.)						
Goodyear Shoe Machinery Company. (See Spencer, Alvah C., assignor.)						
Goodyear's Metallic Rubber Shoe Company. (See Saunders, Emmett A., assignor.)						
Gould, Frederick D., assignor to Edison General Electric Company, New York, N. Y. Insulator	477,753	June 28	2448	611	59	1965
Gould, Frederick D., assignor to Edison General Electric Company, New York, N. Y. Holder for arc lamps and similar globes	480,720	Aug. 16	1561	389 390	60	907
Gould, Frederick D., assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	480,721	Aug. 16	1563	390	60	907
Gould, Frederick D., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Snap-switch	480,722	Aug. 16	1564	390 391	60	907
Gould, Lewis W., King's Heath, and F. Bartlett, Birmingham, England. Lock-trimming	466,341	Jan. 5	53	13	58	13
Goolden, Walter T. (See Atkinson and Goolden.)						
Goolden, Walter T. (See Renold, Goolden, Atkinson, and Gold.)						
Goolden, Walter T., and L. B. Atkinson, London, England. Dynamo-electric machine or motor	471,693	Mar. 29	3149	802	58	1742
Goolden, Walter T., and L. B. Atkinson, London, England. Machine for working coal or other minerals	488,606	Dec. 27	2257	560	61	1820
Gooley, Ella, New Holland, Ohio. Spring-bolster	486,462	Nov. 22	2044	541	61	1034
Gorden, S. P. (See Talley, Reuben J., assignor.)						
Gordon, Albert A. (See Wyman and Gordon.) (Reissue.)						
Gordon, Alexander, Detroit, Mich. Cigar-bunching machine	486,249	Nov. 15	1710	451	61	954
Gordon, Edward F., Concord, N. H. Driving-pulley	488,390	Dec. 20	1911	478	61	1735
Gordon, Edward Y., assignor to C. F. Wilkin, Rochester, N. Y. Apparatus for weighing liquors	472,535	Apr. 12	830	212	59	171

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Gordon, Elonso J., assignor to Gordon Hollow Blast Grate Company, Greenville, Mich. Furnace-grate.	484,497	Oct. 18	1500	382	61	328
Gordon, Fred E., Allegheny, Pa. Molding	482,901	Sept. 20	1611		60	1675
Gordon, Frederick W., assignor to Philadelphia Engineering Works, Limited, Philadelphia, Pa. Device for transmitting rotary motion	467,593	Jan. 26	2108	534	58	424
Gordon, Frederick W., assignor to Philadelphia Engineering Works, Limited, Philadelphia, Pa. Device for transmitting rotary motion	478,959	July 12	1363	336	60	284
Gordon, Hamilton S. (See Hambloch, Hubert A., assignor.)						
Gordon Hollow Blast Grate Company. (See Gordon, Elonso J., assignor.)						
Gordon, J. T., et al. (See Bailey, Frank M., assignor.)						
Gordon, James F., Lowell, Mass. Circular-knitting machine for ribbed work	469,694	Mar. 1	32	11, 12	58	1104
Gordon, James F., assignor to Shaw Stocking Company, Lowell, Mass. Knitting-machine	467,094	Jan. 12	1282	325	58	251
Gordon, John W. (See Cox and Gordon.)						
Gordon, Joseph, and C. R. Perkins, Pioneer, Ohio. Folding or knockdown box	477,051	June 14	1282	311	59	1707
Gordon, Minnie W. (See Wood and Gordon.)						
Gordon, Thomas A. (See Beggs and Gordon.)						
Gordon, Thomas H., Syracuse, N. Y. Check-book	469,418	Feb. 23	2363	606	58	1012
Gordon, Thomas J., assignor of two-thirds to R. L. Meador, Eureka Springs, and G. W. Finn, Mndell, Ark. Fire and burglar alarm	469,648	Feb. 23	2699	695	58	1079
Gordon, William, Stubbs, Tex. Caster	479,980	Aug. 2	324	79	60	644
Gordon, William J., and E. D. Gilbert, Philadelphia, Pa. Machine for edge-curling sheet metal	482,962	Sept. 20	1701	429, 430	60	1693
Gordon, William M., assignor of one-half to J. W. Hoffman, Chicago, Ill. Apparatus for producing manifold copies	477,000	June 14	1201	291	59	1690
Gore, William G. (See Scott and Brasfield, assignors.)						
Gore, William G., et al. (See Scott, Matthew T., assignor.)						
Görge, Johannes F. H., assignor to Siemens & Halske, Berlin, Germany. System for operating glow-lamps by means of multiphase currents	468,500	Feb. 9	931	237	58	714
Görge, Johannes H. F., assignor to Siemens & Halske, Berlin, Germany. Incandescent lamp	487,049	Nov. 29	3020	776	61	1244
Gorham Manufacturing Company. (See Ketterlinus, Eugene, assignor.)						
Gorman, Thomas J., Boston, Mass. Paper-file	483,609	Oct. 4	138	35	61	29
Gornall, Richard, Baltimore, Md., assignor to Lamson Consolidated Store Service Company, Boston, Mass. Store-service apparatus	483,610	Oct. 4	139	35	61	29
Gorrell, Charles L., assignor of three-fourths to Gorrell Manufacturing Company, Belair, Md. Can-labeling machine	476,879	June 14	1002	244, 245	59	1650
Gorrell, John B., and A. W. Clay, La Otto, Ind. Automatic windmill-regulator	469,738	Mar. 1	111	30	58	1121
Gorrell Manufacturing Company. (See Gorrell, Charles L., assignor.)						
Gorsuch, George W., Martinsburg, assignor of one-half to M. B. Miller, Carlisle, Pa. Pipe wrench and cutter	468,601	Feb. 9	1087	277	58	745
Gorton, George, et al. (See Johnson, Bernt M., assignor.)						
Gorton, Robert, Plainfield, N. J. Sash-lift	468,869	Feb. 16	1499	382	58	837
Gorton, Robert, Plainfield, N. J. Hook	472,948	Apr. 12	1420	363	59	284
Goshen Folding Bed Company. (See Ru Ton, Hiram W., assignor.)						
Goslett, Charles A. (See Crossley, Eli, Jr., assignor.)						
Gosling, Charles, et al. (See Hall, George F., assignor.)						
Gosling, Henry J., assignor to G. and H. Barnett, Philadelphia, Pa. Machine for stripping files	488,652	Dec. 27	2334	577	61	1834
Gosling, Henry J., assignor to G. and H. Barnett, Philadelphia, Pa. Holder and turner for stripping-machines	488,653	Dec. 27	2335	577	61	1834
Gosman, Harry, Watertown, N. Y. Railway time-signal	470,821	Mar. 15	1850	474, 475	58	1474
Gosnell, Andrew J. and F. D. Terre Haute, Ind. Guard-rail for railways	467,228	Jan. 19	1512	387	58	304
Gosnell, Frank D. (See Gosnell, Andrew J. and F. D.)						
Goss, Franklin, New London, Conn. Sink connection	472,045	Apr. 5	54	13	59	13
Goss Printing Press Company. (See Goss, Samuel G., assignor.)						
Goss, Samuel G., assignor to Goss Printing Press Company, Chicago, Ill. Printing-press	483,687	Oct. 4	246	61, 62	61	51
Goss, William C., Lynn, Mass. Electric railway	471,543	Mar. 29	2928	745	58	1702
Gosslin, William G., et al. (See Rush, Ulysses S., assignor.)						
Gothorpe, Thomas, Rye, N. H. Telegraphy	475,938	May 31	3284	829	59	1328
Gott, Clarence P., New York, N. Y. Apparatus for registering sales of tickets, &c	473,113	Apr. 19	1710	433	59	349
Gott, Descomb D., La Grange, Ohio. Mail-bag hanger	471,270	Mar. 22	2531	643	58	1617
Gottschalk, Henry. (See Hall and Gottschalk.)						
Gottwals, William O. (See Ahrens and Gottwals.)						
Goubert, Auguste A., Brooklyn, N. Y. Separator	482,354	Sept. 13	737	177	60	1494
Goujon, Hippolyte, Paris, France. Puzzle dice-box	481,398	Aug. 23	2679	657	60	1133
Gould, Aaron P., et al. (See Kellogg, James F., assignor.)						
Gould, Aaron P., et al. (See Pynchon, Edwin, assignor.)						
Gould, Aaron P., et al. (See Stuck, Levi, assignor.)						
Gould, Aaron P., Canton, Ohio. Dental chair	478,590	July 12	812	200, 201	60	176
Gould, Aaron P., Canton, Ohio. Lowering-jack	484,587	Oct. 18	1631	414	61	354
Gould, Andrew J., Jackson, Mich. Nut-lock	471,608	Mar. 29	3018	768	58	1718
Gould, Bert L. (See Hathorn, Oliver B., assignor.)						
Gould, Charles A. (See Allen, Alfred J., assignor.)						
Gould, Charles A., Buffalo, N. Y. Car-coupling	466,342	Jan. 5	54	14	58	13
Gould, Charles A., Buffalo, N. Y. Car-coupling	478,747	July 12	1042	256	60	222
Gould, Hiram. (See Hulett, John F., assignor.)						
Gould, James, Jr., Maywood, Ill. Tinning plate	467,800	Jan. 26	2427	616, 617, 618	58	484
Gould, James, Jr., Maywood, Ill. Tinning	467,801	Jan. 26	2429	618	58	484
Gould, John C. (See Burton and Gould.)						
Gould, John C., assignor to S. I. Gould, Chicago, Ill. Animal-trap	472,213	Apr. 5	326	84	59	61
Gould, Samuel A., assignor of two-thirds to G. R. Blanchard and A. H. Brown, Chicago, Ill. Boring-machine	487,407	Dec. 6	292	76	61	1379
Gould, Susan I. (See Gould, John C., assignor.)						
Gould, Thomas E., Brooklyn, N. Y. Bill and letter holder or file	473,835	Apr. 26	2902	728	59	601
Gould & Watson Company. (See Lee, Charles T., assignor.)						
Gould, William F., Des Moines, Iowa. Railway rail splice	466,408	Jan. 5	148	41	58	30
Gould, William F., Des Moines, Iowa. Metal shim and railway-rail joint	487,832	Dec. 13	976	246	61	1533
Goulding, Henry C., Nashoba, Mass. Boiler	466,933	Jan. 12	1019	260	58	202
Goulding, Joseph C., Cardiff, assignor to Woodhouse & Rawson United, Limited, London, England. Telephone-transmitter	469,782	Mar. 1	186	48	58	1137

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr & G.	Vol.	Page.
Gove, Horace D. (See Ramsey, Jonathan, assignor.)						
Govum, Henry I., Palestine, Ark. Heating-stool	467,606	Jan. 26	2127	540	58	427
Gowin, Ernest E. (See Briscoe, Henry, assignor.)						
Gowing, Daniel H., assignor to H. A. Moyer, Syracuse, N. Y. Hub-boring machine	486,869	Nov. 29	2704	706	61	1182
Grabau, Hans E., assignor of one-half to E. G. Soltmann, New York, N. Y. Surveying-instrument	472,451	Apr. 5	693	177	59	131
				{ 598 599 }	60	1838
Grace, Henry S., assignor to J. A. Fischer, San Francisco, Cal. Cigarette-machine	483,380	Sept. 27	2382	598		
Grace, Robert W. (See Potter, John A., assignor.)						
Grace, Robert W., Pittsburg, assignor of one-half to J. A. Potter, Munhall, Pa. Machine for cutting right-angled structural shapes	479,066	July 19	1536	{ 383 384 }	60	328
Grace, Thomas. (See Bailey and Grace.)						
Gracey, James G., et al. (See Dreyer, Charles M., assignor.)						
Gradle, Bernard, et al. (See Steinkle, William M., assignor.)						
Grady, James, assignor of one-half to J. W. Fowler, Brooklyn, N. Y. Combined wheel and rail brake for cars	486,037	Nov. 8	1356	361	61	867
Graeber, William A., Shenandoah, Pa. Metallic railway-tie	477,112	June 14	1379	336	59	1726
Graeme, Patrick J. F., Beulah, Canada. Lamp-burner	473,738	Apr. 26	2764	{ 694 695 }	59	573
Graeser, Albert A., Pittsburg, Pa. Securing designs on glass articles	487,013	Nov. 29	2966		61	1233
Graf, Anton, assignor of one-half to S. Osgood, Georgetown, Mass. Furnace-door	485,189	Nov. 1	53	16	61	583
Graf, Anton, assignor of one-half to S. Osgood, Georgetown, Mass. Heater	485,190	Nov. 1	54	17	61	583
Graf, Henry J., St. Louis, Mo., assignor to Graf Iron Melting and Manufacturing Company, East St. Louis, Ill. Melting-iron	485,927	Nov. 8	1173	309	61	828
Graf Iron Melting and Manufacturing Company. (See Graf, Henry J., assignor.)						
Graff, George E., assignor to S. T. McCormick, Williamsport, Pa. Type-cleaning appliance for type-writing machines	474,733	May 10	1360	345	59	910
Graff, Edward E., assignor to D. M. McMasters, Pittsburg, Pa., and J. A. Werner, Chicago, Ill. Reducing iron ore	470,640	Mar. 8	1560		58	1409
Graff, George J. (See Slack, Graff, and Paxton.)						
Graff, Jakob, Paterson, N. J. Locket	487,480	Dec. 6	411	106	61	1402
Grafton, Edwin W., Washington, D. C. Paint	471,970	Mar. 29	3568		58	1823
Graham, Arthur N. (See Tracy and Graham.)						
Graham, Ben C. (See Davis and Ripley, assignors.)						
Graham, Charles F., Ludlow, Ill. Band-cutter and feeder for thrashing-machines	478,996	July 19	1433	{ 355 356 }	60	308
Graham, Clarence V. (See Griswold, John B., assignor.)						
Graham & Co., James. (See Sweeney, John, assignor.)						
Graham, Edmund H., Biddeford, Me., assignor of one-half to L. Woodbury, Washington, D. C. Positive shuttle-motion for looms	466,851	Jan. 12	879	225	58	176
Graham, Edmund H., Biddeford, Me., assignor of one-half to L. Woodbury, Washington, D. C. Positive shuttle-motion for looms	474,555	May 10	1080	276	59	855
Graham, Eliza M., Mobile, Ala. Machine for hanging wall-paper	471,636	Mar. 29	3059	778	58	1725
				{ 109 110 }	58	610
Graham, George H., Ridgeland, Ill. Rotary engine	468,198	Feb. 2	440			
Graham, George H., Ridgeland, Ill. Railway-rail chair	471,971	Mar. 29	3568	911	58	1823
Graham, George H., Oak Park, Ill. Car-wheel	477,532	June 21	2079	517	59	1876
Graham, George M., Chicago, Ill. Building or paving block	470,377	Mar. 8	1173	300	58	1332
Graham, George M., Houston, Tex. Artificial-stone block	474,339	May 3	733	191	59	778
Graham, John, Philadelphia, Pa. Inkstand	469,042	Feb. 16	1793	458	58	895
Graham, John M., Johnstown, Mo. Fence-building machine	474,009	May 3	196	46	59	676
Graham, Julius, et al. (See Willis, William H., assignor.)						
Graham, Levi P., Decatur, Ill. Corn-planter	474,448	May 10	915	236	59	824
Graham, Levi P., Decatur, Ill. Corn-planter	479,067	July 19	1538	{ 384 385 }	60	328
Graham, Malcolm, et al. (See Beardsley, William N., assignor.)						
Graham, Malcolm, et al. (See Beardsley and Moulton, assignors.)						
Graham, Orpheus J., Farwell, Mich. Floor-clamp	475,855	May 31	3152	799	59	1302
Graham, Sidney J., Colville, Wash. Vehicle-spring brace	466,675	Jan. 5	576	149	58	112
Graham, Wilson T. (See Gagnebin, William T., assignor.)						
Grammer, John, Houston, Va. Shaft-tug	473,624	Apr. 26	2589	652	59	540
Grand Detour Plow Company. (See Ruef, Charles S., assignor.)						
Grand Rapids Brass Company. (See Tobey, Fred W., assignor.)						
Grand Rapids Folding Bed Company. (See Herrinton and Smith, assignors.)						
Grande, Clemente del, Isernia, Italy, assignor to C. N. Romaine, Petersburg, Va. Pyrotechnic	471,703	Mar. 29	3162	806	58	1745
Grandeman, Charles F., Brooklyn, N. Y. Door-check	467,165	Jan. 19	1421	363	58	287
Grandy, Henry E., Somerville, Mass. Color-printing press	484,421	Oct. 18	1375	{ 351 352 }	61	303
Granger, Edmund R., Richford, N. Y. Roll-paper holder and cutter	482,039	Sept. 6	189	45	60	1372
Grannis, George D., Syracuse, N. Y. Sand-drier	469,909	Mar. 1	435	109	58	1185
Grant, Arthur L., Toronto, Canada, assignor to Adamant Manufacturing Company, Syracuse, N. Y. Plastering composition	466,782	Jan. 12	768		58	156
Grant, Arthur W. (See Rodgers and Grant.)						
Grant, Arthur W., and D. P. Jefferies, Springfield, Ohio. Rubber wheel-tire	470,483	Mar. 8	1344	349	58	1364
Grant, Duncan E., assignor of one-third to A. Ritchie, Quebec, Canada. Breech-loading gun	480,259	Aug. 9	820	{ 210 211 }	60	750
Grant, Frank, and L. Veltan, Westfield, Mass. Ferrule for whips and making the same	469,897	Mar. 1	370	93	58	1172
Grant, Frank, and A. H. Murray, assignors of one-half to J. S. Boggess, agent, Middleport, Ohio. Machine for re-pressing bricks	485,191	Nov. 1	55	17, 18	61	584
Grant, Henry B., Pleasant Mound, Tenn. Car-coupling	485,928	Nov. 8	1174	309	61	828
Grant, Horace E., Pittsburg, Pa. Pen-extractor	470,296	Mar. 8	1025	262	58	1307
Grant, Irby H. (See Turner and Grant.)						
Grant, James. (See Altman and Macdonald, assignors.)						
Grant, James A., Mount Pleasant, Iowa. Earth-scraper	476,262	June 7	53	11	59	1447
Grant, James W., Bridgeport, Conn. Fruit-cutter	466,343	Jan. 5	55	14	58	13
Grant, John. (See James, David O., assignor.)						
Grant, John, Windsor, Canada. Last-supporter	477,210	June 21	1548	380	59	1774
Grant, Oscar F., Pittsburg, Pa. Drawing-pen	479,270	July 19	1855	465	60	388
Grant, Perrin, Portsmouth, Va. Incandescent lamp	466,562	Jan. 5	408	{ 103 104 }	58	78
Grant, Richard. (See Montgomery, James, assignor.)						
Grant, William A., Houston Tex. Manufacturing soap	471,668	Mar. 29	3106	790	58	1734
Grant, William H., Waltham, Me. Vehicle-brake	472,575	Apr. 12	878	226	59	181

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Grantham, Harry M., assignor of one-fourth to A. Scott, Wilmington, Ohio. Ticket-punch.	476,378	June 7	239	58	59	1483
Grantland, John W. (See Kennedy and Grantland.)						
Grantland, John W., Philadelphia, Pa. Nut-fastener.	467,750	Jan. 26	2354	596	58	470
Grantland, John W., Philadelphia, Pa. Nut-fastening device.	472,788	Apr. 12	1193	306	59	238
Grantland, John W., Philadelphia, Pa. Camera-shutter	487,833	Dec. 13	976	{ 246 247 }	61	1533
Grantland, John W., assignor of one-half to W. P. Miller, Philadelphia, Pa. Toboggan-slide	471,510	Mar. 22	2882	733	58	1685
Grantland, John W., assignor to A. J. Ingraham, Philadelphia, Pa. Inkstand.	473,551	Apr. 26	2447	620	59	512
Grantland, John W., assignor to G. L. Parker, Philadelphia, Pa. Electric railway	475,107	May 17	1961	497	59	1041
Grantland, John W., assignor of one-half to W. H. Mattson, Philadelphia, Pa. Hook	486,641	Nov. 22	2324	608	61	1089
Grantland, John W., assignor to A. J. Ingraham and W. L. Boggs, Philadelphia, Pa. Combined portable bill and letter file and perforating appliance	485,102	Oct. 25	2481	638	61	540
Grantland, John W., assignor to A. J. Ingraham and W. L. Boggs, Philadelphia, Pa. Combined bill and letter file and perforating appliance	488,939	Dec. 27	2778	686	61	1925
Granville, Bernard, Dayton, Ohio. Type writing machine	482,521	Sept. 13	1015	{ 245 246 }	60	1547
Grapewine, Charles E. (See Smith and Grapewine.)						
Grasham, William, and J. W. Moore, Mountain Home, Ark. Potato-digger	469,136	Feb. 16	1914	490	58	919
Grasselli Chemical Company. (See Frasch, Hans A., assignor.)						
Grau, Charles, Cincinnati, Ohio. Tanner's signe-brush	483,350	Sept. 27	2332	586	60	1829
Grau, Christian F. (See Keeler, William E., assignor.)						
Graumlich, Solomon M., Duvall, Ohio. Cultivator-shovel	484,789	Oct. 25	1981	505	61	440
Graupensperger, George. (See Stees and Graupensperger.)						
Graveline, David U., Granby, Canada. Car-coupling	474,123	May 3	368	89	59	708
Graves, Charles W. (See Verpillier, Emil, assignor.)						
Graves, Edward J., New York, N. Y. Automatic vending-machine	466,928	Jan. 12	1011	{ 258 259 }	58	201
Graves, Ephraim H., Appleton, Wis. Veterinary parturition-hook	472,536	Apr. 12	831	212	59	171
Graves, George, <i>et al.</i> (See Foster, Benjamin F., assignor.)						
Graves, James W., Lathrop, Cal., assignor of one-half to E. D. Middlekauff, Minneapolis, Minn. Punch	469,783	Mar. 1	187	48	58	1137
Graves, John F., Ellsworth, Minn. Whiffletree-hook	488,391	Dec. 20	1912	479	61	1735
Graves, Robert B., and D. F. Merritt, Ellisville Depot, Miss. Harrow	478,960	July 12	1365	336	60	224
Graves, William D., Cleveland, Ohio. Electric-arc lamp	469,347	Feb. 23	2247	{ 576 577 }	58	990
Gravity Twine Box Company. (See Bolus, William G., assignor.)						
Gray Automatic Telephone Pay Station Company. (See Holbrook, Charles W., assignor.)						
Gray, Charles P., Madisonville, Ohio. Dental plugger	466,961	Jan. 12	1060	269	58	210
Gray, George F. and H. N., San Francisco, Cal. Concrete-mixer	477,361	June 21	1806	442	59	1820
Gray, George J., assignor to F. W. McGahan, Rochester, N. Y. Gas sad-iron	474,470	May 10	945	243	59	830
Gray, George S., Beloit, Wis. Paper-holder	475,308	May 24	2260	582	59	1118
Gray, Harry N. (See Gray, George F. and H. N.)						
Gray, Isaac C., Elion, Ind., assignor of one-half to J. S. Tilton, Norwalk, Ohio. Ratchet pipe and nut wrench	484,634	Oct. 18	1713	435	61	370
Gray, James, Lima, Ohio. Apparatus for manufacturing gas	487,616	Dec. 6	606	{ 155 156 }	61	1442
Gray, James W., assignor of one-half to J. P. Heindell, Brooklyn, N. Y. Claw-bar	478,855	July 12	1213	301	60	256
Gray, John, and A. Simmons, Corsicana, Tex. Soap	481,860	Aug. 30	3436		60	1297
Gray, John G., Connersville, Ind. Grave-vault	478,102	July 5	38	12	60	10
Gray, John G., Connersville, Ind. Burial-case	480,427	Aug. 9	1097	274	60	800
Gray, John H., Chicago, Ill. Metal column	488,274	Dec. 20	1719	433	61	1698
Gray, John W., Hartford, Conn., assignor to Hartford Rubber Works Company, of Connecticut. Pneumatic tire for bicycles	467,502	Jan. 26	1937	495	58	394
Gray, Joshua, Medford, Mass. Electric locomotive	478,591	July 12	814	201	60	177
Gray, Ralph, Anderson, Ind. Glass-melting furnace	483,915	Oct. 4	590	149	61	122
Gray, Robert. (See Cunningham, Peter N., assignor.)						
Gray, Silas W., Fort Dodge, Iowa. Appointment-signal for telephones	470,786	Mar. 15	1781	{ 458 459 }	58	1461
Gray, Thomas F., Monroeville, Ohio. Automatic grain-scale	472,872	Apr. 12	1304	335	59	261
Gray, William, assignor of one-half to C. Soby, Hartford, Conn. Signal device for telephone pay-stations	469,649	Feb. 23	2701	695	58	1079
Gray, William, assignor of one-half to C. Soby, Hartford, Conn. Signal device for telephone pay-stations	469,650	Feb. 23	2702	695	58	1080
Gray, William D., Milwaukee, Wis., assignor to Edward P. Allis Company, of Wisconsin. Flour-bolt	487,004	Nov. 29	2952	{ 760 761 }	61	1230
Gray, William H. (See Combis and Gray.)						
Gray, William L., and J. Rivers, Evanston, Wyo. Pop safety-valve	487,029	Nov. 29	2989	769	61	1237
Gray, William M., Brooklyn, N. Y. Machine for affixing stamps	483,250	Sept. 27	2155	546	60	1797
Graybill, Jacob D., Shreveport, La. Compound for preserving the color of finishing-bricks	479,640	July 26	2471		60	521
Grayson, William H., Carter, Tex. Pea or bean thrasher	472,452	Apr. 5	694	177	59	131
Greason, Thomas, Newark, N. J. Fishing-reel	477,754	June 28	2449	{ 611 612 }	59	1966
Greaves, Charles. (See Greaves, William, assignor.)						
Greaves, William, assignor to C. Greaves, St. Louis, Mo. Routing-machine	483,671	Oct. 4	223	56	61	46
Greaves, William A., Cincinnati, Ohio. Lock for adjustable machine-tables	475,553	May 24	2664	678	59	1194
Grebe, Frederick C. J., Los Angeles, Cal. Historical toy novelty	482,123	Sept. 6	328	78	60	1399
Grehenstein, Charles H., New York, N. Y. Door-opener	467,684	Jan. 26	2240	570	58	448
Greeley, Andrew J., assignor of one-half to J. M. Worden, Hillsborough, Wis. Combined apple parer, corer, and slicer	468,800	Feb. 16	1395	354	58	817
Greely, Gayton C., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Green, Alfred N., Lewistown, Ohio. Whiffletree-hook	479,939	Aug. 2	254	63	60	631
Green, Charles, Toronto, Canada. Door-lock switch for electric lights	483,739	Oct. 4	323	81	61	68
Green, Charles C., assignor to M. E. Green, Utica, N. Y. Hop-picking machine	478,592	July 12	815	201	60	177
Green, Charles F., and G. A. Haley, National Soldiers' Home, Va. Duplex penholder	488,119	Dec. 13	1458	367	61	1630
Green, Daniel D., Scofield, Utah Ter. Car-coupling	468,602	Feb. 9	1088	277	58	745
Green, Duff, and R. M. Herron, Dalton, Ga. Revolving exhibitor for the display of goods	486,545	Nov. 22	2158	570	61	1057
Green, Edward D., Chicago, Ill. Power-fan	466,783	Jan. 12	769	200	58	156
Green, Edwin J., Valparaiso, Ind. Hand-purse	471,000	Mar. 15	2116	544	58	1526
Green, Frank A. (See Chaffee, Hoffman, and Green.)						
Green, Furney F. (See Jones and Green.)						
Green, George F., Kalamazoo, Mich. Photographic shutter	473,188	Apr. 19	1848	465	59	374
Green, Henry, assignor of one-half to G. S. Miller, Hartford, Conn. Incandescent electric lamp	475,394	May 24	2402	614	59	1145

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Green, Henry, assignor of one-half to F. C. Rockwell, Hartford, Conn. Incandescent electric lamp.	479,360	July 19	2009	502	60	419
Green, Henry J., Brooklyn, N. Y. Anemometer-cup.	471,817	Mar. 29	3362	856	58	1782
Green, Hermann, assignor to Hertz & Green, New York, N. Y. Loop-fastener.	483,672	Oct. 4	225	56	61	47
Green, Ira L., St. Regis Falls, N. Y. Watch-oiler.	487,732	Dec. 13	812	207	61	1499
Green, James, <i>et al.</i> (See Coze and Lencachez, assignors.)						
Green, James A., Milldale, assignor of two-thirds to J. D. Chapin, Stone Bridge, and S. S. Thomas, Berryville, Va. Automatic wagon-brake.	466,409	Jan. 5	153	41	58	31
Green, James T. R. (See Gamble, Joseph W., assignor.)						
Green, Jerry S., Nora Springs, Iowa. Producing ornamental surfaces.	467,229	Jan. 19	1513	387	58	304
Green, John, assignor to Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Boot or shoe sole.	470,046	Mar. 1	602	150	58	1216
Green, John, assignor of one-half to E. Miciangi, Renovo, Pa. Crosscut-saw handle.	470,361	July 19	2010	502	60	419
Green, John, assignor of one-half to C. Corano, Renovo, Pa. Game apparatus.	483,109	Sept. 20	1928	488	60	1741
Green, John, assignor of one-half to W. L. Holtan and J. McCord, Renovo, Pa. Car-coupling.	476,630	June 7	611	146	59	1558
Green, John, assignor of one-half to J. W. and I. Forster, Renovo, Pa. Brake-beam.	478,057	June 28	2930	731	59	2057
Green, John, assignor of two-thirds to S. M. English and A. E. Stagren, Renovo, Pa. Har-ness tug-hook.	483,959	Oct. 4	656	165	61	136
Green, John J., Boonton, N. J., assignor to Security Insulator Company, of New Jersey. Insulator.	480,011	Aug. 2	395	98	60	656
Green, John J., Boonton, assignor to Security Insulator Company, Elizabeth, N. J. Ceil-ing-block.	484,911	Oct. 25	2186	563	61	481
Green, Joseph W., Jr. (See Moore, George C., assignor.)						
Green, Martha E. (See Green, Charles C., assignor.)						
Green, Martin A., Altoona, Pa. Engine-governor.	480,580	Aug. 9	1329	331	60	848
Green, Martin A., Altoona, Pa. Balanced slide-valve.	483,054	Sept. 20	1845	468	60	1724
Green, Paul E., Georgetown, Colo. Advertising-board.	484,194	Oct. 11	1005	257	61	219
Green, Richard, Birmingham, England. Hub.	473,837	Apr. 26	2904	729	59	601
Green, Samuel F., Salamanca, N. Y. Car-coupling.	474,124	May 3	369	89	59	709
Green, Stith, Jackson, Miss. Metallic fence.	466,463	Nov. 22	2045	541	61	1034
Green, William W., Chicago, Ill., assignor of one-half to A. V. Terry, Brockport, N. Y. Harrow.	478,259	July 5	319	77	60	64
Greene, Francis V., assignor to Barber Asphalt Paving Company, New York, N. Y. Plant for heating and controlling sand.	481,489	Aug. 23	2823	694	60	1163
Greene, Francis W. (See Matteson, James A., assignor.)						
Greene, Grant P., assignor of one-half to M. A. Knapp, Chicago, Ill. Hotel call system.	474,907	May 17	1639	418	59	980
Greene, Henry D., Philadelphia, Pa. Portable fire-extinguisher.	474,042	May 3	255	62	59	687
Greene, Henry S., Lawrence, assignor of one-half to T. H. Greene, Lowell, Mass. Com-bined gigning and shearing machine.	469,502	Feb. 23	2493	639	58	1036
Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Overedge sewing-machine.	472,046	Apr. 5	55	13,14	59	13
Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Overseam for fabrics.	472,117	Apr. 5	170	46	59	32
Greene, James G., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Plaiting attachment for sewing-machines.	480,260	Aug. 9	828	{ 211 212 }	60	752
Greene, James W., White City, Kans. Carrying attachment for hand-cars.	481,021	Aug. 16	2021	505	60	998
Greene, John W., Louisville, Ky. Grate.	472,171	Apr. 5	251	66	59	47
Greene, Thomas C., assignor of one-half to W. T. Bowers, Liberty, Ind. Thill-coupling.	468,245	Feb. 2	506	125	58	624
Greene, Thomas H. (See Greene, Henry S., assignor.)						
Greene, William F., <i>et al.</i> (See Van Wic, Byron, assignor.)						
Greenebaum, Michael, Chicago, Ill. Combined refrigerator and water-cooler.	486,286	Nov. 15	1772	466	61	967
Greenfield, Edwin T., New York, N. Y. Covering tubes with metal.	469,662	Feb. 23	2725	{ 701 702 }	58	1085
Greenfield, Edwin T., New York, N. Y. Method of and apparatus for making metal-cov-ered tubes.	469,663	Feb. 23	2727	702	58	1056
Greenfield, Edwin T., New York, N. Y. Making paper or analogous tubing.	477,593	June 21	2169	538	59	1893
Greenfield, Edwin T., New York, N. Y. Paper-binding machine.	488,735	Dec. 27	2457	611	61	1859
Greenfield, Edwin T., assignor to Interior Conduit and Insulation Company, New York, N. Y. Electrical conduit.	469,208	Feb. 16	2037	520	58	940
Greenfield, Edwin T., assignor to Interior Conduit and Insulation Company, New York, N. Y. Tube for electric conductors.	469,469	Feb. 23	2438	625	58	1027
Greenfield, Edwin T., assignor to Interior Conduit and Insulation Company, New York, N. Y. Conduit for electric conductors.	469,470	Feb. 23	2440	626	58	1027
Greenfield, Edwin T., assignor to Interior Conduit and Insulation Company, New York, N. Y. Electric switch.	477,409	June 21	1879	463	59	1836
Greenland, Hamilton, and J. C. Carrick, Spivey, Kans. Thill-coupling.	483,440	Sept. 27	2460	619	60	1854
Greenleaf, Joseph H., New Haven, Conn. Fare-register.	476,741	June 7	771	{ 189 190 }	59	1591
Greenleaf, Miller T., Quincy, Ill. Incubator.	470,394	Mar. 8	1200	307	58	1337
Greenleaf, Oscar S., <i>et al.</i> (See Richards, Francis H., assignor.)						
Greenlees, William, Brookland, D. C. Car-coupling.	476,742	June 7	774	190	59	1591
Greenstreet, Charles J., <i>et al.</i> (See Greenstreet, Jason H., assignor.)						
Greenstreet, Flora V., <i>et al.</i> (See Greenstreet, Jason H., assignor.)						
Greenstreet, Jason H., assignor to C. J. and F. V. Greenstreet, Indianapolis, Ind. Indi-cating and recording balance.	478,232	July 5	269	63,67	60	54
Greenwade, Moses M., Cincinnati, Ohio. Device for throwing missives from moving trains.	468,801	Feb. 16	1398	355	58	817
Greenwald, Herman D., Oshkosh, Wis., assignor to Sectional Lead Pencil Company, Chi-cago, Ill. Pencil.	468,744	Feb. 9	1304	331	58	790
Greenwald, Louis, Leadville, Colo. Necktie-fastener.	483,215	Sept. 27	2103	533	60	1787
Greenwald, Louis, Leadville, Colo. Necktie-fastener.	488,275	Dec. 20	1720	434	61	1698
Greenwald, Louis, and M. R. Hopkins, Leadville, Colo. Portable mine-awning.	471,217	Mar. 22	2454	623	58	1603
Greenwell, Robert E., Waco, Tex. Railway-joint.	466,775	Nov. 22	2540	663	61	1132
Greenwood, De Wayne, assignor to Greenwood School Supply Company, Youngstown, Ohio. Ink-well.	471,511	Mar. 22	2883	734	58	1685
Greenwood, Enoch, and R. M. Wise, Jamestown, N. Y. Belt-fastener.	466,374	Nov. 15	1906	504	61	994
Greenwood, Guyon F. (See Riddell, John, assignor.)						
Greenwood, Henry, Gilbertville, Mass. Means for driving spindles.	478,280	July 5	349	84	60	70
Greenwood, John T., <i>et al.</i> (See Blair, John, assignor.)						
Greenwood, Richard, <i>et al.</i> (See Blair, John, assignor.)						
Greenwood, Samuel, Lowell, Mass. Picker-check for looms.	485,686	Nov. 8	815	218	61	756
Greenwood School Supply Company. (See Greenwood, De Wayne, assignor.)						
Greer, John, Greensborough, N. C. Lubricator.	484,195	Oct. 11	1006	257	61	219

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Greer, John, Greensborough, N. C. Lubricator.....	484,196	Oct. 11	1007	257	61	219
Greer, John R., and W. D. Thomas, Auxvasse, Mo.; said Thomas assignor to said Greer. Combined ink-bottle holder and pen-rack.....	484,498	Oct. 18	1503	382	61	328
Gregg, Elwood L., Hoxie, Kans. Toe-weight.....	467,779	Jan. 26	2394	608	58	478
Gregg, Henry T., Milwaukee, Wis. Thill or pole prop for vehicles.....	485,843	Nov. 8	1639	278	61	801
Gregg, John A., West Bay City, Mich. Hydrant.....	484,197	Oct. 11	1008	258	61	220
Gregg, Richard, Randolph, Ind. Hay-drag.....	466,522	Jan. 5	342	85	58	66
Gregg, Richard, Randolph, Ind. Hay-carrier.....	477,001	June 14	1202	292	59	1690
Gregg, William H., New York, N. Y. Toy.....	478,423	July 5	561	136	60	109
Gregg, William T., Lakeport, Cal. Door.....	473,625	Apr. 26	2591	652	59	540
Gregg, William T., Lakeport, Cal. Window-frame.....	478,933	July 12	817	202	60	178
Gregory, Brainard E., Brooklyn, N. Y. Eyeglasses.....	468,951	Feb. 16	1638	417	58	863
Gregory, Edward M. (See Ward and Gregory.)						
Gregory, James, Bridgeport, Conn. Mechanical movement.....	479,593	July 26	2397	597	60	508
Gregory, John H., assignor to himself and J. Newman, Ione, Cal. Wrench.....	488,431	Dec. 20	1976	493	61	1747
Gregory, Joseph L., Washington, Mo. Shaft-tug.....	482,243	Sept. 6	525	125	60	1437
Gregory, Nathan B., Joplin, Mo. Swing.....	477,858	June 28	2617	656	59	1996
Gregson, George, Cambridge, Mass. Match-lighter.....	484,311	Oct. 11	1205	307	61	257
Greig, George W., Chicago, Ill. Window-ventilator.....	483,433	Sept. 27	2509	632	60	1864
Greilick, William M., Sutton's Bay, Mich. Saw-set.....	480,581	Aug. 9	1331	331 332	60	848
Grellet, Frank A., assignor to B. and O. Hemming, New Haven, Conn. Vegetable-cutter.....	470,671	Mar. 15	1611	418	58	1428
Grenfell, Herbert H. (See Baron, Peter, assignor.)						
Grenfell, Hubert H., London, and J. G. Accles, Birmingham, England. Projectile.....	486,598	Nov. 22	2253	589	61	1074
Gresham, James, Manchester, assignor to Vacuum Brake Company, Limited, London, England. Automatic vacuum-brake apparatus.....	471,382	Mar. 22	2696	687 688 689	58	1650
Gress, Joseph. (See Neth, George J., assignor.)						
Grether, Jacob F. (See Walsh, John, assignor.)						
Grevert, Tjarek W. (See Powers and Grevert.)						
Gribben, John, Pittsburg, Pa. Bedstead-brace.....	481,628	Aug. 30	3049	744	60	1222
Gribben, William, and J. M. Gaige, Crosswell, Mich. Feed-regulator.....	477,327	June 21	1751	428 429	59	1811
Gribble, Theodore G., Yonkers, N. Y. Street-railway tunnel and constructing the same.....	468,282	Feb. 2	575	143	58	635
Grice, Francis E. (See Elbe, Henry, assignor.)						
Gridley, Wilmer D., Brooklyn, N. Y. Bracket.....	482,086	Sept. 6	268	65	60	1388
Grier, William W., et al. (See Casey, Peter, assignor.)						
Grier, William W., et al. (See Shannon, John, assignor.)						
Grier, William W., Hulton, Pa. Machine for graining wood.....	472,260	Apr. 5	398	103	59	74
Grierson, James, Toronto, Canada. Machine for loading coal.....	479,641	July 26	2472	614 615	60	521
Griesemer, Adam, Pueblo, Colo. Corn and seed planter.....	481,170	Aug. 23	2292	565 148 149 150 151	60	1062
Grieser, Louis H., assignor of one-half to N. A. Fleischer, Duluth, Minn. Grain-binder.....	468,295	Feb. 2	598	148 149 150 151	58	639
Griesser, William, Chicago, Ill. Construction of storage-rooms.....	482,889	Sept. 20	1588	399	60	1671
Griffen, Arthur B., Newark, and W. C. Clarke, Bloomfield, N. J. Carbureting air.....	487,617	Dec. 6	609	157	61	1443
Griffin, Alonzo J., Wilkes-Barré, Pa. Valve for steam-motors.....	469,695	Mar. 1	37	13	58	1105
Griffin, Charles H., assignor of one-half to L. Kafka, Lake City, Colo. Cap-attacher.....	487,562	Dec. 6	535	137	61	1427
Griffin, Dennis J. (See Crocker, Alfred M., assignor.)						
Griffin, Edwin J., Zion, Ky. Hedge-fence stay.....	488,498	Dec. 20	2084	518	61	1771
Griffin, Elvin H., South Boston, Va. Loop-rieveting machine.....	487,618	Dec. 6	613	157	61	1443
Griffin, Ira J., Sing Sing, N. Y. Nut-lock.....	470,561	Mar. 8	1447	766	58	1385
Griffin, James F. (See Staats, William H., assignor.)						
Griffin, John H., assignor of one-third to C. C. Bixby, Brockton, Mass. Sewing-machine.....	470,891	Mar. 15	1946	498	58	1493
Griffin, John S., Roslyn, Wash. Machine for rolling hollow rods or bars.....	468,655	Feb. 9	1167	297 298	58	761
Griffin, La Roy F., North Granville, N. Y. Composition for wall-coverings.....	486,870	Nov. 29	2705	61	1182	
Griffin, Roger B., Anburndale, Mass. Recovering grease, &c., from wool-washings.....	475,395	May 24	2403	59	1146	
Griffin, Thomas W., assignor of one-half to R. H. Nesbit and J. H. Bulford, New Haven, Conn. Funnel for filling lamps.....	477,002	June 14	1203	292	59	1690
Griffin, Winfield. (See Strouse and Griffin.)						
Griffith, Benjamin, et al. (See Dunn, Claudius A., assignor.)						
Griffith, Franklin H., Philadelphia, Pa. Impervious case for containing strings for musical instruments.....	488,005	Dec. 13	1261	314	61	1589
Griffith, J. T. (See Moors, George F., assignor.)						
Griffith, John T. (See Harris, Griffith, and Harris.)						
Griffith, Joseph H., assignor of one-half to J. T. Espy, Cannonsburg, Pa. Heating system.....	469,209	Feb. 16	2040	520 521	58	941
Griffith, Joseph T., Orangeburg, S. C. Fertilizer-distributor.....	476,631	June 7	612	147	59	1558
Griffith, Lafayette, et al. (See Walker, James E., assignor.)						
Griffith, William, Pittston, Pa. Device for conveying bricks.....	472,922	Apr. 12	1382	354 355	59	277
Griffith, William P., assignor to Carpenter & Dyett, Rome, N. Y. Folding bed.....	475,499	May 24	2572	655	59	1177
Griffiths, Oliver W., Brooklyn, N. Y. Lubricator.....	469,419	Feb. 23	2365	607	58	1012
Griffiths, Samuel, Weir, Kans. Coal-screen.....	481,754	Aug. 30	3264	794	60	1263
Griggs, George B., Ada, Ohio, assignor of one-fourth to F. S. Burke, Houston, Tex. Saddle.....	476,743	June 7	775	190	59	1592
Grigsby, Melvin, et al. (See Pruner, Thomas H., assignor.)						
Grimes, Allen R., Port Royal, Ky. Gate-latch.....	477,654	June 28	2258	573	59	1933
Grimes, James C., assignor of one-half to J. W. Johnson, Julesburg, Mo. Nut-lock.....	478,997	July 19	1437	356	60	309
Grimes, Virgil A., and C. R. Lane, Pittsfield, Ill. Ballot-box.....	477,533	June 21	2080	517	59	1876
Grimm, Max, West Hoboken, N. J. Pump for refrigerating apparatus.....	479,877	Aug. 2	157	39	60	612
Grimm, Philip H., and F. J. Willard, Ashland, Wis. Heating-drum.....	476,794	June 14	865	213	59	1622
Grimmer, Charles, et al. (See Cafferty, Ridner P., Jr., and W. N., assignors.)						
Grimmer, John W., et al. (See Cafferty, Ridner P., Jr., and W. N., assignors.)						
Grimmesey, Hiram F. (See McNutt and Grimmesey.)						
Grimmesey, O. R. (See McNutt and Grimmesey, assignors.)						
Grinnell, Fannie A. (See Killiner, Melross M., assignor.)						
Gripp, Jacob. (See Morrison and Gripp.)						
Griscom, William W., Haverford, Pa. Manufacture of secondary-battery electrodes.....	487,834	Dec. 13	980	247	61	1534
Griscom, William W., Haverford College, assignor to Accumulator Company, Philadelphia, Pa. Secondary battery.....	481,560	Aug. 30	2946	723	60	1203

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Grisel, George, and F. Severio, assignors of one-third to J. D. Case, San Francisco, Cal. Machine for wrapping block-matches	477,362	June 21	1807	442	59	1821
Grisham, James M., Whitney, Tex. Harrow	469,060	Feb. 16	1818	404 465	58	899
Grisham, Wiley M., assignor of one-half to A. C. Palmer, Winchester, Ill. Gate	476,379	June 7	240	58	59	1483
Grisler, George C., Jefferson, Iowa. Fountain	482,244	Sept. 6	525	125	60	1437
Grissinger, Elwood A., Mechanicsburg, Pa. Telephone-receiver	468,246	Feb. 2	507	125	58	624
Grissinger, Elwood A. and T., Mechanicsburg, Pa. Telephone-transmitter	469,085	Feb. 16	1851	474	58	906
Grissinger, Theodore. (See Grissinger, Elwood A. and T.)						
Grist, Benjamin W., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Power-transmitting mechanism	486,287	Nov. 15	1774	466 467	61	967
Grist, Benjamin W., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Adjustable shaft-bearing	486,401	Nov. 15	1949	516 517	61	1003
Grist, Benjamin W., assignor to Pennsylvania Iron Works Company, Philadelphia, Pa. Adjustable sheave-support	486,402	Nov. 15	1950	517	61	1003
Griswold, Alanson B. (See Bradbury and Griswold.)						
Griswold, Frederick B. (See Dey, Harry E., assignor.)						
Griswold, Frederick B. (See Dey and Griswold.)						
Griswold, Henry J., Leicester, England. Stocking	472,873	Apr. 12	1307	336	59	261
Griswold, Henry J., Madison, Conn. Device for transferring knitted fabrics	472,874	Apr. 12	1308	336	59	262
Griswold, Henry J., Madison, Conn. Knitted goods and manufacturing the same	472,875	Apr. 12	1309	336	59	262
Griswold, Henry J., Madison, Conn. Manufacture of hosiery	472,876	Apr. 12	1311	336 337	59	262
Griswold, Horace P., Providence, R. I. Adjustable sight	472,669	Apr. 12	1015	262 263	59	205
Griswold, John B., Zanesville, Ohio, assignor of one-half to C. V. Graham. Brick-kiln	466,676	Jan. 5	577	149 150	58	112
Griswold, John W., Troy, N. Y. Bale-tie	466,563	Jan. 5	409	104	58	78
Griswold, John W., Troy, N. Y. Controlling-spout for granulated material	468,870	Feb. 16	1500	382	58	837
Griswold, John W., Troy, N. Y. Barbed-wire fence	472,496	Apr. 5	764	194	59	145
Griswold, John W., Troy, N. Y. Barbed-wire fence	466,179	Nov. 15	1599	424	61	932
Griswold, Lewis F., assignor to Charles Parker Company, Meriden, Conn. Lamp	486,038	Nov. 8	1358	362	61	867
Griswold, Matthew and M., Jr., Erie, Pa. Gridiron	472,537	Apr. 12	832	212	59	171
Griswold, Milton O., Rock Island, Ill. Coin-controlled picture or surface exhibitor	472,704	Apr. 12	1077	276	59	216
Gritten, Walter, and A. Parnley, London, England. Molding for electric wires	469,241	Feb. 23	2084	536	58	959
Grobo, D. E. (See Crannell, Charles W., assignor.)						
Grodhaus, George H., Cameron, Ohio. Steam-cooker	470,562	Mar. 8	1448	376	58	1385
Groeber, Paul, Rutherford, N. J. Printing block or roller	466,677	Jan. 5	581	150	58	113
Groenman, Abraham J., Brooklyn, N. Y. Jewelry	466,344	Jan. 5	56	14	58	13
Groff, Sylvanus E., Marietta, assignor of two-thirds to H. C. Musser, Schock's Mills, Pa., and H. M. Engle, Roanoke, Va. Nail-machine	476,632	June 7	613	147	50	1559
Grohman, Charles, Lincolnville, N. Y. Steam-condenser	479,271	July 19	1856	465	60	388
Grohman, Charles, Carteret, N. J. Condenser and feed-water heater	485,031	Oct. 25	2383	612	61	519
Grondahl, Lars, Red Wing, Minn. Washing-machine	469,402	Feb. 23	2337	600 601	58	1008
Gronert, Carl. (See Bolze, Heinrich A., assignor.)						
Groom, Richard C., Cobb, Ky. Catching-tool	473,739	Apr. 26	2766	695	59	574
Groom, Wallace P., Brooklyn, N. Y. Process of and apparatus for ginning cotton	469,559	Feb. 23	2583	662	58	1054
Groom, Wallace P., Brooklyn, N. Y. Apparatus for and process of cleaning seed-cotton	469,560	Feb. 23	2586	662	58	1055
Groom, Wallace P., Brooklyn, N. Y. Process of and apparatus for harvesting cotton	477,177	June 14	1484	364	59	1747
Groom, Wallace P., Brooklyn, N. Y. Machine for opening and cleaning cotton	465,272	Nov. 1	175	52	61	699
Groos, Frederic, Naples, N. Y. Machine for cleaning and peeling vegetables	479,562	July 26	2356	588	60	500
Grosh, Silas W., Decatur, Ill. Gratu-car door	478,748	July 12	1043	256	60	223
Grosh, Silas W., Decatur, Ill. Car-door	485,007	Oct. 25	2342	603	61	510
Groshon High Duty Pumping Engine Company. (See Groshon, John A., assignor.)						
Groshon, John A., assignor to Groshon High Duty Pumping Engine Company, New York, N. Y. Direct acting steam-engine	474,775	May 10	1422	362	59	923
Gross, Augustus, Sydney, New South Wales. Nut-lock	467,617	Jan. 26	2141	543	58	430
Gross, Elam A., Camden, N. J. Water-filter	470,192	Mar. 8	844	208	58	1272
Gross, Ferdinand, Montreal, Canada. Telephone-receiver	483,718	Oct. 4	289	72	61	61
Gross, George M., Chicago, Ill. Operating mechanism for mining drills and stamps	483,842	Oct. 4	480	119	61	99
Gross, James M. (See Woodring, Peter, assignor.)						
Gross, John, and H. Beck, assignors of one-third to J. Weiss, New York, N. Y. Ventilator	483,650	Oct. 4	197	49	61	41
Gross, Joseph, Milwaukee, Wis. Whiffletree-hook	473,311	Apr. 19	2043	513	59	414
Gross, Milton H., Abilene, Kans. Door check and bolt	467,618	Jan. 26	2142	514	58	430
Grosselin, Nicolas H., fils, Sedan, France. Gig-mill	485,929	Nov. 8	1175	309 310	61	829
Grosser, Herman, et al. (See Meyer, Henry, assignor.)						
Grossman, George, assignor to M. M. Grossman, Lancaster, Pa. Stock-car	487,668	Dec. 6	697	178	61	1459
Grossman, Mary M. (See Grossman, George, assignor.)						
Grossman, Samuel, Chicago, Ill. Fruit-press	475,856	May 31	3153	800	59	1303
Grossmann, Morris, St. Louis, Mo. Machine for cutting cloth	467,407	Jan. 19	1786	455	58	355
Grossmann, Salomon, Chicago, Ill. Flour-sifter	467,504	Jan. 26	2110	535	58	424
Groth, William, Seattle, Wash., assignor of five-sixths to T. S. Constantino, New York, N. Y. Postmarking and stamp-canceling machine	472,497	Apr. 5	764	195 196	59	145
Grothgar, John, and J. M. Garfield, Galveston, Tex. Keel	408,339	Feb. 9	684	169	58	666
Grotta, David, New Haven, Conn. Garment-stay	478,961	July 12	1366	337	60	285
Grotz, Charles, Ottumwa, Iowa, assignor to Cooper & Hampton. Cutter-head and knife	481,861	Aug. 30	3436	843	60	1297
Grouleff, Albert, assignor of one-half to N. P. Salling, Grayling, Mich. Hat-case	486,898	Nov. 22	2630	686	61	1152
Grouleff, Albert, and H. B. Williams, Grayling, Mich. Breech-loading firearm	477,410	June 21	1880	463	59	1836
Grouilliers, Hector de, Berlin, Germany. Transfer	469,898	Mar. 1	371		58	1172
Gront, William L. (See Bowers and Titus, assignors.)						
Gronx, Henry A., West Orange, N. J. Thill-coupling	486,579	Nov. 22	2222	583	61	1068
Grove, George F., et al. (See Long, George W., assignor.)						
Grove, George W., Washington, D. C. Book-holder	483,611	Oct. 4	140	35	61	29
Grove, George W., assignor to National Cash Register Company, Dayton, Ohio. Registering-lock for cash-registers	485,930	Nov. 8	1179	310	61	829
Grove, Melchi M., Garfield, Wash. Pump	481,022	Aug. 16	2022	505	60	998
Grove, Samuel, Coalport, Pa. Automatic switch-lock	475,740	May 24	2947	747	59	1248
Grove, William A., Tionesta, Pa. Bit-truck	472,538	Apr. 12	833	213	59	172
Grover, William B., assignor to himself and G. C. Harrison, Philadelphia, Pa. Paint	469,634	Feb. 23	2679		58	1075

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Groves, Thomas F., assignor of one-half to S. A. Gardner, Kokomo, Ind. Step-ladder.....	475,857	May 31	3154	800	59	1303
Groves, William. (See Parks, David O., assignor.)						
Grubb, Arthur D. and C. J., Hamilton, Ill. Stovepipe collar and fastener	483,441	Sept. 27	2461	619	60	1854
Grubb, Charles J. (See Grubb, Arthur D. and C. J.)						
Grube, Jefferson, Auburn, Ind., assignor to Newark Machine Company, Columbus, Ohio. Straw-stacker	474,010	May 3	199	47	59	676
Gruber, Moritz. (See Lindner, Josef, assignor.)						
Gruenhagen, Charles H., San Francisco, Cal. Adjustable stand for show-windows	486,981	Nov. 29	2917	753	61	1224
Gruenhagen, Willie H. (See Held and Gruenhagen.)						
Grumbacher, Frederick M. (See Dittrich and Grumbacher.)						
Grumbacher, Frederick M., New York, N. Y. Ozone-machine	470,425	Mar. 8	1256	320	58	1346
Grund, Emil, Cologne, Germany. Car-coupling	486,375	Nov. 15	1906	504	61	994
Grundy, Alfred, Cedar Falls, Iowa. Letter-file	471,357	Mar. 22	2659	675	58	1642
Grundy, William R. (See Harvey and Grundy.)						
Grundy, William S. (See Lever and Grundy.)						
Grundy, William S., <i>et al.</i> (See Hofbauer, Frank, assignor.)						
Grüne, Wilhelm, Sr., Berlin, Germany. Transparent toy or puzzle-picture and producing the same	481,023	Aug. 16	2024		60	999
Grünberg, Friedrich A., New York, N. Y. Ball-bearing	477,113	June 14	1380	336	59	1726
Grunow, William Jr., New York, N. Y. Car-starter	470,753	Mar. 15	1732	446	58	1451
Grünzweig, Carl, assignor to Grünzweig & Hartmann, Ludwigshafen-on-the-Rhine, Germany. Building-block	482,890	Sept. 20	1590		60	1671
Grünzweig & Hartmann. (See Grünzweig, Carl, assignor.)						
Grusonwerk. (See Mantey, Henry, assignor.)						
Grusonwerk. (See Martin, Carl, assignor.)						
Grusonwerk. (See Röstel, Carl, assignor.)						
Grymes, John R., Danville, Va. Guard attachment for penholders	474,824	May 17	1510	385	59	953
Gschwind, Edward, assignor to E. F. Herwig, New Orleans, La. Diffusion apparatus	471,995	Mar. 29	3601	920	58	1829
Guasco, André, and A. Chusin, Marseilles, France. Feed-indicator for boilers	482,171	Sept. 6	414	99	60	1416
Guastavino Fire Proof Construction Company. (See Guastavino, Rafael, assignor.)						
Guastavino, Rafael, Jr., Boston, Mass. Cohesive ceiling-floor	466,536	Jan. 5	363	91	58	69
Guastavino, Rafael, Jr., Boston, Mass. Construction of fireproof-buildings	468,871	Feb. 16	1501	382	58	837
Guastavino, Rafael, Jr., Boston, Mass. Hollow cohesive arch	471,173	Mar. 22	2381	608	58	1589
Guastavino, Rafael, Jr., Boston, Mass. Cohesive combined lintel-ceiling	481,755	Aug. 30	3265	795	60	1264
Guastavino, Rafael, New York, N. Y., assignor to Guastavino Fire Proof Construction Company. Construction of buildings	468,296	Feb. 2	603	151	58	640
Gubbins, John F. (See Leckstaedt and Gubbins.)						
Guéguen, Alphonse, Paris, France, assignor, by mesne assignments, to Chartier Valley Gas Company, Pittsburg, Pa. Means for detecting the escape of gas from gas-mains	478,424	July 5	562	136	60	110
Guels, Herman, St. Louis, Mo. Car-wheel	481,862	Aug. 30	3437	843	60	1297
Guerber, Frederick S., Allentown, Pa. Clip for railway-switch bars	477,534	June 21	2082	517	59	1876
Guerber, Frederick S., Allentown, Pa. Brace and slide plate for railway-switches	477,535	June 21	2082	518	59	1876
Guerber, Frederick S., Allentown, Pa. Manufacturing brace and slide plates for railway-rails	477,536	June 21	2083	518	59	1877
Guérin, Paul, Paris, France. Apparatus for automatically compressing chocolate, &c.	484,790	Oct. 25	1981	{ 505 } { 506 }	{ 61 }	440
Guernsey, Jane M. (See Guernsey, William B., assignor.)						
Guernsey, William B., assignor to J. M. Guernsey, Norwich, N. Y. Automatic car-brake.	473,457	Apr. 26	2301	{ 582 } { 583 } { 485 } { 486 } { 487 }	{ 59 }	485
Guerra, Asterio, Philadelphia, Pa. Toboggan-slide	475,081	May 17	1913	{ 486 } { 487 }	{ 59 }	1032
Guerra, Elias R., Hoboken, N. J. Cable-grip	473,221	Apr. 19	1903	480	59	385
Guerrant, Cornelius W. (See Guerrant, George M. and C. W.)						
Guerrant, George M., New York, N. Y., assignor to J. T. Merehead, Leaksville, N. C. } Means for moving and guiding turning, engraving, or planing tools	468,283	Feb. 2	577	{ 143 } { 144 }	{ 58 }	636
Guerrant, George M., New York, N. Y., and C. W. Guerrant, Danville, Va. Machine for attaching tags to plug-tobacco	476,010	May 31	3390	855	59	1349
Guerrant, George M., New York, N. Y., assignor to himself, and T. F. Young, Clinton, N. J. } Means for reducing friction	482,902	Sept. 20	1612	403	60	1675
Guerre, Charles E., and G. H. Marlin, Rouen, France. Musical instrument	472,453	Apr. 5	595	177	59	131
Guertin, Henry C., Winchendon, Mass. Puzzle	479,418	July 26	2115	529	60	454
Guethler, William, and F. Gellhaus, Philadelphia, Pa. Ice-velocipede	467,737	Jan. 26	2331	592	58	466
Guethler, William, and F. Gellhaus; said Guethler assignor to W. Neilsen, Philadelphia, Pa. Ice-velocipede	485,844	Nov. 8	1039	278	61	802
Guetfler, George C. H., <i>et al.</i> (See Krause, Gustave A., assignor.)						
Gühring, Karl, assignor to O. Müller, Stuttgart, Germany. Lasting-tool	469,854	Mar. 1	303	78	58	1160
Guibert, John C. N., New York, N. Y. Hose-rack	483,673	Oct. 4	226	56	61	47
Guidinger, Joseph, Los Angeles, Cal. Perpetual monthly calendar	476,263	June 7	54	12	59	1448
Guignard, Gaston, Paris, assignor to Société Anonyme la Levure, Juvisy, France. Pro- } cess of and apparatus for manufacturing pure yeast	471,335	Mar. 22	2618	{ 664 } { 665 }	{ 58 }	1635
Guild, Arthur E., Walpole, N. H. Plow-clevis	485,931	Nov. 8	1181	311	61	830
Guild, George M., assignor, by mesne assignments, to L. A. Guild, Boston, Mass. Up- } right-piano action	472,478	Apr. 5	735	{ 187 } { 188 }	{ 59 }	139
Guild, George M., assignor to L. A. Guild, Boston, Mass. Upright-piano action	466,808	Nov. 22	2589	675	61	1142
Guild, L. A. (See Guild, George M., assignor.)						
Guiley, Augustus H. R., assignor to himself and W. B. Sollday, South Easton, Pa. Trol- } ley for electric railways	466,333	Nov. 15	1843	484	61	981
Guiley, Jacob H., and J. E. Wright, Saginaw, Mich. Wrench	482,245	Sept. 6	527	125	60	1437
Guilford, William W., <i>et al.</i> (See Abbott, Leonard G., assignor.)						
Guillard, Théoline C., and V. E. Catherinet, Saint-Mandé, near Paris, France. Finger-ex- } ercising device	486,546	Nov. 22	2159	570	61	1057
Guillaume, Franz, and E. Goldstein, Bonn, Germany. Jar-closure	481,112	Aug. 16	2181	540	60	1028
Guillaume, Theodor, Cologne, Germany. Manufacture of rubber-coated wire, &c	483,110	Sept. 20	1929	489	60	1741
Guillaume, Theodor, Cologne, Germany. Electric cable	483,285	Sept. 27	2239	563	60	1811
Guiliemot, Leonidas, San Francisco, Cal. Slack-take-up for air-brakes	482,400	Sept. 6	190	46	60	1373
Guinn, John A., Perry, Iowa. Railway time-signal	475,108	May 17	1964	497	59	1042
Guinn, John L., assignor of one-half to J. B. Thornton, Somerset, Ky. Draw-bar guide for } cars	480,464	Aug. 9	1158	290	60	813
Gülicher, Robert J., Berlin, Germany. Therme-electric battery	472,261	Apr. 5	400	104	59	74
Gulden, Julius, Buda-Pesth, Austria-Hungary. Bearing for turbine shafts	471,694	Mar. 29	3150	803	58	1742
Gumaer, Frederick F., Trenton, N. J. Match-machine	473,922	May 3	58	11, 12	59	647
Gümpel, Charles G., London, England. Spinal brace	479,326	July 19	1931	483	60	404

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Cr.	Vol.	Page.
Guckel, Patrick H. (See Smith, John H., assignor.)						
Guckel, Patrick H. (See Smith, John M., assignor.)						
Gunder, James H., Homer, Ill. Automatic grain-weighing scale.....	474,825	May 17	1511	{ 386 387 }	59	954
Gundersen, Gilbert S., Beloit, Wis. Plant-transplanting machine. (Reissue).....	11,262	Aug. 16	2370	560	60	1044
Gunderson, Fremont T., and C. G. Wilson, Chicago, Ill.; said Wilson assignor to said Gunderson. Printer's slug.....	470,154	Mar. 1	758	189	58	1246
Gunderson, Ole (See Larson and Gunderson.)						
Gundlach, John P. (See Gundlach, Philip M. and J. P.)						
Gundlach, Philip M. and J. P., Belleville, Ill. Grain-drill.....	466,523	Jan. 5	343	85, 86	58	66
Gundrum, Edward, New York, N. Y. Machine for washing fibrous materials.....	468,097	Feb. 2	280	68, 69	58	578
Gunkel, Caspar, Jefferson, Iowa. Tailor's measure.....	486,670	Nov. 22	2370	619	61	1098
Gunkelmann, Frank A., Medina, Ohio. Spring-vehicle.....	470,563	Mar. 8	1449	376	58	1385
Gunn, James, <i>et al.</i> (See Knowlton, Ephraim H. B., assignor.)						
Gunn, John A., Spearfish, S. D., assignor of one-half to A. L. Maxim, I. L. Brind, Omaha, } Nebr., and D. C. Dwinnell, Spearfish, S. D. Bill of fare.....	479,758	July 26	2673	{ 664 665 }	60	560
Gunn, John M., assignor to R. E. and E. C. Taylor, Findlay, Ohio. Tumbler-washer.....	484,422	Oct. 18	1378	352	61	303
Gunn, William S. (See Cook, Douglas D., assignor.)						
Gunn, William S., Grand Rapids, Mich. Folding bed.....	469,518	Feb. 23	2518	{ 646 647 }	58	1041
Gunn, William S., Grand Rapids, Mich. Wardrobe-bed.....	476,744	June 7	776	191	59	1592
Gunnarson, Wahlitzer, assignor of one-half to P. Sandberg and P. Drots, Jamestown, N. Y. Fire-escape.....	473,572	Apr. 26	2504	632	59	525
Gunning, James F. J., Toronto, Canada. Corset-stay.....	466,461	Jan. 5	244	62	58	46
Gunning, Thomas, Pittsburg, Pa. Smoke-consumer.....	482,124	Sept. 6	329	78	60	1399
Gunston, Byron M., assignor to T. Kingsford, Oswego, N. Y. Box-nailing machine.....	481,863	Aug. 30	3438	{ 844 845 }	60	1297
Gunther, George P. A., New York, N. Y. Fish-tank or aquarium.....	475,082	May 17	1915	487	59	1033
Günther, Ludwig, Schwerin, Germany. Timepiece for boiling eggs.....	477,252	June 21	1633	398	59	1788
Gunzendorfer, Abe B., Monterey, Cal. Cash-carrier.....	486,250	Nov. 15	1713	452	61	954
Gurganus, James D. (See Carson and Gurganus.)						
Gurnee, Orlando. (See Reed and Gurnee.)						
Gurnett, Michael, Binghamton, N. Y. Adjustable track-gage.....	475,309	May 24	2261	583	59	1118
Gurney, Charles H., assignor to Capitol Manufacturing Company, Chicago, Ill. Handle for tools and other instruments.....	466,678	Jan. 5	582	150	58	113
Gussett, Charles, Cincinnati, Ohio. Vehicle-gear.....	469,445	Feb. 23	2403	615	58	1020
Gustafson, Axel R., Chicago, Ill., assignor of one-half to W. F. Anderson, Negaunee, Mich. Ironing-machine.....	485,465	Nov. 1	486	129	61	671
Gustafson, Charles J., Mobile, Ala. Boiler-blow-off valve.....	480,723	Aug. 16	1566	391	60	908
Gustafson, Charles J., Mobile, Ala. Car-coupling.....	486,930	Nov. 29	2835	{ 734 735 }	61	1208
Gustafson, John. (See Fowler and Gustafson.)						
Gustafsson, Walfrid, Brooklyn, N. Y. Pressure-regulating valve.....	478,856	July 12	1214	301	60	256
Gustin, John S. (See Lindahl, Henry, assignor.)						
Gustin, Samuel, Sing Sing, N. Y. Distributing-valve.....	481,943	Sept. 6	34	8	60	1341
Gutherlet, Edward T., and W. R. Isard, St. Louis, Mo. Electric cigar-lighter.....	488,889	Dec. 27	2692	{ 666 667 }	61	1907
Gutbier, Louis K. F., and E. H. Koch, Elberfeld, Germany. Tun.....	484,312	Oct. 11	1207	307	61	258
Gutenkunst, Charles A., Milwaukee, Wis. Track for hay-carriers.....	486,711	Nov. 22	2436	634	61	1112
Guermute, David, Petaluma, Cal. Sash-fastener.....	477,537	June 21	2025	518	59	1877
Gutgesell, Edward. (See Hetherington, Thomas A., assignor.)						
Guthat, Albert W., Muskegon, Mich. Scaffold-bracket.....	470,856	Mar. 15	1898	486	58	1483
Guthrie, Herbert, Levenshulme, near Manchester, England. Drive-chain.....	469,298	Feb. 23	2180	559	58	976
Guthrie, Thomas M., Hutchinson, Mo. Harness-buckle.....	487,619	Dec. 6	615	158	61	1444
Guthrie, William A., Durham, N. C. Railway-joint.....	468,518	Feb. 9	962	245	58	721
Guthrie, William F. (See Hume, Thomas J., assignor.)						
Guthrie, William L., Laddonia, Mo. Bridle attachment.....	486,376	Nov. 15	1907	504	61	994
Gutman, Harry J., Des Moines, Iowa. Incandescent electric lamp.....	467,576	Jan. 26	2083	527	58	419
Gutman, Harry J., Des Moines, Iowa. Incandescent-lamp socket.....	474,826	May 17	1515	387	59	954
Gutmann, Emil, New York, N. Y. Suspenders.....	482,963	Sept. 20	1702	430	60	1694
Gutmann, Ludwig, Pittsburg, Pa. Alternating-current motor.....	467,537	Jan. 26	2016	{ 510 511 511 }	58	408
Gutmanu, Ludwig, Pittsburg, Pa. Electric heater.....	467,538	Jan. 26	2019	{ 511 512 }	58	408
Gutmann, Ludwig, Fort Wayne, Ind. Electric converter.....	484,959	Oct. 25	2258	{ 583 584 }	61	495
Gütter, Karl A. (See Stark and Gütter.)						
Guttman, Hugo, <i>et al.</i> (See Schwartz, William, assignor.)						
Guttmann, Oscar, London, England. Apparatus for condensing nitric acid.....	472,498	Apr. 5	772	196	59	146
Guyer, Nelson, Ethel Landing, Pa. Lubricator.....	471,001	Mar. 15	2117	544	58	1526
Guyer, Virgil I. (See Coleman and Guyer.)						
Guzowski, Joseph, assignor of one-third to F. Swiontkowski, Denver, Colo. Potato-digger.....	466,752	Jan. 5	705	{ 181 182 183 }	58	134
Gwin, David, Edgerton, Mo. Band-cutter and feeder.....	482,476	Sept. 13	931	227	60	1529
Gwodoff, Eugene, St. Petersburg, Russia. Long-distance-telephone system.....	470,310	Mar. 22	2588	656	58	1628
Gwyn, Walter B., Asheville, N. C. Mucilage-holder.....	487,182	Nov. 29	3227	826	61	1285
Gwynne, Hugh J., South Melbourne, and G. E. Fowler, Melbourne, Victoria. Valve for controlling the inflow and discharge of hydraulic pressure, &c.....	471,421	Mar. 22	2758	704	58	1661
Gyle, Alexander, assignor to himself and L. N. Eklund, South Bend, Wash. Musical instrument.....	485,932	Nov. 8	1181	311	61	830
H. H. Babcock Company. (See Davis, Francis G., assignor.)						
H. J. Heinz Company. (See Mueller, Matchett, and Eggers, assignors.)						
H. P. Deucher Company. (See Moore, Mark C., assignor.)						
H. W. Butterworth & Sons Company. (See Mackinney, William C., assignor.)						
Haag, Paul, assignor to A. Featherstone, Chicago, Ill. Bicycle-brake.....	486,464	Nov. 22	2040	541	61	1034
Haake, Julius, Radebeul, near Dresden, Germany. Paint.....	473,391	Apr. 19	2193	.....	59	443
Haar, John H., <i>et al.</i> (See Butler, William A., assignor.)						
Haas, Benjamin, Jr., and G. Trouvé, Paris, France. Illuminated timepiece.....	486,563	Nov. 22	2191	577	61	1062
Haas, Edward, <i>et al.</i> (See Widmer, Jacob A., assignor.)						
Haas, Ernst F., Burlington, Iowa. Saddle.....	472,993	Apr. 19	1513	386	59	314
Haas, Frederic, and W. D. Evans, New York, N. Y.; said Evans assignor to said Haas. Razor-strop.....	468,407	Feb. 9	780	195	58	686

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Haas, Jacob C., assignor of one-half to G. F. Wahl and I. L. D. Seiler, Bremen, Ind. Seed-planter	480,091	Aug. 2	538	134	60	683
Haas, John, <i>et al.</i> (See Edgar and Rohrbach, assignors.)						
Haas, Lawrence, Grand Crossing, Ill. Car-heater	470,120	Mar. 1	713	176	58	1237
Haas, Louis, New York, N. Y. Pedal for musical instruments	469,656	Feb. 9	1169	293	58	762
Haas, Samuel H., Philadelphia, Pa. Shaft-tug	471,818	Mar. 29	3363	856	58	1782
Haas, Samuel H., Philadelphia, Pa. Whiffletree	487,264	Dec. 6	38	12	61	1329
Haberle, John B., South Bend, Ind. Sprinkler	466,345	Jan. 5	57	14	58	14
Haberle, John B., South Bend, Ind. Street-sprinkler	467,503	Jan. 26	1938	495	58	394
Haberle, John B., South Bend, Ind. Sprinkler	479,506	July 26	2281	570	60	486
Haberlin, Herman, assignor to Webster, Camp & Lane Machine Company, Akron, Ohio. Machine for planing circular guides for engine-beds	475,939	May 31	3286	829	59	1328
Haberman, Frederick, New York, and E. Sifferlen, Maspeth, assignors to Haberman Manufacturing Company, Berlin, N. Y. Handle for vessels	475,216	May 17	2121	537	59	1074
Haberman, Joseph, <i>et al.</i> (See Mundt, Wilhelm, assignor.)						
Haberman Manufacturing Company. (See Haberman and Sifferlen, assignors.)						
Hack, Peter, Michigan City, Ind. Gate for wire fences	483,351	Sept. 27	2333	586	60	1829
Hacke, Karl W., Dürkheim, Germany, assignor of two-thirds to E. M. and H. Tillmann, Dallas, Tex. Washing-machine	485,687	Nov. 8	817	218	61	757
Hackett, Frank M., Luverne, Minn. Machine for pressing and binding straw	477,538	June 21	2085	519	59	1877
Hackett, Isaac W. (See Fries, Richardson, and Hackett.)						
Hackett, James, Taunton, Mass. Printing-press	480,191	Aug. 2	689	174	60	712
Hack, Eugen, Stuttgart, Germany. Magnesium-light composition	476,264	June 7	55		59	1448
Hacklaender, Charles H., Allegheny, Pa. Reclining-chair	485,273	Nov. 1	177	53	61	609
Hackney, Herbert, South Evanston, Ill., assignor to Benjamin Machine Company, of Illinois. Belt-tightener	488,197	Dec. 20	1589	398	61	1672
Hackworth, James T. (See Briggs, Alfred, assignor.)						
Hadaway, John B., Brockton, assignor, by mesne assignments, to J. S. Turner, Rockland, Mass. Channel-machine	484,363	Oct. 11	1280	326 } 327 }	61	273
Haddock, Charles D., Hermon, N. Y. Cheese-bandager	471,756	Mar. 29	3254	829	58	1761
Haddad, Antoun F. (See Kheiralla and Haddad.)						
Hadden, Harvey, Peekskill, N. Y. Ear-muff	479,185	July 19	1733	434	60	364
Hadfield, Cornelius S., Augusta, Me. Railway-head	466,410	Jan. 5	156	42	58	31
Hadley, Charles E., Washington, D. C., assignor to W. Koch, New York, N. Y. Quilting-machine	467,138	Jan. 12	1375	352	58	270
Hadley, Charles E., assignor to Overman Wheel Company, Chicopee, Mass. Post for cycle-saddles	485,865	Nov. 8	1072	285	61	808
Hadley, Charles R., <i>et al.</i> (See Burton, Augustus G., assignor.)						
Hadley, Charles R., <i>et al.</i> (See Thuge, Johan A., assignor.)						
Hadley, Charles R., <i>et al.</i> (See Turck, Frederick M., assignor.)						
Hadley, David, <i>et al.</i> (See Cox, Jacob R., assignor.)						
Hadley, John V., <i>et al.</i> (See Cox, Jacob R., assignor.)						
Hadley, Joshua A., Brazil, assignor of one-half to R. L. Kennedy, Centre Point, Ind. Shutter-worker	484,734	Oct. 18	1869	475 } 476 }	61	402
Hadley, Thomas. (See Parkes and Hadley.)						
Hadlock, Edson J., Big Spring, Tex. Smoke-consumer	471,757	Mar. 29	3254	829	58	1761
Hadlock, Edson J., Big Spring, Tex. Smoke and spark arrester and consumer	483,055	Sept. 20	1846	469	60	1724
Hadlund, Gustaf E., Portland, Oreg. Boot or shoe	475,858	May 31	3155	800	59	1303
Hadorn, Leopold C. (See Tetaz and Hadorn)						
Haackler, Philip, Minneapolis, Minn. Dust-collector and grain-cleaner	473,662	Apr. 26	2644	666	59	551
Haage, Eugen, Stuttgart, Germany. Hat, &c.	470,618	Mar. 8	1530	399	58	1403
Haën, Carl J. E. de, List, near Hanover, Germany. Bleaching	482,477	Sept. 13	932		60	1530
Haendler, Marie, New York, N. Y. Manufacture of wire ornaments	472,758	Apr. 12	1152	295	59	230
Haerem, Ommund, Houston, Tex. Pier	474,734	May 10	1361	345	59	910
Haeseler, Emil C., assignor to Barney & Smith Car Company, Dayton, Ohio. Seat	488,555	Dec. 27	2171	536	61	1802
Haeseler, Francis J., U. S. Navy. Brush-holder	479,802	Aug. 2	42	10, 11	60	590
Hafely, Alfred C., New York, N. Y. Making corners, covers, and like parts for books, boxes, and similar articles of celluloid or kindred material	484,006	Oct. 11	733	184	61	165
Hafely, Alfred C., New York, N. Y. Making corners, covers, and like parts for books, boxes, and similar articles of celluloid or kindred material	488,630	Dec. 27	2296	568	61	1827
Hafely, Alfred C., assignor to Koch Sons & Company, New York, N. Y. Bookbinding	470,866	Mar. 15	1912	489	58	1486
Hafer, Alfred H., Cleveland, Ohio. Mop-wringer	480,192	Aug. 2	691	175	60	713
Hafertop, Theodore B., Chicago, Ill. Automatic advertising device	487,563	Dec. 6	536	138	61	1427
Haff, Edward P. (See Lane, Spencer B., assignor.)						
Haffner, William F., and S. P. Kirkpatrick, Franklin, Tenn. Gage	467,005	Jan. 12	1128	286	58	222
Hafgar, Magnus J., Chicago, Ill. Desk	478,594	July 12	818	202	60	178
Hafner, Frederick J., Philadelphia, Pa. Stringed musical instrument	467,602	Jan. 26	2434	618	58	485
Hafner, Frederick J., Philadelphia, Pa. Stringed musical instrument	474,242	May 3	550	135	59	744
Hagadorn, Frank H., and M. J. Nicol, Rochester, N. Y. Tension device for shoe-sewing machines	474,381	May 10	804	210	59	803
Hagan, William E. (See Van Patten, John, assignor.)						
Hagee, Edward W., St. Louis, Mo. Shutter-fastener	482,246	Sept. 6	528	126	60	1437
Hagelin, Frank, Cleveland, Ohio. Hydrocarbon-oil burner	475,277	May 17	2217	568	59	1094
Hageman, Robert, Mullan, Idaho. Musical instrument	488,890	Dec. 27	2693	667	61	1907
Hagemann, Otto C. (See Domeier and Hagemann.)						
Hagemeyer, August H. (See Baumhoff and Hagemeyer.)						
Hagen, Augustus A., New York, N. Y., assignor, by mesne assignments, of seven-eighths to F. Storsberg, Newark, N. J. Fire-shield for buildings	472,479	Apr. 5	738	188	59	140
Hagen & Reid. (See Reid, James, Jr., assignor.)						
Hager, Charles E. O., Hagersville, Canada. Puzzle	478,998	July 19	1438	356	60	309
Hager, John N., Fort Atkinson, Wis. Tool-bracket	468,802	Feb. 16	1399	355	58	817
Hagerling, Henry, St. Louis, Mo. Glory-hole furnace	468,657	Feb. 9	1170	298	58	762
Hagerman, Frank. (See Chapman, Newton S., assignor.)						
Haggar, Morys, Marshall, Tex. Gate-latch	475,554	May 24	2665	678	59	1194
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Apparatus for purifying or sorting grits, &c.	467,987	Feb. 2	122	29, 30 } 739 } 740 } 741 } 742 } 743 } 744 }	58	547
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Apparatus for sifting and sorting meal and flour. (Reissue.)	11,252	June 28	2958		59	2063
Haggenmacher, Carl, Buda-Pesth, Austria-Hungary. Bolting or sifting machine	483,286	Sept. 27	2240	593	60	1811

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Haggeumuller, Franklin F., New York, N. Y. Lithographic plate	487,121	Nov. 29	3137	804	61	1267
Haggerty, Alonzo, Cambridge, Pa. Whiffletree connection	481,301	Aug. 23	2527	620	60	1106
Haggerty, Francis. (See Reiff, William H., assignor.)						
Hagler, Charles H., Hackett, Ark. Kitchen-cabinet	488,807	Dec. 27	2569	638	61	1881
Haglock, John G. and W. H. Sterling, Ill. Adjustable lame-staple	483,111	Sept. 20	1931	489	60	1742
Haglock, William H. (See Haglock, John G. and W. H.)						
Hague, Luke G., Bloomington, Ill. Attachment for vehicle-shafts	487,524	Dec. 6	479	125	61	1416
Hahn, Henry T. (See Schroeder and Hahn.)						
Hahn, John N., and J. P. Herman, Cleveland, Ohio. Lunch-basket	478,103	July 5	39	12	60	10
Haidacher, Vitus V. (See Bennett and Haidacher.)						
Haifley, David, Amboy, Ind. Feed-stable	484,791	Oct. 25	1953	506	61	440
Haigh, John W., and G. Exley, Worcester, Mass. Fare-box	470,933	Mar. 15	2007	514 515	58	1504
Haight, Henry J., New York, N. Y. Electric switch	467,504	Jan. 26	1939	495 496	58	394
Haight, Henry J., New York, N. Y. Electric indicating-instrument	467,505	Jan. 26	1944	496 497	58	395
Haight, Henry J., New York, N. Y. Electric indicating system and instrument	473,174	Apr. 19	1821	459 460	59	369
Haight, Henry J., New York, N. Y. Electric wind-vane indicator	474,735	May 10	1362	345 346	59	911
Haight, Oscar M., and C. F. Biffar, Rock Valley, N. Y. Bootjack	473,740	Apr. 26	2767	695	59	574
Haight, Silas M., et al. (See Trump, John G., assignor.)						
Halles, William, Albany, N. Y. Car-wheel	477,539	June 21	2087	519	59	1877
Hallstone, William W., Long Island City, N. Y. Electro-magnetic stop-motion for steam-engines	469,471	Feb. 23	2441	626	58	1027
Haltman, Elias, assignor to S. Landauer, Atlanta, Ga. Whiffletree	475,730	Feb. 24	2934	744	59	4245
Haines, Amos A., Belgrade, Mont. Breech-loading firearm	469,561	May 23	2589	662 663	58	1055
Haines, Clarence. (See Cocker, Collyer, and Haines.)						
Haines, Franklin, Yonkers, N. Y. Artificial-stone paving-block	481,352	Aug. 23	2602	639	60	1119
Haines, Franklin, Yonkers, N. Y. Artificial-stone paving-block	481,353	Aug. 23	2604	640	60	1120
Haines, Franklin, New York, N. Y. Artificial-stone paving-block	481,354	Aug. 23	2605	640	60	1120
Haines, John G., Omaha, Nebr. Air compressor and reservoir	470,934	Mar. 15	2009	515	58	1505
Haines, John G., Omaha, Nebr. Air-compressor	480,193	Aug. 2	692	175	60	713
Haines, John H. J., New York, N. Y. Packer's funnel	474,362	May 10	805	210	59	803
Haines, John H. J., Flushing, assignor to A. Siebel, New York, N. Y. Putting up metal-foil packages	471,609	Mar. 29	3019	768	58	1718
Haines, Louis A. (See Fralinger, Joseph F., assignor.)						
Haines, Robert B., Jr., Coatesville, Pa. Micrometer-gage	468,519	Feb. 9	964	245	58	721
Haines, Robert D. (See Houghton and Haines.)						
Haines, Spencer, and W. B. Mathis, Rancocas, N. J. Disk furrower	486,776	Nov. 22	2541	663	61	1132
Hainsworth, Frederick, Chicago, Ill. Printing-plate holder	484,588	Oct. 18	1632	414	61	354
Haire, William H., Morristown, Tenn. Wrench	469,562	Feb. 23	2590	663	58	1056
Haise, John M., Florence, Ohio. Broom-holder	467,932	Feb. 2	47	11	58	534
Haise, John M., Florence, Ohio. Grade-measure	479,803	Aug. 2	44	11	60	590
Haisb, Jacob, De Kalb, Ill. Combined freight and passenger car	479,068	July 19	1542	385	60	329
Haldeman, John H., Marietta, Pa. Combined guard and cleaner for lawn-rakes	479,940	Aug. 2	255	63	60	631
Haldeman, John R., Normal, Ill. Brick pavement	481,756	Aug. 30	3267	795	60	1264
Hale, David, Boston, Mass. Valve for air-cushions	476,957	June 14	1140	275	59	1677
Hale, Francis W., Boston, Mass. Pianoforte	474,827	May 17	1518	387 388	59	955
Hale, Henry S., Philadelphia, Pa., assignor to Hale & Kilburn Manufacturing Company, of Pennsylvania. Car-seat	475,109	May 17	1966	498	59	1042
Hale, James W., Newburyport, Mass. Game apparatus	473,114	Apr. 19	1712	433	59	349
Hale, James W., Newburyport, Mass. Puzzle	481,561	Aug. 30	2947	724	60	1203
Hale, James W., Newburyport, Mass. Valve mechanism for wash-basins	484,423	Oct. 18	1378	352	61	304
Hale, John C., et al. (See Dow, Herbert H., assignor.)						
Hale, John P., Mulvane, Kans. Washing-machine	486,564	Nov. 22	2192	577	61	1063
Hale, Julia, executrix. (See Hale, Richard.)						
Hale & Kilburn Manufacturing Company. (See Hale, Henry S., assignor.)						
Hale, Perley, Chicago, Ill., assignor to C. H. Sparks, St. Louis, Mo. Metallic grating	469,519	Feb. 23	2520	647	58	1042
Hale, Perley, Chicago, Ill., assignor to C. H. Sparks, St. Louis, Mo. Metallic grating for jails, vaults, &c.	469,520	Feb. 23	2521	647	58	1042
Hale, Perley, Chicago, Ill., assignor to C. H. Sparks, St. Louis, Mo. Constructing jails.	469,635	Feb. 23	2680	689	58	1075
Hale, Perley, Chicago, Ill., assignor to C. H. Sparks, St. Louis, Mo. Safety-door for jail-corridors	475,556	May 24	2668	678	59	1195
Hale, Perley, Chicago, Ill., and C. H. Sparks, St. Louis, Mo., assignors of part to W. S. Hull, Sheffield, Ala. Electric jail	477,301	June 21	1710	419	59	1802
Hale, Philip, Jr., Denver, Colo. Game-counter	480,815	Aug. 16	1704	425	60	936
Hale, Richard, deceased; J. Hale, executrix, Cranford, N. J. Pyroxyline varnish	471,422	Mar. 22	2759	58	1662	
Hale, Steadman H., Chicago, Ill. Elevator	482,247	Sept. 6	529	126	60	1437
Haley, Abraham G., Gardiner, Me. Composition of matter for journal-bearings	485,688	Nov. 8	819	61	757	
Haley, F. H. (See Hubbard, Harvey F., assignor.)						
Haley, Fred H., Manitowoc, Wis., assignor, by mesne assignments, to I. M. Haley, Hamilton, Ill., and C. E. Darrow, Kirksville, Mo. Revolving bookcase	474,556	May 10	1082	277	59	856
Haley, George A. (See Green and Haley.)						
Haley, Ida M., et al. (See Haley, Fred H., assignor.)						
Haley, Isaac N. (See Cox and Haley.)						
Haley, Jonathan, Fostoria, Ohio. Ornamental pressed glassware	485,032	Oct. 25	2385	612	61	519
Haley, Joseph A., Fort Wayne, Ind. Slide-valve	473,152	Apr. 19	1771	447	59	361
Halford, Elise, New York, N. Y. Barrow-coat	471,478	Mar. 22	2845	724	58	1677
Hall, Albert, Brooklyn, N. Y. Button	486,871	Nov. 29	2706	706	61	1182
Hall, Albert F., Boston, Mass., assignor to Geo. F. Blake Manufacturing Company, of New Jersey. Hand-hole cover	471,051	Mar. 15	2184	562	58	1539
Hall, Alexander V., and W. S. Holmes, Baton Rouge, La. Idler for driving-belts	487,564	Dec. 6	537	138	61	1127
Hall, Andrew J., Carmel, Tenn., assignor of one-half to J. W. Dunn. Corn-planter	473,663	Apr. 26	2645	667	59	552
Hall, Arnold, Altcar and Hill House Station, England. Railway signaling apparatus	486,335	Nov. 15	1845	485 486	61	981
Hall, Arthur W., Taunton, Mass. Bicycle-lock	470,836	Mar. 15	1876	480	58	1478
Hall, Charles K., assignor of forty-nine one-hundredths to W. B. Lillard, New Orleans, La. Electric railway-signal	482,306	Sept. 6	631	151	60	1458
Hall, Cofran I., San Francisco, Cal. Hydraulic elevator	488,891	Dec. 27	2695	667	61	1908
Hall, Dexter A., Boston, Mass. Table	469,997	Mar. 1	535	133	58	1202

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Cr.	Vol.	Page.
Hall, Edwin W., Whitehall, N. Y. Safety fastening or seal for envelopes	484,711	Oct. 18	1831	465	61	395
Hall, Elias S., Somerville, N. J. Manger	476,265	June 7	56	12	59	1448
Hall, Eva J., Stillwater, Minn., assignor to St. Croix Manufacturing Company, Hudson, Wis. Needle for sewing-machines	467,408	Jan. 19	1787	455	58	356
Hall, Eva J., Stillwater, Minn., assignor to St. Croix Manufacturing Company, Hudson, Wis. Sewing-machine needle	471,857	Mar. 29	3413	871	58	1792
Hall, Eva J., Stillwater, Minn., assignor to St. Croix Manufacturing Company, Hudson, Wis. Sewing-machine needle	471,972	Mar. 29	3569	911	58	1823
Hall, Frank E., Newton, Mass., assignor to Consolidated Fastener Company, Portland, Me. Glove and garment fastener	484,792	Oct. 25	1984	506	61	440
Hall, Frank H. (See Klar and Hall.)						
Hall, Frank J., assignor of one-half to J. H. Billington, Philadelphia, Pa. Loom-shuttle ..	467,803	Jan. 26	2435	618	58	486
Hall, George C. (See Crocker, George H., assignor.)						
Hall, George F. (See Reck, Adam, assignor.)						
Hall, George F., Newark, N. J. Adjustable bracket for supporting inkstands	473,056	May 17	1877	476	59	1026
Hall, George F., Newark, N. J., assignor to Schrade & Hall Novelty Manufacturing Company, of West Virginia. Bicycle	480,844	Aug. 16	1743	436	60	944
Hall, George F., Newark, assignor of two-thirds to J. W. Baker, South Orange, N. J., and C. Gosling, New York, N. Y. Sole	472,214	Apr. 5	327	85	59	62
Hall, George F., and H. Gottschalk; said Hall assignor to J. Fisch, Newark, N. J. Pool-rack	484,533	Oct. 18	1555	395 396	61	338
Hall, George O., assignor to D. N. Coates, Springfield, Mass. Indexed directory	467,131	Jan. 12	1359	346 347	58	267
Hall, George T., Monrovia, assignor of one-half to E. F. Spence, deceased, Los Angeles, Cal.; A. M. Spence, executrix. Street-car fender	488,276	Dec. 20	1721	434	61	1698
Hall, George W., Washington, D. C. Bill-file	479,908	Aug. 2	197	49	60	621
Hall, George W., Washington, D. C. House-door letter-box	488,556	Dec. 27	2171	536 537	61	1802
Hall, George W., and J. J. De Marr, Georgetown, Colo. Regulable electric lamp	486,334	Nov. 15	1844	425	61	981
Hall, Hamilton. (See Norton and Hall.)						
Hall, Henry, and J. W. Cook, Port Perry, Canada. Post-hole digger	467,751	Jan. 26	2355	596	58	470
Hall, Henry B., Hero, Pa. Pndding-furnace	472,759	Apr. 12	1153	295	59	230
Hall, Horace L., Manchester, N. H., assignor to E. T. Burrowes, Portland, Me. Attachment for window-shades	483,490	Sept. 27	2519	634	60	1866
Hall, James. (See Driscoll, William, assignor.)						
Hall, James B., assignor of one-fourth to M. M. Varden, Toronto, Canada. Propelling power	478,962	July 12	1367	337	60	285
Hall, James F., assignor of one-fourth to T. B. Buckner, Kansas City, Mo. Plumb-level ..	479,981	Aug. 2	325	80	60	644
Hall, James G., Kentland, assignor of one-half to M. M. Hall, Monticello, and L. B. Reed, Idaville, Ind. Trip device for cultivators	487,218	Nov. 29	3283	838	61	1295
Hall, John S., New York, N. Y. Oil-filter	483,148	Sept. 27	1989	503	60	1763
Hall, Joseph C., London, England. Pneumatic wheel for vehicles	476,764	June 7	803	197 198	59	1598
Hall, Maggie M., et al. (See Hall, James G., assignor.)						
Hall, Major, assignor of one-half to J. W. Thompson, St. Paul, Minn. Well-fishing tool ..	477,178	June 14	1487	364	59	1748
Hall, Milan W., Plainfield, N. J., assignor to Otis Brothers & Company, New York, N. Y. Pump	482,921	Sept. 20	1636	411 412	60	1680
Hall, Milan W., Plainfield, N. J., assignor to Otis Brothers & Company, New York, N. Y. Force-pump	482,944	Sept. 20	1669	419 420 421	60	1688
Hall, Milton, San Francisco, Cal. Bumper for vehicle-springs	477,114	June 14	1381	337	59	1726
Hall, Nellie A. (See King, Christopher C., assignor.)						
Hall, Orlando C., assignor to C. L. Sheldon, Auburn, N. Y. Machine for making continuous collared axle-blanks and axles	469,784	Mar. 1	188	49	58	1137
Hall, Orlando C., assignor to C. L. Sheldon, Auburn, N. Y. Manufacture of axle-blanks and axles	470,239	Mar. 8	914	226	58	1286
Hall, Orlando C., Auburn, N. Y., assignor to Sheldon Axle Company, Wilkes-Barré, Pa. Manufacture of channeled axles	471,544	Mar. 29	2931	746	58	1703
Hall, Osborn B., Malden, Mass. Automatic fire-extinguisher	467,970	Feb. 2	90	22	58	542
Hall, Reynold T., Merchantville, N. J. Ship's log	473,222	Apr. 19	1905	480	59	386
Hall, Samuel P., and J. W. Wood, Oakland, Cal. Bituminous-rock-reducing machine ..	484,735	Oct. 18	1870	476	61	402
Hall, Samuel Z., Little Rock, Ark. Cotton-gin	483,216	Sept. 27	2104	533	60	1787
Hall Signal Company. (See Myers, Frank I., assignor.)						
Hall Signal Company. (See Wilson, Adoniram J., assignor.)						
Hall, Solomon E., assignor of one-half to G. Hill, Honeoye Falls, N. Y. Wrench	466,564	Jan. 5	410	104 105	58	79
Hall, Susie B., Little Rock, Ark. Brush for cotton-gins	482,478	Sept. 13	933	227	60	1530
Hall, Thomas. (See Holt, Charles C., assignor.)						
Hall, Thomas Q., Kansas City, Mo. Folding or bed lounge	468,297	Feb. 2	606	151 152	58	640
Hall, W. W., et al. (See Rose, Robert, assignor.) (Reissue.)						
Hall, Walter R., San Francisco, Cal. Filing physicians' prescriptions	473,552	Apr. 26	2449	620	59	513
Hall, William C., Pine Bluff, Ark. Carrier	469,137	Feb. 16	1915	490	58	919
Hall, William F. (See Downing and Hall.)						
Hall, William F., Rapid City, S. D. Ink-bottle	471,479	Mar. 22	2846	724	58	1678
Hall, William S., Tokio, Japan. Wire ropeway	475,766	May 31	2990	758	59	1271
Halladay, Lewis P., Chicago, Ill., assignor to Marion Cycle Company, Marion, Ind. Saw-sharpening machine	466,411	Jan. 5	158	42, 43	58	31
Halladay, Lewis P., Chicago, Ill., assignor to Marion Cycle Company, Marion, Ind. Bicycle ..	477,179	June 14	1489	364	59	1749
Hallahan, James J., Brooklyn, N. Y. Scarf-clasp	483,783	Oct. 4	397	98	61	83
Hallbeck, Otto L., West Salem, Ill. Injector	479,214	July 19	1771	444	60	371
Hallenbeck, Henry F. (See Wilcox, Hallenbeck, and Wandell.)						
Hallenbeck, William, G. W. Witt, and W. Pattison, Hammondsport, N. Y. Butter stamp and cutter	474,243	May 3	551	135	59	744
Hallenstein, Reuben, Melbourne, Australia. Door-opening device	483,916	Oct. 4	591	149	61	122
Haller, Lewis T., et al. (See Haller, William A., assignor.)						
Haller, William A., assignor of two-thirds to L. T. Haller and T. W. Downs, St. Louis, Mo. Dumping wagon	470,484	Mar. 8	1345	349	58	1364
Hallett, Amos, Chattanooga, Tenn. Hot-water heater	468,993	Feb. 16	1717	437	58	879
Hallett Boiler Company. (See Hallett, Charles, assignor.)						
Hallett, Charles, Riverhead, N. Y., assignor to Hallett Boiler Company, of New Jersey. Boiler	483,612	Oct. 4	142	36	61	30
Hallett, Nelson F. (See Johnston and Hallett.)						
Hallett, William W., Lee, Ill. Machine for calculating and illustrating longitude and time ..	480,367	Aug. 9	997	250	60	783

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hallétt, William W., Lee, Ill. Device for instruction in reading and calculating	481,728	Aug. 30	3217	785	60	1254
Hallidie, Andrew S., San Francisco, Cal. Clip for rope tramways	466,880	Jan. 12	930	240	58	188
Hallidie, Andrew S., San Francisco, Cal. Grip-pulley	483,442	Sept. 27	2462	619	60	1854
Halligan, John H., Huntsville, Tex. Apparatus for aging whisky	470,121	Mar. 1	714	176	58	1238
Hallings, John C. (See O'Neill, James A., assignor.)						
Hallowell, James M. (See Curtis and Hallowell.)						
Hallsten, John P., and C. J. Anderson, Rock Island, Ill. Washing-machine	483,443	Sept. 27	2463	620	60	1855
Halstead, Benton, Riverside, Ohio. Automatic ballasting device	472,991	Apr. 19	1514	387	59	314
Halvorson, Cromwell A. B., Saugus, Mass. Incandescent-lamp socket	475,555	May 24	2666	678	59	1195
Ham, Foster. (See Parkhurst and Ham.)						
Ham, William S., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Gong-bell	483,149	Sept. 27	1989	503	60	1764
Hamann, Carl, Reinbeck, and J. A. Schmidt, Barmen, Germany. Shears	476,459	June 7	359	83	59	1507
Hambay, James T., Pittsburg, Pa. Signal	472,499	Apr. 5	773	196	59	147
Hambay, James T., Pittsburg, Pa. Art of and machine for manufacturing jaws for coupling-rods	483,740	Oct. 4	334	81, 82	61	68
Hamble, Anthony W., Allen, Kans. Bedclothes-clamp	483,628	Oct. 4	165	41	61	34
Hamblen, William H., Huntsville, Tex. Tool for tightening wheel-tires	473,223	Apr. 19	1907	480	59	386
Hambleton, Francis H., Baltimore, Md. Pipe-coupling	467,718	Jan. 26	2304	585	58	461
Hamblin, Floyd, Mohawk, N. Y. Combined bureau, commode, and writing-desk	470,378	Mar. 8	1174	301	58	1332
Hamblin, Floyd, Mohawk, N. Y. Folding bedstead	481,757	Aug. 30	3267	795	60	1264
Hamblin, Floyd, Mohawk, N. Y. Folding plant-stand	485,627	Nov. 8	725	189	61	737
Hamblin, Gideon D., Deering, assignor to D. A. Meaher, Portland, Me. Portable garden or spraying pump	482,681	Sept. 13	1251	305	60	1593
Hamblin, Joshua J., Heathsville, assignor of one-half to C. R. Lewis, Lewisetta, Va. Wind-lass	483,113	Sept. 20	1933	429	60	1742
Hambloch, Hubert A., assignor to H. S. Gordon, New York, N. Y. Pianoforte pedal	478,007	June 28	2852	713	59	2043
Hamer, James A., assignor of one-half to C. D. Gilham, Reading, Pa. Screw-cutting machine	483,112	Sept. 20	1932	489	60	1742
Hänig, Conrad, Munich, Germany. Yarn-cleaning and fly-collecting device for yarn-winding machines	468,055	Feb. 2	223	54, 55	58	568
Hamill, Joseph H. (See Johnson and Hamill.)						
Hamill, Joseph H., Globe, Ariz. Ter. Pencil attachment	468,658	Feb. 9	1171	299	58	762
Hamill, Joseph H., Globe, Ariz. Ter. Fountain attachment for inkstands	471,002	Mar. 15	2118	544	58	1526
Hamill, Joseph H., and P. J. Johnson, Globe, Ariz. Ter. Shoe-fastener	484,313	Oct. 11	1208	307	61	258
Hamill, Nellie, et al. (See Hamill, Robert J., assignor.)						
Hamill, Robert J., Ottawa, Ill., assignor to N. Hamill, A. E. Gibbs, and D. Evans. Drive-chain	467,804	Jan. 26	2437	619	58	486
Hamilton, Alexander, Johnstown, Pa. Apparatus for reeling rods	469,521	Feb. 23	2522	648	58	1042
Hamilton, Andrew R., Kansas City, Kans. Trace-buckle	470,485	Mar. 8	1346	350	58	1364
Hamilton, Ayrus, Fort Garland, Colo. Car-coupling	476,633	June 7	615	148	59	1559
Hamilton, Charles L. (See Newhall and Hamilton.)						
Hamilton, Clarence J., Plymouth, Mich. Uniting barrels of air-guns. (Reissue)	11,247	June 21	2249	563	59	1908
Hamilton, Edwin, Philadelphia, Pa. Buffer for picker-staffs of looms	482,977	Sept. 20	1724	435	60	1698
Hamilton, Herbert E., and N. Boisvert, Salmon Falls, N. H. Shuttle-guard for looms	487,183	Nov. 29	3228	827	61	1286
Hamilton, James, assignor to Hunter, Patchen & Havens, Bridgeport, Conn. Piston-valve	476,228	May 31	3756	948	59	1421
Hamilton, James, assignor to Hunter, Patchen & Havens, Bridgeport, Conn. Valve-gear for engines	476,229	May 31	3757	948	59	1421
Hamilton, James B., London, England. Reed-organ	472,789	Apr. 12	1194	306	59	239
Hamilton, James E., Chicago, Ill. Electrical gas-lighter	482,172	Sept. 6	415	99	60	1416
Hamilton, James E., and F. Kaufmann, Jr., assignors to Hamilton Manufacturing Company, Two Rivers, Wis. Type-case and galley support	482,522	Sept. 13	1019	246	60	1548
Hamilton, John, St. John, Canada. Rotary blower	479,642	July 26	2472	615	60	521
Hamilton, John H., Detroit, Mich. Water-closet	476,011	May 31	3392	856	59	1350
Hamilton, John H., assignor of one-half to B. E. Woodruff, Eureka Springs, Ark. Clothes-pin	485,274	Nov. 1	179	53	61	609
Hamilton, John R., New York, N. Y. Rotary engine	488,277	Dec. 20	1723	434	61	1698
Hamilton, John W., Springfield, Ohio. Folding chair	472,603	Apr. 12	921	237	59	189
Hamilton, John W., Springfield, Ohio. Chair	485,325	Nov. 1	266	72	61	626
Hamilton Manufacturing Company. (See Hamilton and Kaufmann, assignors.)						
Hamilton, Richard. (See Lewis and Hamilton.)						
Hamilton, Richard, and J. G. Lewis, Jefferson City, Mo.; said Hamilton assignor to said Lewis. Trousers, &c., and pattern therefor	478,190	July 5	187	48	60	39
Hamilton, Richard, and J. G. Lewis, Jefferson City, Mo.; said Hamilton assignor to said Lewis. Trousers, &c., and pattern therefor	478,281	July 5	350	85	60	71
Hamilton, S. K. (See Ames, Azel, Jr., assignor.)						
Hamilton, Samuel, King City, Cal. Thrashing-cylinder	481,864	Aug. 30	3442	845	60	1298
Hamilton, Samuel M., Paris, Tex. Shoe-fastening	469,299	Feb. 23	2180	559	58	976
Hamilton, Stewart, Weir, Kans. Mine-elevator	478,595	July 12	820	202	60	178
Hamilton, William J., assignor of two-thirds to J. W. Hoey and F. A. Wilke, Richmond, Ind. Machine for pulling driven-well pipes out of the ground	476,196	May 31	3691	932	59	1409
Hamilton, William M., Pittsburg, Pa. Steam-boiler	484,736	Oct. 18	1871	476	61	402
Hamlet, Noah, Little Rock, Ark. Sash-balance	481,302	Aug. 23	2527	620	60	1106
Hamlin, Dewitt C., Great Bend, Pa. Vehicle-spring	481,303	Aug. 23	2529	621	60	1106
Hamlin, George E., New York, N. Y. Knob attachment	466,679	Jan. 5	583	151	58	113
Hamlin, George E., New York, N. Y. Trousers stretcher and banger	471,858	Mar. 29	3415	871	58	1792
Hamlin, John, Washington, D. C. Veterinary tooth-cutter	475,940	May 31	3287	829	59	1329
Hamn, Friedrich C. (See Rusch, Christian, assignor.)						
Hammann, Edward, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Water-closet	480,402	Aug. 9	1053	264	60	793
Hammelmann, Charles, Buffalo, N. Y. Horseshoe	472,262	Apr. 5	402	104	59	75
Hammelmann, Charles, Buffalo, N. Y. Horseshoe	473,923	May 3	60	12	59	648
Hammer, Jens J., St. Louis, Mo. Velocipede	477,540	June 21	2089	519	59	1878
Hammer, Thorvald F., Branford, Conn. Shovel	487,971	Feb. 2	91	23	58	542
Hammerstein, Oscar, New York, N. Y. Exhibition-building	469,472	Feb. 23	2444	626	58	1028
Hammesfahr, Ernst, Solingen, Germany. Rotary engine	477,353	June 21	1811	443	59	1821

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
Hammesfahr, Ernst, Solingen, Germany. Belt-suspending device	478,260	July 5	321	77	60	64
Hammill, Charles, assignor to M. E. Page Confectionery Company, Chicago, Ill. Ice-cream dasher	474,989	May 17	1778	450	59	1006
Hammon, Charles T. (See Martin and Hammon.)						
Hammon, Edwin W., Medford, Oreg. Extension and step ladder	467,685	Jan. 26	2242	571	58	449
Hammon, W. P. (See Brandloy, Arnold, assignor.)						
Hammond, Charles N., Boston, Mass. Insulator	469,940	Mar. 1	438	109	58	1185
Hammond, Fred C., Springfield, Vt. Door-hanger	469,043	Feb. 16	1794	458	58	895
Hammond, George A., Bennett, Mich. Device for securing desks and seats to the floor	484,657	Oct. 18	1758	447	61	379
Hammond, Henry, Ashbourne, Pa., assignor to J. H. Williams & Co., Brooklyn, N. Y. Wrench. (Reissue)	11,277	Oct. 18	1933	491	61	418
Hammond, John, San Francisco, Cal. Railway-car	474,736	May 10	1367	346	59	912
Hammond, John F., assignor to A. W. See & Co., New York, N. Y. Hand-piece for dental engines	466,462	Jan. 5	245	62	58	46
Hammond, Joseph C., Jr., Rockville, Conn. Rubber sandal	472,118	Apr. 5	171	47	59	32
Hammond, Leander W., North Plainfield, N. J. Blind-fastener	470,162	Mar. 1	778	192	58	1249
Hammond Type Writer Company. (See Pratt, John, assignor.)						
Hamner, William H., Fort Assinaboine, Mont. Entrenching-tool	470,122	Mar. 1	715	177	58	1238
Hamner, William H., Fort Assinaboine, Mont. Cartridge-loader	476,048	May 31	3443	869 870	59	1361
Hamrick, Graham H., Philippi, W. Va. Preserving corpses	466,524	Jan. 5	345	86	58	67
Hamrick, Harry M., assignor to Mechanical Novelties Company, Philadelphia, Pa. Candlestick	479,362	July 19	2011	502	60	420
Hamrick, John C. (See Flook, William A., assignor.)						
Hamsley, Millard F., Brooklyn, N. Y. Domestic gas heater and lighter	466,412	Jan. 5	159	43	58	32
Hanauer, Joseph, et al. (See Tatro, Charles P., assignor.)						
Hance, William A., assignor to Stover Bicycle Manufacturing Company, Freeport, Ill. Bicycle	468,994	Feb. 16	1719	437	58	880
Hancock, George, Providence, R. I. Machine for shading the surfaces of calico-printing rolls	478,540	July 5	744	181	60	148
Hancock, George, assignor to himself and S. Smith, Providence, R. I. Car-vestibule	480,695	Aug. 9	1519	377	60	884
Hancock, George, assignor to himself and S. Smith, Providence, R. I. Vestibule-car	481,902	Aug. 30	3505	858	60	1310
Hancock, George W., Chicago, Ill. Cushion-tip for ball-bats	471,545	Mar. 29	2932	746	58	1703
Hancock Inspirator Company. (See Church, Charles E., assignor.)						
Hancock, Milton T., Shreveport, La. Rotary plow. (Reissue)	11,257	Aug. 9	1530	380 381	60	886
Hancox, Henry A., Melrose, Mass. Automatic switch-stand for railways	466,979	Jan. 12	1099	276 277	58	216
Hancox, Henry A., Melrose, Mass. Automatic railway-switch	467,409	Jan. 19	1762	456	58	356
Hancox, Henry A., Melrose, Mass. Automatic railway-frog	470,486	Mar. 8	1347	350	58	1364
Hand, David, Neatherwood, N. J. Rein-support	474,737	May 10	1368	346	59	912
Hand Method Finishing Machine Company. (See Phelps, Eugene M., assignor.)						
Hand Method Finishing Machine Company. (See Thompson and Phelps, assignors.)						
Hand Stitch Broom Sewing Machine Company. (See McCombs, George F., assignor.)						
Hand, Thomas W., and W. Teale, Hamilton, Canada. Signal-rocket for vessels	480,012	Aug. 2	396	98	60	657
Handol, Philip J., Meriden, Conn. Kilo	481,562	Aug. 30	2948	724	60	1203
Handeland, Ole, Webster, S. D. Horseshoe's tool	481,490	Aug. 23	2-25	694	60	1163
Handly, Thomas F., Allegheny, Pa. Automatic gravity fire-extinguisher	483,491	Sept. 27	2520	634	60	1866
Handwerker, John, Marlborough, Mass. Shutter-fastener	469,446	Feb. 23	2404	616	58	1020
Hane, Urban H., Lakeland, Fla. Railway-joint	481,171	Aug. 23	3295	565	60	1063
Hansenstein, Oscar H., Buffalo, N. Y. Tripod	479,000	July 19	1440	357	60	310
Hanes, James D. (See Orton, Hanes, and Orton.)						
Haney, Enoch G. and W. A., Media, Kans. Wagon-brake	483,056	Sept. 20	1847	469	60	1725
Haney, Fred G., Findlay, Ohio. Musical instrument	480,816	Aug. 16	1705	425	60	936
Haney, John W., and W. A. Owens, assignors of one-third to S. P. Veasey, Garden Valley, Tex. Spring seat attachment for vehicles	467,805	Jan. 26	2438	619	58	487
Haney, William A. (See Haney, Enoch G. and W. A.)						
Haney, William H., Elmwood Place, Ohio. Combined whip-socket and rein-holder	486,547	Nov. 22	2160	571	61	1058
Hanford, Clarence C., assignor to H. C. Hanford, Medford, Mass. Spraying device for cooling beer, &c.	477,859	June 28	2618	656	59	1997
Hanford, Clarence C., Medford, and C. D. Stanford, Boston, Mass. Apparatus for cooling malt liquors	479,419	July 26	2116	529	60	454
Hanford, Herbert C. (See Hanford, Clarence C., assignor.)						
Hanford, Samuel, Binghamton, N. Y. Hydraulic air-compressor	474,296	May 3	640	162	59	761
Hanford-Stanford Company. (See Stanford, Charles D., assignor.)						
Hänisch, Gustav E., Bentzen, Germany. Boiling and precipitating tower	477,755	June 28	2450	612	59	1966
Hanish, Frank, Terre Haute, Ind. Dip-net	482,635	Sept. 13	1182	286	60	1579
Hanke, Carl G. F., Ratibor, and E. Richter, Czekalski, Germany. Musical-game apparatus	484,589	Oct. 18	1632	414	61	354
Hankel, August, Hampton, Nebr. Device for spooling and stretching fence-wires	472,047	Apr. 5	57	14 15	59	13
Hankenhof, Julius, assignor to F. Cook, New York, N. Y. Valve for water-closets	478,963	July 12	1370	337	60	2-6
Hanley, John, Terre Haute, Ind. Folding election-booth	475,013	May 17	1815	460	59	1013
Hanley, Patrick F., assignor of one-half to G. Gladden, Homestead, Pa. Splint	471,252	Mar. 22	2502	634	58	1612
Hanley, Patrick J., Amesbury, Mass. Shifting seat for vehicles	468,275	Feb. 2	564	139	58	633
Hanley, William H. (See Rouse and Hanley.)						
Hanna, Manuel J., New York, assignor to W. H. Quick, Brooklyn, N. Y. Pipe-hanger	485,033	Oct. 25	2385	613	61	519
Hanna, Michael. (See Martin and Hanna.)						
Hannan, James J., Columbus, Ohio. Indicator for brake-pistons	469,833	Mar. 1	255	65	58	1151
Hannan, John B., Widowsville, Ohio. Bouquet and badge holder	483,719	Oct. 4	2-9	72	61	61
Hannan, William H. (See Hannan, William H., assignor.)						
Hannan, William H., assignor to W. H. Hannan, Syracuse, N. Y. Thill-coupling. (Re-issue)	11,260	Aug. 16	2267	559	60	1043
Hannan, William H., assignor to W. H. Hannan, Syracuse, N. Y. Thill-coupling	486,251	Nov. 15	1715	452	61	955
Hannan, William H., assignor to W. H. Hannan, Syracuse, N. Y. Thill-coupling	487,005	Nov. 29	2953	761	61	1231
Hanner, George W., Holbrook, Ariz. Ter. Railway-rail joint	484,424	Oct. 18	1380	353	61	304
Hannes, George, Cincinnati, Ohio. Tripod-head for surveyors' instruments	470,802	Mar. 15	1813	466	58	1467
Hanney, David, Turner, Ill. Air-brake	476,880	June 14	1008	245	59	1651
Hanning, George T. (See Forbes, Alexander C., assignor.)						
Hannum, Henry A., assignor of one-half to P. A. Webster, Cazenovia, N. Y. Communiting-machine	470,395	Mar. 8	1202	307	58	1337
Hans, Christian. (See Faber and Hans.)						
Hanscom, Aaron B., North Andover, Mass. Feed-roll for carding-machines, &c.	481,024	Aug. 16	2025	505	60	999
Hanscom, Charles E., assignor of one-half to Hitchings & Company, New York, N. Y. Hot-water heater	468,745	Feb. 9	1305	331 332	58	790
Hanscom, Jeddiah F., Ashland, Wis. Road-locomotive	467,095	Jan. 12	12-3	325	58	252

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Hanscomb, William P., Cambridge, Mass. Piano-damper.....	470,619	Mar. 8	1531	399	58	1403
Hanscome, Ralph L., and R. Ferguson, Kingman, Kans. Sash-holder	470,396	Mar. 8	1205	308	58	1338
Hansel, Andrew. (See Howell, William H., assignor.)						
Hansen, Carl. (See Hansen, Christian and C.)						
Hansen, Christian and C., Chicago, Ill. Brick handling implement.....	468,872	Feb. 16	1503	383	58	838
Hansen, Hans P., Grand Rapids, Mich. Lawn-trimmer	482,307	Sept. 6	633	151	60	1459
Hansen, Jens, Helsingör, Denmark. Apparatus for smelting cast-iron borings, turnings, and shavings	473,741	Apr. 26	2768	695	59	574
Hansen, Marius H. and W. J., Chicago, Ill. Folding seat	475,310	May 24	2261	583	59	1119
Hansen, Niels C., Flensburg, Germany. Lathe for turning oval objects	487,525	Dec. 6	480	125 126	61	1416
Hansen, Peter, Antigo, Wis. Stump-extractor.....	481,944	Sept. 6	36	8, 9	60	1341
Hansen, William J. (See Hansen, Marius H. and W. J.)						
Hansing, Siegfried, New York, N. Y. Tone-sustaining attachment for pianos.....	474,990	May 17	1779	450	59	1006
Hanson, Alice M., administratrix. (See Hansen and Farnham.)						
Hanson, Daniel W., deceased, (A. M. Hanson, administratrix,) and J. S. Farnham, Mineral, Ill.; said administratrix assignor to said Farnham. Corn-harvester	482,945	Sept. 20	1675	421 422	60	1688
Hanson, Dempsey B., Milwaukee, Wis. Device for side-dressing saw-teeth. (Reissue) ..	11,218	Jan. 19	1915	490	58	382
Hanson Furniture Company. (See Hansen, Henry M., assignor.)						
Hanson, Hans, Mankato, Minn. Wire-reel holder	485,275	Nov. 1	180	53	61	610
Hanson, Harry, and J. E. Bergman, Chicago, Ill. Elevator	485,034	Oct. 25	2386	613	61	519
Hanson, Henry M., Janesville, Wis., assignor to Hanson Furniture Company, of Wisconsin. Furniture-leg fastening	479,363	July 19	2012	503	60	420
Hanson, James P., Oshkosh, Wis. Sawmill-carriage	472,995	Apr. 19	1517	387	59	315
Hanson, Olaus, Toledo, Ohio. Bicycle	482,735	Sept. 20	1343	332 333	60	1623
Hanson, Olaus, assignor to First National Bank, Marshall, Mich. Bicycle-saddle.....	471,744	Mar. 29	3239	825	58	1758
Hanson, Ole, Lake Crystal, Minn. Car-coupling	473,742	Apr. 26	2769	696	59	574
Hanson, Thomas, New York, N. Y. Fluid-pressure regulator	474,244	May 3	552	136	59	745
Hanson, Walter T., Macon, Ga. Twine-holder	468,465	Nov. 22	2047	541	61	1035
Hanway, Mary D., Baltimore, Md. Eyeglasses	486,034	Feb. 2	193	47	58	562
Harbaugh, Calvin, Pleasant Home, Ohio. Variable feed for sawmills	479,272	July 19	1857	465	60	389
Harbaugh, Frank P., Chambersburg, Pa. Ice-cream freezer	477,211	June 21	1549	380	59	1774
Harbaugh, Howard E., Rockford, Ill. Knitting-machine	482,173	Sept. 6	416	99 100	60	1417
Harbold, Alfred, et al. (See Nugent, Richard C., assignor.)						
Harbelsheimer, John, Philadelphia, Pa. Garbage-box	483,492	Sept. 27	2522	635	60	1866
Harcourt, Augustus G. V., Cowley Grange, England. Standard oil-lamp	480,013	Aug. 2	397	98	60	657
Harcourt, John R. (See Osborn and Harcourt.)						
Hard, John R., New York, N. Y. Electric bell	485,379	Nov. 1	355	95	61	645
Harden, Allen, Anniston, Ala. Bed-brace	467,456	Jan. 19	1860	474	58	370
Harden, Edward W., assignor to F. C. Weir, Cincinnati, Ohio. Governor	486,404	Nov. 15	1953	518	61	1004
Harden, Edward W., and M. R. Conway, assignors to F. C. Weir, Cincinnati, Ohio. Steam-engine	469,563	Feb. 23	2591	663 664	58	1056
Harden, Edward W., and M. R. Conway, assignors to F. C. Weir, Cincinnati, Ohio. Valve ..	486,403	Nov. 15	1951	517 518	61	1003
Harden, William H., assignor of one-half to W. L. Wilkins and W. W. Walker, Quitman, Ga. Animal-trap	473,312	Apr. 19	2044	513	59	414
Harden, William I. F. (See Stubbs and Harden.)						
Hardenbergh, Abner, and W. C. Froehley, Hamburg, N. Y. Caster	473,924	May 3	61	12	59	648
Hardendorf, Eugene, Fort Wayne, Ind. Adjustable folding boat-seat	468,873	Feb. 16	1504	383	58	838
Harder, Charles N. (See Sagerdorph, Longley L., assignor.)						
Harder, James E., assignor to G. W. Cole, Chicago, Ill. Hanger for lumber-carriers	481,355	Aug. 23	2606	640	60	1120
Hardesty, James F., Cambridge, Ohio. Truss-bridge	485,689	Nov. 8	819	219	61	757
Hardesty, Lorin Q. (See Summers, Kings, and Hardesty.)						
Hardie, James L. (See Cochran and Hardie.)						
Hardie, Robert W., Albany, N. Y. Disk harrow	473,115	Apr. 19	1712	434	59	349
Hardie, Robert W., Albany, N. Y. Disk harrow	478,596	July 12	822	203	60	179
Hardin, Bettie, et al. (See Nelson and Hettett, assignors.)						
Harding, Edward W. (See Smith and Harding.)						
Harding, Edwin R., Winthrop, Mass. Trolley for electric railways	467,250	Jan. 19	1551	395	58	312
Harding, Fred D., Baldwin, Me. Dish-cleaner	485,680	Nov. 8	821	219	61	757
Harding, Legrand D., Colfax, Wash. Grinding-mill.....	475,859	May 31	3156	800 801	59	1303
Harding, Thomas, San José, Cal. Machine for pitting fruit.....	473,838	Apr. 26	2905	730	59	601
Hardman, Fred. H., Beverly, assignor to W. E. Bennett, Boston, Mass. Button-machine ..	474,320	May 3	688	178 179	59	769
Hardman, Fred. H., Beverly, assignor to W. E. Bennett, Boston, Mass. Feed mechanism for punching-machines	474,321	May 3	692	180	59	770
Hardman, Fred. H., Beverly, assignor to W. E. Bennett, Boston, Mass. Button-machine ..	477,115	June 14	1382	337	59	1727
Hardman, Fred. H., Beverly, assignor to W. E. Bennett, Boston, Mass. Blank-conveyor ..	477,116	June 14	1384	337	59	1727
Hardman, Frederick H., Beverly, assignor to W. E. Bennett, Boston, Mass. Blank-feeding mechanism	478,597	July 12	823	203	60	179
Hardman, Frederick H., Beverly, assignor to W. E. Bennett, Boston, Mass. Wire-feeding mechanism	478,598	July 12	825	204	60	179
Hardsegg, Martin, Ottumwa, Iowa. Coal or rock drilling machine	484,425	Oct. 18	1381	353	61	304
Hardy, Alfred, Lichfield, New Zealand. Darning apparatus	471,480	Mar. 22	2847	724	58	1678
Hardy, Charles S., San Diego, Cal. Mailing attachment for books and like articles	480,582	Aug. 9	1332	332	60	848
Hardy, Hippolyte, Minneapolis, Minn. Subterranean exhibition apparatus	482,736	Sept. 20	1344	333 334 335	60	1621
Hardy, John J., assignor of one-half to C. Repp, Chicago, Ill. Gyroscopic top	484,960	Oct. 25	2261	584	61	495
Hardy, Walter B., assignor to Revere Rubber Company, Boston, Mass. Pneumatic tire ..	487,669	Dec. 6	700	178	61	1460
Hardy, Walter B., assignor to Revere Rubber Company, Boston, Mass. Pneumatic tire ..	488,392	Dec. 20	1913	479	61	1735
Hare, James H., Brooklyn, N. Y. Photographic-plate holder	479,186	July 19	1733	434	60	364
Hare, James H., Brooklyn, assignor to E. & H. T. Anthony & Company, New York, N. Y. Photographic camera	471,512	Mar. 22	2884	734	58	1685
Hare, Robert W., Allegheny, Pa. Means for operating elevator-doors	486,953	Nov. 29	2875	743	61	1215
Harger, K. D., et al. (See Leach, William H., assignor.)						
Harger, Lucy A., et al. (See Leach, William H., assignor.)						
Hargett, Charles. (See Kent and Hargett.)						
Hargraves, Robert F., Providence, R. I. Friction-clutch	467,652	Jan. 26	2191	556	58	440
Haring, William N., Nyack, assignor of one-half to F. J. Hasbronck, New York, N. Y. Car-brake	487,391	Dec. 6	250	67	61	1370

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Haring, William N., Nyack, assignor of one-half to F. J. Hasbrouck, New York, N. Y. Car-truck.....	487,923	Dec. 13	1131	282	61	1562
Haring, William N., Nyack, assignor of one-half to F. J. Hasbrouck, New York, N. Y. Car-coupling.....	487,924	Dec. 13	1132	283	61	1562
Haring, William N., Nyack, assignor of one-half to F. J. Hasbrouck, New York, N. Y. Car-body.....	487,925	Dec. 13	1133	283	61	1562
Harrison, William B., New York, N. Y. Blank for book-cover protectors.....	473,502	Apr. 26	2370	601	59	499
Harkins, James S., Minneapolis, Minn. Cooking-stove.....	469,739	Mar. 1	112	30	58	1121
Harkness, Sumner J. (See Morris and Harkness.)						
Harlan, Howard, assignor to himself and G. R. McCrea, Renovo, Pa. Brick-machine.....	482,248	Sept. 6	531	127	60	1438
Harlan, Samuel F. (See Konz, Sebastian, assignor.)						
Harlin, George C., Seattle, Wash., assignor of one-tenth to A. Densmore. Car-coupling.....	482,125	Sept. 6	330	78	60	1399
Harlow, Fred, P., et al. (See Gilman, Willard H., assignor.)						
Harlow, Mellen S., Malden, Mass. Bobbin stand and carrier.....	470,328	Mar. 8	1093	278	58	1318
Harman, Christian B., Lanark, Ill. Corn-planter.....	467,894	Jan. 26	2582	654	58	513
Harman, Frank M., and A. L. Eaton, Ottumwa, Iowa. Construction of legged articles.....	478,857	July 12	1215	302	60	256
Harman, Samuel W., and J. B. Polk, Rogers, Ark.; said Polk assignor to said Harman. Dish-cleaner.....	477,860	June 28	2620	656 657	59	1997
Harmon, Decatur, Ionia, Mich. Lubricant.....	482,249	Sept. 6	533		60	1438
Harmon, John W., Cromwell, Iowa. Combined hay rake and loader.....	483,917	Oct. 4	591	150	61	122
Harmon Machine Company. (See Letabvre, Albert H., assignor.)						
Harmen, Hans C. W., Lucerneburg, Germany. Separating tin from tin-plate waste.....	485,035	Oct. 25	2389		61	520
Harpell, W. S., et al. (See Henning, John E., assignor.)						
Harper, Alfred E., Chicago, Ill. Oil-burner.....	488,355	Dec. 20	1855	464	61	1724
Harper, James M., Peoria, Ill. Hose-pipe carrier.....	484,961	Oct. 25	2263	584	61	495
Harper, James P., Kansas City, Mo. Utilizing stationary cables on cable railways.....	469,330	Feb. 23	2224	570 571	58	985
Harper, John, London, England. Portable scaffold.....	467,096	Jan. 12	1285	325 326	58	252
Harper, John, Fairfield, Iowa. Wire reeling and stretching machine.....	485,541	Nov. 1	595	159	61	695
Harper, John, Fairfield, Iowa. Wire-fence machine.....	487,184	Nov. 29	3230	827	61	1286
Harper, Nathan, Newark, N. J. Drier-ear for brick.....	456,931	Nov. 29	2839	735	61	1208
Harper, Pleasant D., Fullerton, Ill. Elevator.....	478,999	July 19	1438	357	60	309
Harper, Thomas, Redditch, England. Lady's work-box.....	469,138	Feb. 16	1916	490	58	920
Harper, William T., assignor to J. W. Hazen, Cambridge, Mass. Pan-conveying device.....	474,310	May 3	734	191 192	59	778
Harpham, Elmira H., St. Louis, Mich. Coinb.....	483,058	Sept. 20	1850	469	60	1725
Harpin, Louis, Carrow, Ill. Check-row attachment for planters.....	472,996	Apr. 19	1518	387	59	315
Harrah, Akens S., and J. N. Nichols, deceased; E. A. Harrah, administratrix, Mulvaue, W. Va. Trigger.....	488,557	Dec. 27	2174	537	61	1803
Harrah, Emily A., administratrix. (See Harrah and Nichols.)						
Harrelson, Marcellous D., Raleigh, Miss. Bed-slat holder.....	488,558	Dec. 27	2176	537	61	1803
Harrigan, Michael T., Wollaston, and J. L. Packard, Boston, assignors to J. W. Brooks, trustee, Cambridge, Mass. Rotary trimmer.....	473,874	Apr. 26	2972	749	59	614
Harriman, John E., Jr., Dallas, Tex., assignor of one-fourth to J. N. Webb, Washington, D. C. Mechanical attachment for pianos and organs.....	476,197	May 31	3692	933 934	59	1409
Harrington, Frank. (See Bullard and Harrington.)						
Harrington, George W., Wakefield, Mass. Lead-lined pipe.....	474,323	May 3	695	180	59	771
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Method of and apparatus for lining pipes with lead.....	485,691	Nov. 8	822	219 220	61	758
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Swage for forming beads on the ends of lead-lined pipes.....	485,692	Nov. 8	825	220	61	758
Harrington, George W., assignor of one-half to D. H. Darling, Wakefield, Mass. Forming beads on the ends of lead-lined iron pipes.....	485,693	Nov. 8	826	221	61	758
Harrington, Hiram A., Anoka, Minn. Metallic fence-post.....	473,925	May 3	62	12	59	648
Harrington, Hiram A., Anoka, Minn. Metallic fencing.....	485,741	Nov. 8	907	243	61	775
Harrington, John, Coventry, England, assignor to W. H. Durfee, Providence, R. I. Musical instrument.....	485,542	Nov. 1	506	159	61	695
Harrington & Richardson Arms Company. (See Brooks, George F., assignor.)						
Harrington, Walter E., Atlantic City, N. J., assignor of one-half to L. Atwood, Philadelphia, Pa. Joint for electric wires.....	481,025	Aug. 16	2027	506	60	999
Harrington, Walter E., Atlantic City, N. J., assignor to F. T. Chambers, Philadelphia, Pa. Device for transmitting motion for electric street-car motors.....	487,069	Nov. 29	3047	781 782	61	1249
Harrington, Walter E., Atlantic City, N. J., assignor to F. T. Chambers, Philadelphia, Pa. Electro-magnetic pulley.....	487,070	Nov. 29	3049	782	61	1249
Harriott, John W., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Post-office lock-drawer.....	486,777	Nov. 22	2542	663 664	61	1132
Harris, Alfred N. (See Dulin, Charles E., assignor.)						
Harris, Andrew J., Chicago, Ill. Dental plugger.....	477,411	June 21	1882	463	59	1836
Harris, Anthony. (See Burt, Helen A., assignor.)						
Harris, B. G. (See Fairman, Simon, assignor.)						
Harris, Benjamin S. H. (See Harris, William A. and B. S. H.)						
Harris, Bentley G., Ethridge, Tenn. Raek for hauling hay.....	466,537	Jan. 5	365	91	58	70
Harris, Charles, and A. T. Goodsell, Bridgeport, Conn. Bottle-washer.....	466,680	Jan. 5	584	151	58	113
Harris, Charles E., Saxton's River, Vt. Tool.....	481,565	Aug. 30	3443	845	60	1298
Harris, Charles H., Cedar town, Ga. Ecraseur.....	480,670	Aug. 16	1784	447	60	953
Harris, Charles R., Williamsport, Pa. Shoulder-brace.....	467,251	Jan. 19	1553	395	58	312
Harris, Charles R., Williamsport, Pa. Suspenders.....	467,410	Jan. 19	1792	456	58	356
Harris, Charles R., Williamsport, Pa. Clasp for suspenders.....	473,458	Apr. 26	2309	583	59	487
Harris, Charles R., Williamsport, Pa. Suspender-buckle.....	475,560	May 31	3159	801	59	1304
Harris, Charles R., Williamsport, Pa. Wire buckle.....	485,411	Nov. 1	409	110	61	656
Harris, Charles R., Williamsport, Pa. Buckle.....	485,628	Nov. 8	726	189	61	737
Harris, Charles S., Milwaukee, Wis. Boring-machine.....	482,791	Sept. 20	1436	356	60	1641
Harris, David, et al. (See Harris, Walter M., assignor.)						
Harris, Edward L., Red Banks, Miss. Spittoon for railway-cars.....	483,918	Oct. 4	595	151	61	123
Harris, Edward S. (See Pyke and Barnett, assignors.)						
Harris, Edward S. (See Pyke and Harris.)						
Harris, Edwin. (See Purdy, George H., assignor.)						
Harris, Edwin E. (See Fletcher, Andrew H., assignor.)						
Harris, Elmo G., Little Rock, Ark. Coffor-dam.....	467,806	Jan. 26	2439	619	58	487
Harris, Frank, Guildhall, Vt. Railway-switch signal.....	488,654	Dec. 27	2335	578	61	1835
Harris, Frank H., Toledo, Ohio. Wheelbarrow.....	467,411	Jan. 19	1793	457	58	357
Harris, George, Chicago, Ill. Pressure-regulator.....	482,842	Sept. 20	1504	374	60	1656
Harris, George M., Louisville, Ky. Vehicle-spring brace.....	468,340	Feb. 9	685	169	58	666

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
Harris, George W., assignor of one-half to H. Baumgartel, Sturgis, Mich. Watchmaker's depthing and adjusting tool.....	483,960	Oct. 4	657	165	61	136
Harris, Granville E. (See Wood, Thomas T., assignor.)						
Harris, Henry E., Triumph, Minn. Whiffletree-book.....	480,465	Aug. 9	1159	291	60	813
Harris, Henry H. (See Sailer, John M., assignor.)						
Harris, Henry I., London, England. Voltaic battery.....	470,123	Mar. 1	717	{ 177 178 }	58	1238
Harris, Hilry, Krenmlin, Colo. Water-elevator.....	473,573	Apr. 26	2507	633	59	525
Harris, Hiram W. (See Devantery, Joseph A., assignor.)						
Harris, Ira F., Nashua, N. H. Street-railway switch.....	478,858	July 12	1216	302	60	256
Harris, Ira F., Nashua, N. H. Street-railway switching device.....	478,859	July 12	1217	302	60	257
Harris, Ira F., Nashua, N. H. Hinge.....	486,104	Nov. 15	1488	392	61	910
Harris, Jacob J., Highland, Ohio. Wire-fence machine.....	470,047	Mar. 1	603	150	58	1216
Harris, James C., Londonderry, Pa. Butter-print machine.....	476,634	June 7	616	148	59	1559
Harris, John, Chicago, Ill. Boring-machine.....	473,153	Apr. 19	1773	448	59	361
Harris, John E., J. T. Griffith, and T. B. Harris, Wilkes-Barré, Pa. Miner's safety-lamp.....	469,918	Mar. 1	401	101	58	1178
Harris, John F., Jr. (See Lawrence, Charles P., assignor.)						
Harris, Joseph. (See Michelson, Max J., assignor.)						
Harris, Joseph, Boston, Mass. Car-wheel.....	469,919	Mar. 1	403	101	58	1179
Harris, Joseph, Boston, Mass. Apparatus for heating tires.....	471,704	Mar. 29	3163	806	58	1745
Harris, Joseph, Boston, Mass. Engine.....	474,557	May 10	1084	277	59	856
Harris, Joseph A. (See Davison, Charles C., assignor.)						
Harris, Levi, assignor of one-half to O. M. Allen, Sr., Kalamazoo, Mich. Vehicle-wheel box.....	474,245	May 3	553	136	59	745
Harris, Levi, assignor of one-half to O. M. Allen, Sr., Kalamazoo, Mich. Wheel box and axle.....	476,198	May 31	3697	934	59	1410
Harris, Levi, assignor of one-half to O. M. Allen, Sr., Kalamazoo, Mich. Hub-attaching device.....	476,199	May 31	3698	934	59	1410
Harris, Levi O., Cadillac, Mich. Cut-off governor.....	473,743	Apr. 26	2769	696	59	575
Harris, Maria F., et al. (See Harris, Walter M., assignor.)						
Harris Metal Wheel Company. (See Newhouse, Frederick, assignor.)						
Harris, Orrin C., assignor of one-half to C. L. Petree, Little Falls, N. Y. Car-coupling.....	473,574	Apr. 26	2508	633	59	526
Harris, Richard C., Jr., Roselle, N. J. Marking-stamp.....	484,534	Oct. 18	1559	397	61	339
Harris, Richard D. (See Bjorlin, Carl G., assignor.)						
Harris, Samuel. (See Murrey, Jasper, assignor.)						
Harris, Samuel, St. Louis, Mo. Gear-wheel.....	468,767	Feb. 9	1339	338	58	796
Harris, Silas, assignor to Pacific Rolling Mills Company, San Francisco, Cal. Railway-chair.....	478,426	July 5	566	137	60	111
Harris, Silas, assignor to Pacific Rolling Mills Company, San Francisco, Cal. Railway-chair.....	478,427	July 5	566	137	60	111
Harris, Silas, assignor to Pacific Rolling Mills Company, San Francisco, Cal. Railway-chair.....	478,428	July 5	567	137	60	111
Harris, Thomas B. (See Harris, Griffith, and Harris.)						
Harris, Walter M., assignor to M. F. and D. Harris, Auburn, N. Y. Lemon-squeezer.....	468,341	Feb. 9	686	170	58	666
Harris, William A., Providence, R. I. Cut-off for steam-engines.....	469,696	Mar. 1	39	13, 14	58	1106
Harris, William A., Providence, R. I. Dash-pot.....	469,697	Mar. 1	42	14	58	1106
Harris, William A. and B. S. H., assignors of one-third to W. S. Thomason, Spartanburg, S. C. Air-brake coupling.....	472,190	Apr. 5	281	74	59	53
Harris, William H., Boston, Mass. Generating gas.....	478,425	July 5	564	136	60	110
Harris, William H., assignor of one-half to A. P. Pifer, Newberry, S. C. Car-coupling.....	481,399	Aug. 23	2680	657	60	1133
Harris, William T., Baltimore, Md. Metallic packing.....	473,313	Apr. 19	2046	513	59	414
Harris, William T., assignor to B. F. Southworth, Defiance, Ohio. Gate.....	484,198	Oct. 11	1010	258	61	920
Harris, William W., assignor of one-half to H. A. Lyon, Sioux City, Iowa. Gun-sight.....	468,803	Feb. 16	1400	355	58	818
Harris, Woodson T. (See Moore and Jory, assignors.)						
Harrison, Almer M., Columbus, Ohio. Dental tool.....	474,011	May 3	202	47	59	677
Harrison, Charles A., and A. W. Baumgartner, Pontiac, Mich. Pump attachment.....	468,514	Feb. 9	957	244	58	720
Harrison, Edmund, Tulare, Cal. Incubator.....	473,664	Apr. 26	2647	667	59	552
Harrison, Edward M., Fort Smith, Ark. Telephone.....	476,200	May 31	3699	935	59	1410
Harrison, Frank B., Toledo, Ohio. Dust-guard for car-axle journals.....	467,719	Jan. 26	2305	{ 555 556 }	58	461
Harrison, George, Cleveland, Ohio, assignor to C. E. Lamb, Winthrop, Mass. Mechanism for operating brakes.....	473,553	Apr. 26	2450	620	59	513
Harrison, George C. (See Grover, William B., assignor.)						
Harrison, George P., et al. (See Campbell, James A., assignor.)						
Harrison, Jane R., Baltimore, Md. Game-board.....	467,972	Feb. 2	93	23	58	542
Harrison, John J., and W. Hooker, London, England. Advertising match-box.....	471,052	Mar. 15	2185	562	58	1539
Harrison, Mary B., et al. (See Saxton, Harry J., assignor.)						
Harrison, Robert, Erie, Pa. Injector.....	480,921	Aug. 16	1864	465	60	969
Harrison, Robert, Philadelphia, Pa. Carpet-stretcher.....	483,057	Sept. 20	1849	469	60	1725
Harrison Safety Boiler Works. (See Cochrane, David, assignor.)						
Harrison, Thomas J., Brooklyn, N. Y. Wind-wheel.....	485,380	Nov. 1	357	96	61	646
Harrison, Wesley T., Williamstown, Ky., assignor of one-half to J. C. Chipman, Sterling, Colo. Pendant for watches.....	486,105	Nov. 15	1489	392	61	910
Harrison, William T., assignor to himself and J. Smith, Pooler, Ga. Balanced slide-valve.....	473,744	Apr. 26	2770	696	59	575
Harrold, Ernest E., et al. (See Russell, William R., assignor.)						
Harrow Spring Company. (See Brinkman, Herman M., assignor.)						
Harry, Louis. (See Baner, Harry, and Bunker.)						
Harsh, Samuel E. (See Harter and Harsh.)						
Harsh, Samuel E., assignor of one-half to J. M. Harter, Wabash, Ind. Overdraw check-loop.....	488,789	Dec. 27	2541	631	61	1875
Harsin, Charles D. (See Gambetta and Harsin.)						
Hart, Charles E. (See Hart, William H. and C. E.)						
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Inside corner-stone.....	471,610	Mar. 29	3020	769	58	1718
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Drive-chain.....	473,392	Apr. 19	2194	551	59	443
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Drive-chain.....	476,635	June 7	617	{ 148 149 }	59	1560
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Latch-handle.....	476,636	June 7	619	149	59	1560
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Drive-chain.....	476,637	June 7	620	149	59	1560
Hart, Charles E., assignor to Stanley Works, New Britain, Conn. Drive-chain coupling-link.....	477,895	June 28	2679	670	59	2008
Hart, Charles E., and C. A. Taplin, assignors to Stanley Works, New Britain, Conn. Drive-chain.....	476,201	May 31	3702	935	59	1411
Hart, Charles W., assignor, by mesne assignments, to H. A. Hart, Troy, N. Y. Oil-can.....	470,837	Mar. 15	1877	481	58	1479
Hart, Charles W., assignor, by mesne assignments, to H. A. Hart, Troy, N. Y. Oil-can.....	470,838	Mar. 15	1879	481	58	1479

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hart, Emanuel I. S., New York, N. Y. Magic lantern.....	484,854	Oct. 25	2088	537	61	460
Hart, Francis P., Strasburg, Pa. Storepipe-coupling.....	481,026	Aug. 16	2028	506	60	1000
Hart, Frank E., Brooklyn, N. Y. Beveling attachment for planes.....	466,494	Jan. 5	300	77	58	57
Hart, Frank L., Augusta, Wis. Portable grate and mantle.....	474,655	May 10	1235	{ 315 316 }	59	886
Hart, Frederick, Poughkeepsie, N. Y. Adjustable bearing.....	475,311	May 24	2264	583	59	1119
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Method of and dies for forming sheet-metal cones.....	469,785	Mar. 1	189	49	58	1137
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Governor.....	472,293	Apr. 5	448	116	59	84
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeder.....	487,526	Dec. 6	481	{ 126 127 }	61	1416
Hart, Frederick, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeding machine.....	488,006	Dec. 13	1262	315	61	1589
Hart, Frederick, Poughkeepsie, N. Y., assignor to Aktiebolaget Separator, Stockholm, Sweden. Steam-turbine.....	486,829	Nov. 22	2631	687	61	1152
Hart, George P., New Britain, Conn. Manufacture of drive-chain links.....	474,086	May 3	323	77	59	699
Hart, Harriet A. (See Hart, Charles W., assignor.)						
Hart, Henry C., Detroit, Mich. Coat-hook.....	469,564	Feb. 23	2595	665	58	1057
Hart, Henry M., Auburn, Ill. Shelf-support.....	471,481	Mar. 22	2847	725	58	1678
Hart, Howard S., New Britain, Conn. Hinge.....	473,175	Apr. 19	1826	460	59	370
Hart, Howard S., New Britain, Conn. Hook.....	477,655	June 28	2289	573	59	1933
Hart, Hubert C., Unionville, Conn. Die for swaging spoon-blanks.....	478,660	July 12	1218	302	60	257
Hart, Russell A., Battle Creek, Mich. Paper-jogger.....	480,768	Aug. 16	1633	409	60	922
Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Injector.....	474,991	May 17	1780	459	59	1007
Hart, Thomas J., assignor to Sherwood Manufacturing Company, Buffalo, N. Y. Injector.....	488,313	Dec. 20	1781	{ 448 449 }	61	1709
Hart, Vernon D., Addison, W. Va. Riding-saddle.....	481,945	Sept. 6	38	9	60	1342
Hart, William H., Brooklyn, N. Y. Electrical distribution-box.....	488,198	Dec. 20	1590	398	61	1672
Hart, William H., assignor to Stanley Works, New Britain, Conn. Drive-chain.....	483,843	Oct. 4	482	120	61	100
Hart, William H. and C. E., assignors to Stanley Works, New Britain, Conn. Drive-chain.....	488,808	Dec. 27	2570	638	61	1882
Harte, William F., assignor to Automatic Call Manufacturing Company, Omaha, Nebr. Electrical annunciator.....	466,784	Jan. 12	769	200	58	156
Harter, John M. (See Harsh, Samuel E., assignor.)						
Harter, John M., and S. E. Harsh, Wabash, Ind. Overcheck-loop for bridles.....	476,638	June 7	621	149	59	1560
Hartford, Arthur J., New York, N. Y., assignor to A. J. Hartford Steel Railway Tie Manufacturing Company, of West Virginia. Metallic rail-support.....	467,166	Jan. 19	1422	363	58	287
Hartford, Arthur J., New York, N. Y., assignor to A. J. Hartford Steel Railway Tie Manufacturing Company, of West Virginia. Metallic railway-tie.....	487,733	Dec. 13	814	207	61	1499
Hartford, Arthur J., New York, N. Y., assignor to Railway Improvement Company, of Illinois. Railway-tie.....	478,058	June 28	2931	732	59	2057
Hartford, Isaac J., Queen City, Mo. Smoke and spark arrester and conductor.....	469,969	Mar. 1	495	122	58	1194
Hartford Rubber Works Company. (See Gray, John W., assignor.)						
Hartford Sanitary Manufacturing Company. (See Millard, Herbert B., assignor.)						
Hartford Silver Plate Company. (See Maschmeyer, Charles H., assignor.)						
Hartig, Gustav, Washington, D. C. Combined ruler and paper-cutter.....	470,754	Mar. 15	1734	446	58	1455
Hartin, John W., Monett, Mo. Ventilated car.....	469,698	Mar. 1	44	14	58	1106
Harting, Jesse B. (See Baumenner and Harting.)						
Hartley, Asa M., Bentonville, Ark. Wire-coiling machine.....	484,426	Oct. 18	1384	{ 353 354 }	61	304
Hartley, Herbert E. (See Hartley, John E. and H. E.)						
Hartley, James, Leeds, England. Device for fixing joiners' work.....	470,672	Mar. 15	1612	418	58	1428
Hartley, John E. and H. E., Birmingham, England. Attachable letter for signs.....	488,655	Dec. 27	2336	578	61	1835
Hartley, Marcellus, et al. (See Beardsley, William N., assignor.)						
Hartley, Marcellus, et al. (See Beardsley and Moulton, assignors.)						
Hartley, Richard, assignor of five-eighths to H. and A. Foulds, Philadelphia, Pa. Loom for weaving chenille webs.....	470,426	Mar. 8	1251	321	58	1346
Hartley, Richard, assignor of five-eighths to H. and A. Foulds, Philadelphia, Pa. Jacquard mechanism for looms for weaving chenille webs.....	470,427	Mar. 8	1254	{ 321 322 }	58	1347
Hartley, Richard K. (See Smith, Hartley, and McDougall.)						
Hartley, Richard K., Chadderton, England. Bicycle.....	484,712	Oct. 18	1832	466	61	395
Hartley, Walter N., Dublin, Ireland, and W. E. B. Blenkinsop, London, England. Decolorizing vegetable oils.....	467,992	Feb. 2	130	31, 32	58	549
Hartley, William, Jr., Lonsdale, R. I. Machine for drying textile fiber.....	474,087	May 3	325	77, 78	59	700
Hartman, Benjamin F. (See Harvey and Hartman.)						
Hartman, Henry, assignor to A. D. Voigt, B. Ternes, and J. W. Peterson, Ogden, Utah Ter. Saddle attachment.....	469,565	Feb. 23	2596	665	58	1057
Hartman, Henry A., Philadelphia, Pa. Holding-strap for cars.....	473,255	Apr. 19	1954	490	59	396
Hartman, John H. (See Bendure and Tilbery, assignors.)						
Hartman, John M., Philadelphia, Pa. Tuvare.....	485,381	Nov. 1	359	96	61	646
Hartman, John R., Davenport, Iowa. Potato-grinder.....	483,251	Sept. 27	2157	546	60	1797
Hartman Manufacturing Company. (See Schnabel, Herman E., assignor.)						
Hartmann, Adolph H., Brooklyn, N. Y. Eyeglasses.....	481,400	Aug. 23	2681	658	60	1133
Hartmann, Christian, Hanover, Germany. Horseshoe.....	484,713	Oct. 18	1834	466	61	395
Hartness, James, Springfield, Vt. Belt-shipper.....	467,097	Jan. 12	1286	326	58	252
Hartness, James, Springfield, Vt. Turret-lathe.....	481,356	Aug. 23	2607	{ 640 641 }	60	1120
Hartness, James, Springfield, Vt. Clutch.....	482,523	Sept. 13	1020	246	60	1548
Hartness, James, Springfield, Vt. Clutch-operating mechanism.....	483,741	Oct. 4	326	82	61	68
Hartness, James, assignor to Jones & Lamson Machine Company, Springfield, Vt. Stock-feeding device for screw-machines.....	467,098	Jan. 12	1288	{ 326 327 }	58	253
Hartshorn, Edmund F., Newark, assignor to S. Hartshorn, Short Hills, N. J. Apparatus for manufacturing metal tubes.....	479,507	July 26	2282	570	60	486
Hartshorn, Edmund F., Newark, assignor to S. Hartshorn, Short Hills, N. J. Spring-shade-roller.....	483,553	Oct. 4	56	14	61	13
Hartshorn, Edmund F., Newark, assignor to S. Hartshorn, Short Hills, N. J. Attaching window-shades to rollers.....	484,962	Oct. 25	2264	524	61	496
Hartshorn, Newton T., Cleveland, Ohio. Pantograph-bar.....	469,420	Feb. 23	2366	607	58	1013
Hartshorn, Stewart. (See Hartshorn, Edmund F., assignor.)						
Hartshorn, Stewart, Short Hills, N. J. Spring shade-roller.....	466,413	Jan. 5	161	43	58	32
Hartung, Maximilian J., Sydney, New South Wales. Chloridizing gold ores.....	471,423	Mar. 22	2762	.....	58	1662
Harty, William. (See Bouvier, Louis P., assignor.)						
Hartz, Henry V., Cleveland, Ohio. Tackle-block.....	470,240	Mar. 8	915	226	58	1286
Hartz, Henry V., Cleveland, Ohio. Brake mechanism for cars.....	479,420	July 26	2118	530	60	454

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hartzler, Moses E. (See Spangler, Jacob W., assignor.)						
Harvey, Albert, Great Grimsby, England. Sleeve-holder	467,412	Jan. 19	1794	457	58	357
Harvey, Charles A., New York, N. Y. Horse-blanket fastener	481,326	Aug. 23	2565	630	60	1113
Harvey, Charles A., New York, N. Y. Truss	482,946	Sept. 20	1680	423	60	1689
Harvey, Charles A., New York, N. Y., assignor to Harvey Fastening Company, of New Jersey. Shoe-fastening	468,988	Feb. 16	1711	436	58	878
Harvey, Charles A., New York, N. Y., assignor to Harvey Fastening Company, of New Jersey. Shoe-fastening	474,043	May 3	256	62	59	687
Harvey Fastening Company. (See Harvey, Charles A., assignor.)						
Harvey, Francis B., Pickering, Pa. Combined harrow and roller	471,341	Mar. 23	2626	667	58	1636
Harvey, Francis B., Pickering, Pa. Harrow and roller	473,746	Apr. 26	2772	697	59	575
Harvey, Francis B., and B. F. Hartman, Pickering, Pa. Combined harrow and corn-planter.	476,141	May 31	3599	909 910	59	1392
Harvey, Francis B., and B. F. Hartman, Pickering, Pa. Combined roller and harrow	476,142	May 31	3601	910	59	1392
Harvey, George, San Francisco, Cal. Snatch-block	487,734	Dec. 13	815	208	61	1500
Harvey, George, and W. R. Grundy, Winnipeg, Canada. File for letters and papers	478,695	July 12	954	237	60	205
Harvey, George H., Philadelphia, Pa. Ingrain carpet fabric	472,215	Apr. 5	328	85	59	62
Harvey, George H., Philadelphia, Pa. Woven fabric and weaving the same	472,216	Apr. 5	330	85	59	62
Harvey, George H., assignor of three-fourths to J. Getty, Jr., Pittsburg, Pa., G. D. Bayand and G. F. Perrenoud, New York, N. Y. Apparatus for burning oil	482,508	Sept. 13	987	239	60	1542
Harvey, George L., Chicago, Ill. Slack-adjuster for car-brakes	477,842	June 28	2595	650	59	1993
Harvey, John, Brooklyn, N. Y. Adjustable scraper for roller-mills	481,866	Aug. 30	3444	845	60	1299
Harvey L. Hopkins Company. (See Hopkins, Harvey L., assignor.)						
Harvey, Patrick, Chicago, Ill. Siphon for water-closet tanks	477,841	June 28	2592	650	59	1992
Harvey, Turlington W. (See Wilcox, George, assignor.)						
Harwell, George B. (See Davis and Harwell.)						
Hasbrouck, F. M. (See Rasov, John D., assignor.)						
Hasbrouck, Frances J. (See Haring, William N., assignor.)						
Hasbrouck, Frances J. (See Stoner, John B., assignor.)						
Hascall, Charles A. (See Culver and Hascall.)						
Haselwander, Frederic, Frankfort, Germany. Lightning-arrester	477,656	June 28	2290	573	59	1933
Haskell, Charles P., Wichita, Kans. Corn-harvester	473,926	May 3	63	13	59	648
Haskell, Charles S. and W. E., Philadelphia, Pa. Organ	488,559	Dec. 27	2177	538 539	61	1803
Haskell, Frank, Westbrook, Me. Machine for drying warps	485,694	Nov. 8	827	221 222	61	758
Haskell, Frank H., Revere, Mass. Duplex pressure-gage	471,383	Mar. 22	2701	689	58	1651
Haskell, Frank H., Revere, Mass. Duplex pressure-gage	4-3,613	Oct. 4	144	36	61	30
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Multicharge-gun	484,007	Oct. 11	735	184	61	165
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Projectile	484,008	Oct. 11	736	184	61	165
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Multicharge or accelerating gun	484,009	Oct. 11	737	184 185	61	166
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Multicharge-gun	484,010	Oct. 11	740	185 186	61	166
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Multicharge-gun	484,011	Oct. 11	742	186	61	167
Haskell, James R., assignor to J. W. Haskell, Passaic, N. J. Ordnance	484,012	Oct. 11	743	186	61	167
Haskell, Julia W. (See Haskell, James R., assignor.)						
Haskell, Loring B., et al. (See Palson, Magnus J., assignor.)						
Haskell, William E. (See Haskell, Charles S. and W. E.)						
Haskett-Smith, Edmund L. W., Westminster, England. Range-finder	470,487	Mar. 8	1349	350 351	58	1365
Haskin, Samuel E., Avoca, N. Y. Process of and apparatus for vulcanizing wood	488,967	Dec. 27	2824	697	61	1936
Haskins, Alfonso, A. R. Schulenburg, and C. T. Chadwick; said Haskins assignor of one-eighth to C. C. Loomis, San Diego, Cal. Bituminous-rock-disintegrating steam-boiler	475,278	May 17	2218	569	59	1094
Haskins, L. S. (See Williams, Florence, assignor.)						
Haskins, Roselle W. (See Hockley, Edgar A., assignor.)						
Haslam, Henry, assignor to J. A. Traut, New Britain, Conn. Beam-compasses	476,380	June 7	241	59	59	1484
Haslop, George H., Worcester, Mass. Oar-lock	471,546	Mar. 29	2933	746	58	1703
Haslop, Gilbert A., Laurel, Md. Car-coupling	472,877	Apr. 12	1312	337	59	262
Hasnall, Samuel J. K., Penrith, New South Wales. Automatic signal and brake mechanism for locomotives	488,892	Dec. 27	2696	667 668	61	1903
Hassan, Midbury W., Rochester, N. Y. Electric store-service apparatus	470,428	Mar. 8	1258	322	58	1348
Hassan, Midbury W., Rochester, N. Y. Electric telephage apparatus	471,790	Mar. 29	3320	845	58	1774
Hasse, Julius C., Detroit, Mich. Hanger for garments	477,412	June 21	1884	463	59	1836
Hasselbauer, Alexander and L., New York, N. Y. Bridle	487,565	Dec. 6	538	138	61	1428
Hasselbauer, Louis. (See Hasselbauer, Alexander and L.)						
Hassell, Richard L., Chicago, Ill. Conveyor and screen	479,742	July 26	2654	658	60	555
Hassenzahl, Louis W., Toledo, Ohio. Temporary binder	482,524	Sept. 13	1021	247	60	1549
Hasson, Robert, Gadsden, Ala. Combined cultivator and planter	486,712	Nov. 22	2436	634	61	1112
Hasson, Robert, Gadsden, Ala. Planter and fertilizer-distributor	488,356	Dec. 20	1857	465	61	1724
Hasten, Emery A., assignor of one-third to R. C. Maxwell, High Point, N. C. Tobacco stick or hanger	470,124	Mar. 1	718	179	58	1239
Hastings, Azariah H., New York, N. Y. Piano	466,346	Jan. 5	58	15	58	14
Hastings, Azariah H., New York, N. Y. Piano	468,135	Feb. 2	344	86	58	591
Hastings, Azariah H., New York, N. Y. Piano-case	469,341	Feb. 23	2237	574	58	988
Hastings, Azariah H., New York, N. Y. Pedal-foot for pianos	480,696	Aug. 9	1519	378	60	884
Hastings, Edwin G., Des Moines, Iowa. Crib for feeding cattle	467,973	Feb. 2	94	23	58	543
Hastings, Henry M., Cooksville, Ill. Grain-conveyor	472,454	Apr. 5	696	178	59	131
Hastings, James L., Philadelphia, assignor to L. G. McCauley, West Chester, Pa. Apparatus for heating boilers by gaseous fuel	483,352	Sept. 27	2334	587	60	1829
Hastings, Matthew E., assignor of one-half to W. S. Walcott, New York Mills, N. Y. Sheet-metal-folding machine	485,192	Nov. 1	58	18	61	584
Hastings, Walter W., Jersey City, N. J., and F. D. Foster, assignors to Lagerman Typotheter Company, New York, N. Y. Type-setting machine	480,497	Aug. 9	1203	301 302	60	822
Haswell, Alanson M., assignor of one-half to J. C. Plumb, Springfield, Mo. Means for propelling boats	481,113	Aug. 16	2182	540	60	1028
Haswell, Alexander E. and A. G., Vienna, Austria-Hungary. Coating metals and alloys with oxides	476,639	June 7	621	59	59	1560
Haswell, Alfred M., Chicago, Ill. Curtain-fixture	471,114	Mar. 22	2293	589	58	1572
Haswell, Arthur G. (See Haswell, Alexander E. and A. G.)						
Hatch, Charles J., Bayonne, N. J. Seesaw	477,052	June 14	1253	311 312	59	1707
Hatch, Charles J., Augusta, Me., assignor to Dutcher Temple Company, Hopedale, Mass. Loom-temple	484,364	Oct. 11	1283	327	61	273

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hatch, Edward B., and C. A. Colton, assignors to Johns-Pratt Company, Hartford, Conn. Electro-magnetic bobbin	479,804	Aug. 2	46	11	60	591
Hatch, Ellis S., Willard, and J. P. Hutchinson, Auburn, Me., assignors to said Hutchinson. Milk-can	468,768	Feb. 9	1340	339	58	796
Hatch, John, San Francisco, Cal. Dredging implement	485,193	Nov. 1	61	19	61	585
Hatch, John R., Sugar Lake, Mo. Traction-engine	474,738	May 10	1369	347	59	912
Hatch, Walter P., Chicago, Ill. Pruning implement	485,793	Nov. 8	969	260	61	788
Hatcher, Judson N., assignor to himself and R. J. Wilson, Montgomery, Mo. Wire-stretcher	482,555	Sept. 13	1073	260	60	1558
Hatchett, Pink G. (See McKee and Hatchett.)						
Hatfield, Albert L., Newark, N. J. Bottle-filling machine	476,795	June 14	866	213	59	1622
Hatfield, Emerson E., Bethany, Mo. Cultivator	471,218	Mar. 22	2155	624	58	1603
Hatfield, James, Cincinnati, Ohio. Fireback for stoves	488,199	Dec. 20	1592	398	61	1673
Hatfield, James, and J. M. Bennett, Cincinnati, Ohio; said Bennett assignor to said Hatfield. Fireback for stoves	471,547	Mar. 29	2934	747	58	1703
Hatfield, James I., Irwinton, Ga. Plow	472,348	Apr. 5	538	139	59	100
Hatfield, Thomas J., Dublin, Ind., assignor of one-half to J. C. Benson, Alcony, Ohio. Grain-cleaner	477,594	June 21	2170	538	59	1894
Hathaway, Charles A., and J. W. Golden, Staplehurst, Nebr. Pool-gamo register	470,048	Mar. 1	605	150	58	1217
Hathaway, Edgar F., Hornellsville, N. Y. Machine for making wire-fence strands	471,669	Mar. 29	3107	{ 790 791 792 }	58	1734
Hathaway, Merrill H., Springfield, Mass. Brush-holder for dynamos and motors	478,104	July 5	41	13	60	11
Hathaway, Philip, New York, N. Y. Medical battery	474,828	May 17	1521	388	59	955
Hathorn, Oliver B., assignor of one-third to B. L. Gould, Milo, Me. Rein-holder	488,975	Dec. 27	2838	700	61	1939
Hattersley, Richard L., et al. (See Kellett, Rufus, assignor.)						
Hauk, Charles C., and J. F. Dasha, San Francisco, Cal. Car-coupling	488,120	Dec. 13	1459	368	61	1630
Hauk, Albert, Jewett, Ohio. Door-stop	475,686	May 24	2855	721	59	1232
Haufl, Henry A., Brooklyn, N. Y. Piano attachment	482,737	Sept. 20	1354	335	60	1625
Haug, Fidel, New Orleans, La. Burial apparatus	468,995	Feb. 16	1720	438	58	880
Haug, John, Norristown, Pa. Propeller-dam for twin screw vessels	473,745	Apr. 26	2771	{ 696 697 }	59	575
Haugh, Benjamin F., Indianapolis, Ind. Coping-machine	467,720	Jan. 26	2367	566	58	461
Haugh, Benjamin F., Indianapolis, Ind. Cushioned car-wheel	467,721	Jan. 26	2369	587	58	461
Haugh, Benjamin F., Indianapolis, Ind. Coping-machine	467,861	Jan. 26	2530	{ 641 642 }	58	504
Haugh, Benjamin F., Indianapolis, Ind. Car-wheel	480,922	Aug. 16	1865	465	60	969
Hanghwaout, John W., assignor to A. S. Billings, Omaha, Nebr. Rubber-dam clamp	487,670	Dec. 6	701	179	61	1460
Hauptmann, Charles, and J. Schwarz, Chicago, Ill. Apparatus for manufacturing malt	479,421	July 26	2129	531	60	455
Hause, Peter A., Baltimore, Md. Meat-tendering implement	471,973	Mar. 29	3572	912	58	1833
Hausmann, Caspar F., St. Gallen, Switzerland. Capsule-filler	487,886	Dec. 13	1069	268	61	1550
Hansold, Alwin. (See Palmer, Arthur, assignor.)						
Hausperger, Frank, et al. (See Bechler, Charles W., assignor.)						
Hanss, Augustus P., New Albany, Ind. Mail-bag catcher and deliverer	480,385	Aug. 9	1027	258	60	789
Haussmann, Hermann, Chicago, Ill. Veterinary truss	480,323	Aug. 9	936	236	60	771
Hausner, Konrad, Ingolstadt, Germany. Vehicle-wheel	486,106	Nov. 15	1490	392	61	910
Haven, Albert C., West Bay City, Mich. Disinfecting apparatus	467,167	Jan. 19	1424	363	58	287
Haven, James L. (See Matthews, Edwin S., assignor.)						
Havenstrite, David J. (See Hodges and Havenstrite.)						
Haviland, Charles A., Brooklyn, N. Y. Fish-hook	471,548	Mar. 29	2935	747	58	1703
Hawes, Alonzo A., Wallingford, Conn. Tool for setting plants	486,713	Nov. 22	2438	635	61	1112
Hawes, Herbert E., assignor of one-half to C. H. Edgar, trustee, Brooklyn, N. Y. Machine for grinding or truing lathe-centers	478,599	July 12	826	204	60	180
Hawes, Jacob H., Boston, Mass. Apparatus for creasing and shaping coat-collars	488,560	Dec. 27	2185	{ 539 540 541 }	61	1805
Hawes, Willard L., Wakefield, Mass. Piano-action	480,014	Aug. 2	399	98	60	657
Hawk, Walter D., Rock Island, and O. S. French, Monmouth, Ill. End-gate	481,491	Aug. 23	2826	695	60	1163
Hawes, William L., Cincinnati, Ohio. Running-gear for vehicles	476,535	June 7	466	111	59	1529
Hawes, William L., assignor to Dash and Carriage Goods Company, Cincinnati, Ohio. Dash for vehicles	474,634	May 16	1202	366	59	879
Hawk, Hale E., Bucyrus, Ohio. Weighing and bagging machine	472,455	Apr. 5	697	{ 178 179 }	59	132
Hawkins, Edward S., assignor of one-half to E. G. S. Miller, Buffalo, N. Y. Car-coupling	474,992	May 17	1783	{ 450 451 }	59	1067
Hawkins, Fletcher M., Scotland, Ark. Monument	471,758	Mar. 29	3256	829	58	1761
Hawkins, Frank F., Troy, N. Y. Eyelet	483,784	Oct. 4	398	99	61	83
Hawkins, Frederick H., New York, N. Y. Combined sink and washtub	475,941	May 31	3288	830	59	1329
Hawkins, James L., Fresno, Cal. Culinary boiler	467,480	Jan. 19	1902	486	58	379
Hawkins, John T. (See Hawkins, William C., assignor.)						
Hawkins, John T., Taunton, Mass. Combined calendar and desk article	474,449	May 10	920	236	59	825
Hawkins, John T., Taunton, Mass. Graduating steam-radiator	481,789	Aug. 30	3321	811	60	1276
Hawkins, John W. (See Jaynes and Hawkins.)						
Hawkins, William C., Taunton, Mass. Calendar	475,500	May 24	2573	655	59	1177
Hawkins, William C., Taunton, Mass. Calendar	475,501	May 24	2574	{ 656 657 }	59	1178
Hawkins, William C., Taunton, Mass. Calendar	475,502	May 24	2582	657	59	1179
Hawkins, William C., assignor to J. T. Hawkins, Taunton, Mass. Calendar	467,114	Jan. 12	1331	{ 336 337 }	58	262
Hawkins, William C., assignor to J. T. Hawkins, Taunton, Mass. Calendar	467,115	Jan. 12	1334	337	58	262
Hawkins, William C., assignor to J. T. Hawkins, Taunton, Mass. Calendar	467,116	Jan. 12	1336	337	58	263
Hawkins, William C., assignor to J. T. Hawkins, Taunton, Mass. Calendar	467,117	Jan. 12	1338	{ 338 339 340 341 342 343 }	58	263
Hawkins, William C., assignor to J. T. Hawkins, Taunton, Mass. Calendar	467,119	Jan. 12	1344	{ 342 343 }	58	264
Hawks, Archie M., Tacoma, Wash. Wooden pipe	478,165	July 5	43	13	60	11
Hawks, Enos S., Cummington, Mass. Scrubbing-machine	466,681	Jan. 5	585	151	58	113
Hawksley, John, Philadelphia, Pa. Implement for putting seams	471,115	Mar. 22	2295	589	58	1573
Hawley, Eugene W. (See Dozier and Hawley.)						
Hawley, Frank J., Phelps, N. Y. Box-nailing machine	469,139	Feb. 16	1917	491	58	920
Hawley, Lew M., Schenectady, N. Y. Trap and siphon	475,396	May 24	2404	614	59	1146

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Hawley, Mary A., Dixon, Ill. Device for applying insecticides.....	472,456	Apr. 5	702	179	59	133
Hawley, Melville C., St. Louis, Mo. Furnace.....	488,893	Dec. 27	2698	668	61	1908
Hawley, Robert C., Pueblo, Colo. Ore-sampling device.....	475,557	May 24	2670	679	59	1195
Hawley, William D., and S. J. Hogan, Syracuse, N. Y. Proportional meter.....	479,759	July 26	2680	665	60	560
Haworth, Charles N., Promise City, Iowa. Hay-stacker.....	474,246	May 3	554	136	59	745
Haworth, George D., Chicago, Ill. Check-row wire.....	460,403	Feb. 23	2339	601	58	1008
Haworth, George D., Chicago, Ill. Fertilizer-distributor.....	474,635	May 10	1203	307	59	879
Haworth, George D., Ackworth, Iowa. Corn cutting and shocking machine.....	482,355	Sept. 13	738	{ 177 178 232 223 }	60	1494
Haworth, Joseph, Church, England. Apparatus for washing fabrics.....	485,695	Nov. 8	829	{ 232 223 }	61	759
Haworth, William M., Decatur, Ill. Flushing apparatus for waste-pipes.....	476,012	May 31	3393	856	59	1350
Haworth, William M., Decatur, Ill. Blacksmith's tongs.....	478,600	July 12	829	204	60	180
Hawthorne, Samuel R., Middlebury, Vt. Roof.....	476,381	June 7	242	59	59	1484
Hawthornthwaite, James H., San Francisco, Cal. Amalgamator.....	469,566	Feb. 23	2590	665	58	1057
Hay, A. W., et al. (See Starks, John, assignor.)						
Hay, Amasa P., Goshen, Ind. Windmill-governor.....	469,315	Feb. 23	2200	564	58	980
Hay, Archibald, Woodstock, Canada. Loom for weaving cane, &c.....	469,473	Feb. 23	2445	{ 627 628 }	58	1028
Hay, Gilbert, assignor of one-half to H. Rose, Fayette, Mo. Stapling implement.....	482,357	Sept. 13	741	178	60	1495
Hay, Gilbert, assignor to himself and E. Jacobs, Madison, Nebr. Staple-driving machine.....	477,117	June 14	1386	337	59	1727
Hay, John C., assignor to himself and S. Oettinger, Kingston, N. C. Lumber-drier.....	473,116	Apr. 19	1714	434	59	349
Hay, Walter, assignor to E. B. Towne, Chicago, Ill. Chiff-holder.....	487,527	Dec. 6	485	127	61	1416
Hay, William G., Concordia, Kans. Weed-cutter for railway-tracks.....	483,150	Sept. 27	1990	504	66	1764
Haycox, Edward, Detroit, Mich. Sight-feed connection for lubricators.....	466,785	Jan. 12	771	200	58	156
Hayden & Derby Manufacturing Company. (See Derby, John N., assignor.)						
Hayden, Henry A., Jersey City, N. J., assignor to Hayden Specialty Company, of New Jersey. Combined infant's crib and chair.....	483,218	Sept. 27	2107	534	66	1788
Hayden, Henry F. (See Rossell and Hayden.)						
Hayden, Henry F., Washington, D. C. Fire-hydrant.....	485,409	Nov. 1	403	108	61	655
Hayden, James, Philadelphia, Pa. Necktie-fastener.....	473,154	Apr. 19	1777	449	59	362
Hayden, James T., assignor to Crane Company, Chicago, Ill. Valve-indicator.....	477,003	June 14	1204	292	59	1691
Hayden, James T., assignor to Crane Company, Chicago, Ill. Low-water alarm.....	477,004	June 14	1205	{ 292 293 }	59	1691
Hayden, James T., assignor to Crane Company, Chicago, Ill. Coupling for air-brakes.....	481,651	Aug. 30	3081	752	60	1229
Hayden, John W., Fort Wayne, Ind. Conduit for electric railways.....	487,735	Dec. 13	816	208	61	1500
Hayden Specialty Company. (See Hayden, Henry A., assignor.)						
Hayden, W. S., et al. (See Campbell, William A., assignor.)						
Haydon, Charles E., et al. (See Collins, Olmstead, assignor.)						
Hayes, Calvin Q., Sioux City, Iowa. Self-loading cart.....	475,687	May 24	2855	722	59	1232
Hayes, Charles E., and H. L. Millay, Springview, Nebr. Folding umbrella or parasol.....	472,457	Apr. 5	703	179	59	133
Hayes, Edward, Rochester, N. Y. Regulator.....	477,253	June 21	1634	398	59	1788
Hayes, Eli B., Oshkosh, Wis. Sash-machine.....	476,202	May 31	3703	{ 935 936 }	59	1411
Hayes, Eli B., Oshkosh, Wis. Cut-off saw.....	477,756	June 28	2452	613	59	1966
Hayes, Eli B., Oshkosh, Wis. Molding and blind-slat-planing machine.....	487,348	Dec. 6	176	49	61	1355
Hayes, Erastus, et al. (See Beers, Franklin H., assignor.)						
Hayes, George, New York, N. Y. Fireproof ceiling.....	486,982	Nov. 29	2919	753	61	1225
Hayes, George D., Chetek, Wis. Combined buckle and snap-hook.....	487,325	Dec. 6	146	42	61	1349
Hayes, George R. (See Smith and Hayes.)						
Hayes, Hammond V., Cambridge, Mass. Electric cable.....	469,522	Feb. 23	2526	649	58	1043
Hayes, Hammond V., Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Telephone-support.....	469,474	Feb. 23	2449	628	58	1029
Hayes, Hammond V., Cambridge, assignor to American Bell Telephone Company, Boston, Mass. Telephone-circuit.....	474,323	May 3	696	181	59	771
Haves, Hammond V., Cambridge, and J. S. Stone, assignors to American Bell Telephone Company, Boston, Mass. Electric cable.....	469,475	Feb. 23	2451	628	58	1029
Hayes, Hammond V., Cambridge, and W. L. Richards, Malden, assignors to American Bell Telephone Company, Boston, Mass. Telephone.....	487,219	Nov. 29	3284	838	61	1295
Hayes, Henry B., Woburn, Mass. Sash-holder.....	477,801	June 28	2517	632	59	1978
Hayes, Hulbert, Elizabethtown, Ohio. Boiler-cleaner.....	483,919	Oct. 4	595	151	61	123
Hayes, Joel A., Carson City, Nev. Electric-arc lamp.....	484,199	Oct. 11	1011	{ 258 259 }	61	220
Hayes, John A., Rogers, Ark. Hay-press.....	470,488	Mar. 8	1352	352	58	1365
Hayes, John A., Rogers, Ark. Hay-press.....	472,349	Apr. 5	540	{ 139 140 }	59	101
Hayes, John E. (See Potter, Henry W., assignor.)						
Hayes, John J. (See Holden and Hayes.)						
Hayes, John J., Brooklyn, N. Y. Veneer-cutter.....	467,577	Jan. 26	2083	528	58	419
Hayea, Peter P., Ellendale, Va. Corn-planter.....	483,217	Sept. 27	2106	534	60	1787
Hayes, Thomas R. (See Stetson, Alva M., assignor.)						
Haynes, Charles B. (See Haynes, James E. and C. B.)						
Haynes, Charles M., Chillicothe, Ohio. Tool for ornamenting the surfaces of wood.....	481,868	Aug. 30	3447	846	60	1299
Haynes, James E. and C. B., Ames, Ill. Hay-rack.....	479,878	Aug. 2	159	39	60	613
Haynes, Thomas J. (See Pugh, John W., assignor.)						
Haynes, Tilly, Boston, Mass. Centrifugal drier.....	477,413	June 21	1885	464	59	1837
Haynes, William, Chicago, Ill. Bridge-gate.....	474,125	May 3	370	89	59	709
Hays, Elijah, Warsaw, Ind. Horse-detacher.....	483,059	Sept. 20	1851	470	60	1726
Hays, Frederick B., and C. E. Tefft, Fall River, Mass. Strainer for tea or coffee pots.....	471,116	Mar. 23	2296	589	58	1573
Hays, James C., assignor of one-half to J. J. Murray, Rusk, Tex. Messenger's picket.....	481,867	Aug. 30	3446	846	60	1299
Hays, John W., Clinton, Ill. Harrow.....	477,541	June 21	2090	530	59	1878
Hays, Morris, Monmouth, Ill. Hand fence-machine.....	472,167	Apr. 5	242	64	59	46
Hayter, William. (See Terry and Hayter.)						
Haythorn, William, assignor to W. S. Haythorn, Chicago, Ill. Automatic valve for steam-radiators.....	467,883	Jan. 26	2565	649	58	510
Haythorn, William S. (See Haythorn, William, assignor.)						
Hayton, John W., and S. H. Swift, Taylor, Tex. Cabinet-bed.....	476,923	June 14	1077	{ 259 260 }	59	1665
Hayward, David S., Brooklyn, N. Y. Rider for pulley-lines.....	465,098	Feb. 2	282	69	58	579
Hayward, Edward R. (See Calef, Joseph W., assignor.)						
Hayward, Edwin S., Jr. (See Parker and Crapo, assignors.)						
Hayward, Isaac H., Lawrence, Mich. Wheel check.....	472,997	Apr. 19	1519	338	59	315
Hayward, Thomas J., et al. (See Austin, John T., assignor.)						
Hayward, Thomas S. (See Sigshoe, Hayward, and Anderson.)						
Hazard, Dexter, assignor of one-half to F. O. Clark, Marquette, Mich. Saw.....	486,226	Nov. 15	1668	441	61	945

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hazard, Willet E., Buffalo, assignor to H. F. McCann and W. S. Wickham, Salamanca, N. Y. Machine for sharpening matcher-heads	484,094	Oct. 11	853	216	61	189
Hazeltine, Charles W., assignor to Hazeltine Electric Company, St. Louis, Mo. Electrode for arc lamps	487,220	Nov. 29	3286	839	61	1296
Hazeltine Electric Company. (See Hazeltine, Charles W., assignor.)						
Hazelton, Ivory, Philadelphia, Pa. Car-coupling	477,414	June 21	1886	464	59	1837
Hazelton, James P., New Straitsville, Ohio. Brick-truck	470,193	Mar. 8	845	208	58	1272
Hazen, James W. (See Harper, William T., assignor.)						
Hizlehurst, George B. (See Cole and Hazlehurst.)						
Hazletine, S. A., et al. (See Bartlett, Henry F., assignor.)						
Hazletine, S. C., et al. (See Bartlett, Henry F., assignor.)						
Hazzard, Miley, Kansas City, Mo. Coin-mailing grip	475,397	May 24	2406	614	59	1146
Heacock, Mansel E., and T. H. Lovejoy, Portland, Oreg., assignors to Columbia Car and Tool Works, of Oregon. Car	470,125	Mar. 1	719	179	58	1239
Head, John, assignor of one-half to H. O. Webber, King William's Town, Cape Colony. Starting-gear for high-speed rotary machines	478,541	July 5	745	181	60	148
Head, Thomas, Mankato, Minn. Potato-harvester	470,126	Mar. 1	721	179	58	1239
Head, Winfield S. (See Thurston, James B., assignor.)						
Heady, Charles B., and J. S. Carrow, Philadelphia, Pa. Mounting metallic ornaments upon glass, &c.	479,743	July 26	2657	659	60	555
Heagerty, Michael, Baltimore, Md. Toe-weight	486,671	Nov. 22	2371	620	61	1098
Heald, William F., New York, N. Y. Printing	479,508	July 26	2224	571	60	486
Healea, George G. (See Healea, John and G. G.)						
Healea, John and G. G., Farmer City, Ill. Corn-conveyer	486,466	Nov. 22	2048	542	61	1035
Healey, Joseph S., Boston, Mass. Glove-fastening	467,974	Feb. 2	95	23	58	543
Healy, Dorus, Dansville, N. Y. Copying-press	478,601	July 12	829	205	60	180
Healy, James A., Nashville, Tenn. Car heating and ventilating system	485,036	Oct. 25	2339	614	61	520
Heaphy, John W., Jr., assignor to F. G. Kimman, Rochester, N. Y. Stove-door knob	474,471	May 10	946	244	59	830
Heaphy, John W., Jr., assignor to F. G. Kimman, Rochester, N. Y. Cord-adjuster for electric lamps	479,509	July 26	2284	571	60	486
Heard, James, Delta, Colo. Tool for operating on wires of fences	477,005	June 14	1208	293	59	1691
Heard, Thomas H., and W. K. Birkinshaw, Derby, England. Crank-handle fastening	481,262	Aug. 23	2455	605	60	1091
Hearne, John, New York, N. Y., assignor of one-half to W. P. Elliott, New Brunswick, N. J. Center seal	485,629	Nov. 8	727	190	61	737
Heartfield, Charles H., et al. (See Heartfield, Henry, assignor.)						
Heartfield, Henry, Croydon, assignor of two-thirds to T. Webb, Stockport, England, and C. H. Heartfield, New York, N. Y. Machine for filling and corking bottles	474,044	May 3	258	63	59	687
Heartfield, Henry, Croydon, assignor of two-thirds to T. Webb, Stockport, England, and C. H. Heartfield, New York, N. Y. Bottle and stopper	482,682	Sept. 13	1252	305	60	1593
Heartley, George W., Toledo, Ohio. Eaves-trough hanger	473,294	Apr. 5	449	116	59	85
Heath, Alfred H., et al. (See Watson, Nelson M., assignor.)						
Heath, Alfred R., Covington, Ind. Car-coupling	467,807	Jan. 26	2410	620	58	447
Heath, Charles F., Jersey City, N. J. Car-truck	470,925	Mar. 15	2013	515	58	1506
Heath, Charles F., assignor of one-half to W. M. Taylor, Durham, Cal. Saw set and gage.	482,250	Sept. 6	533	127	60	1438
Heath, Clarence V., and A. G. Milzer, Sacramento, Cal. Car-ventilator	474,247	May 3	555	136	59	745
Heath, Edward E. (See Richard, Ogden, and Heath.)						
Heath, Elmer E., Eldred, Pa. Lock for show-cases	470,673	Mar. 15	1613	419	58	1428
Heath, Elroy N., Boston, Mass. Package-carrier for velocipedes	479,069	July 19	1544	386	60	329
Heath, Frederick H., Minneapolis, Minn., assignor to Heath Rail Joint Company, Waterloo, Iowa. Truss-rail joint fastening	474,126	May 3	373	90	59	709
Heath, Frederick H., Minneapolis, Minn., assignor to Heath Rail Joint Company, Waterloo, Iowa. Rail-chair, tie-plate, truss-joint, and joint-fastening	474,127	May 3	374	90	59	710
Heath, Frederick H., Minneapolis, Minn., assignor to Heath Rail Joint Company, Waterloo, Iowa. Combined rail-brace and truss-fastening for rail-joints	474,128	May 3	376	90	59	710
Heath, Frederick H., Minneapolis, Minn., assignor to Heath Rail Joint Company, Waterloo, Iowa. Rail-joint	474,129	May 3	378	91	59	711
Heath, George S., Springfield, Mass. Type-writing machine	475,057	May 17	1879	476	59	1026
Heath, Henry, Brooklyn, assignor to H. G. Fisk, T. R. Clark, and T. J. Flagg, New York, N. Y. Necktie	478,008	June 28	2833	713	59	2049
Heath, John M., et al. (See Campbell, Lawrence S., assignor.)						
Heath, John M., Talbotton, Ga. Device for measuring shot	479,982	Aug. 2	326	80	60	644
Heath Rail Joint Company. (See Heath, Frederick H., assignor.)						
Heath, Samuel P., Saginaw, Mich. Car-coupling	472,350	Apr. 5	541	140	59	101
Heath, Samuel P., Saginaw, and T. Burr, Detroit, Mich.; said Burr assignor to said Heath. Car-coupling	475,239	May 17	2162	550	59	1082
Heath, Thomas T., Loveland, and A. N. Verdin, Glendale, Ohio; said Verdin assignor to said Heath. Typographic machine	483,252	Sept. 27	2158	547	60	1797
Heath, William B., et al. (See Watson, Nelson M., assignor.)						
Heathfield, Richard, Darlaston, England. Apparatus for coating metal sheets	478,282	July 5	351	85	60	71
Heaton, Eva, Holly Beach, N. J. Stage effect	473,927	May 3	67	13	59	619
Heaton, John. (See Leach, Heaton, and Bentley.)						
Heaton Peninsular Button Fastener Company. (See Ray, Frederick A., assignor.)						
Hebbard, Albert H., Cleveland, Ohio, assignor to H. A. Penrose, New London, Conn. Carrier for target-traps	468,175	Feb. 2	406	101	58	603
Heberling, Henry. (See Heberling, William L. and H.)						
Heberling, John, Rochester, assignor of one-half to H. S. Southworth, Binghamton, N. Y. Ice-cream freezer	470,360	Mar. 8	1144	293	58	1327
Heberling, William L. and H., Havana, Ill. Metal roofing	468,015	Feb. 2	165	40	58	556
Heberling, William L. and H., Havana, Ill. Roofer's bending-tool	468,016	Feb. 2	166	41	58	556
Heberling, William L. and H., Havana, Ill. Roofer's bending-tool	471,637	Mar. 29	3060	779	58	1725
Hebron, Charles R., assignor of five-sevenths to C. J. Everson, Denver, Colo., M. W. Hutchinson, Topeka, Kans., and C. T. Brown, Chicago, Ill. Concentrating ores	474,829	May 17	1523	388	59	956
Hebron, Charles B., and C. J. Everson, Denver, Colo. Concentrating ores	471,174	Mar. 22	2382	608	58	1589
Hecht, Jonas. (See Swiss, Morris R., assignor.)						
Hochman, Olive M., Washington, D. C. Effervescent beverage	482,738	Sept. 20	1355	.....	60	1625
Heckmeroth, Louis. (See Lenzen and Heckenroth.)						
Heckert, Frank L. (See Heckert, Thomas, and Heckert.)						
Heckert, William, W. J. Thomas and F. L. Heckert, Findlay, Ohio. Furnace for iron-working	475,398	May 24	2408	614	59	1140
Heckman, John K., et al. (See Kemmerer, John N., assignor.)						
Heckman, Milton O., Reading, Pa. Hatchet	474,908	May 17	1640	419	59	980

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hecox, John H., Westborough, Mass. Machine for softening cotton braid	473,747	Apr. 26	2774	697	59	576
Hedgeland, Frederick W., Chicago, Ill. Pneumatic action for organs	476,796	June 14	867	214	59	1623
Hedgeland, Frederick W., Chicago, Ill. Miter-clamp	477,254	June 21	1636	399	59	1788
Hedgeland, Frederick W., Chicago, Ill. Pneumatic action for organs	488,607	Dec. 27	2259	560	61	1820
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Folding keyboard for organs	469,242	Feb. 23	2085	536	58	959
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Detachable keyboard for organs	469,243	Feb. 23	2086	536	58	959
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Octave-coupler for folding keyboards for organs	469,699	Mar. 1	45	14	58	1107
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Bellows for organs	470,241	Mar. 8	917	226	58	1286
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Blowing apparatus for organs	470,242	Mar. 8	918	227	58	1286
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Qualifying-box for bass-reeds of organs	472,998	Apr. 19	1519	388	59	316
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Device for throwing couplers of organs into action	476,266	June 7	57	12	59	1449
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Organ-coupler	476,267	June 7	58	12	59	1449
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Rack for musical instruments	478,602	July 12	833	205	60	181
Hedin, Nels P. (See Quanström, Charles E., assignor.)						
Heepe, Conrad, Frankfort-on-the-Main, assignor to Vereinigte Holzindustrie, Fabrik Frankenthal, Frankenthal, Germany. Substitute for wood and leather	488,809	Dec. 27	2571	638	61	1882
Heermans, Thaddeus W., Chicago, Ill. Guide-lubricator	467,168	Jan. 19	1426	364	58	287
Heermans, Thaddeus W., Chicago, Ill., assignor, by mesne assignments, to National Company, of Illinois. Elevator-control gear	468,520	Feb. 9	965	245	58	721
Heermans, Thaddeus W., assignor to Elevator Supply and Repair Company, Chicago, Ill. Indicator for elevators	479,422	July 26	2124	531	60	456
Heermans, Thaddeus W., Chicago, Ill., assignor, by mesne assignments, to National Company, of Illinois. Limit-stop for elevators	480,563	Aug. 9	1334	332 333	60	849
Heeter, Charles M. (See Boyd, William F., assignor.)						
Heffner, George, Lima, Ohio. Sash-holder	470,914	Mar. 15	1981	566	58	1499
Heffner, George W., Montgomery county, Ohio. Automatic match-safe	481,696	Aug. 30	3153	769	60	1242
Heflin, Henry M., Baltimore, Md., assignor of one-half to G. Draper & Sons, Hopedale, Mass. Silver-tension regulator for roving-machines	486,252	Nov. 15	1716	452	61	955
Hefner-Altenack, Friedrich von, Berlin, Germany. Temporary binder	480,324	Aug. 9	931	236	60	771
Hegemann, Henry F., Milwaukee, Wis. Folding square	488,422	Dec. 20	1670	417	61	1688
Hegglund, Oliver, Oakland, Neb. Corn-planter	467,099	Jan. 12	1289	327	58	253
Heggun, William. (See Bunce, Levi P., assignor.)						
Hegler, Lizzie, Toronto, Canada. Dish-cleaner	477,415	June 21	1886	464	59	1837
Heide, Henry, New York, N. Y. Candy-cream heater and cooler	470,822	Mar. 15	1853	475	58	1474
Heide, Henry, New York, N. Y. Apparatus for cooling hot liquid sugar	470,823	Mar. 15	1855	475	58	1475
Heidel, Gustavos, assignor to L. Krickhaus and R. Merkle, St. Louis, Mo. Gasoline-torch	486,039	Nov. 8	1361	362	61	868
Heidelberg, Samuel R., Palestine, Tex. Draw-bar for locomotives	480,923	Aug. 16	1867	466	60	969
Heidenhain, Heinrich, Chicago, Ill., assignor to W. Zinsser & Co., New York, N. Y. Manufacture of disinfectants	479,710	July 26	2593		60	544
Heidenreich, Eyvind L., Chicago, Ill. Power-transmission for grain-elevators	469,421	Feb. 23	2367	607	58	1013
Heider, Hugo v., Vienna, and J. Schuscha, Varpalota, Austria-Hungary. Movable fire-bar	471,695	Mar. 29	3131	803	58	1742
Heidler, Adolf, Siegmars, Germany. Straight-knitting machine	471,696	Mar. 29	3152	803 804	58	1743
Heil, J. F., et al. (See Altmeyer, Matthew, assignor.)						
Heiland, Hermann, Charlottenburg, near Berlin, Germany. Scaffolding	469,567	Feb. 23	2597	665 666	58	1057
Heiland, Lawrence, and C. E. Bronson, Defiance, Ohio. Fence-post	472,705	Apr. 12	1079	277	59	216
Heilrath, John, Plymouth, Cal. Vehicle-spring	466,538	Jan. 5	366	91	58	70
Heimann, Salomon, assignor to E. B. Amend, New York, N. Y. Lubricant	484,635	Oct. 18	1714		61	370
Heimerdinger, Henry H., et al. (See Little, Robert H., assignor.)						
Heindell, John P. (See Gray, James W., assignor.)						
Heine, August, Silver Creek, N. Y. Grain-cleaner	485,845	Nov. 8	1041	279	61	802
Heine, August, Silver Creek, N. Y. Grain-cleaner	485,866	Nov. 8	1073	285 286	61	808
Heine, August, Silver Creek, N. Y. Bran-duster	485,867	Nov. 8	1077	286	61	809
Heineke, Martin, Springfield, Ill. Straw-stacker	484,427	Oct. 18	1386	354	61	305
Heinemann, David, Wabash, Ind. Annunciator	466,870	Jan. 12	916	234 235	58	184
Heinemann, Walter S., assignor to T. W. Heinemann Company, Chicago, Ill. Chest-protector	469,195	Feb. 16	2002	511	58	936
Heinig, Frederick E. (See Baoyerlin and Heinig.)						
Heinly, Anderson W., Danville, Ill. Dish-washing machine	481,027	Aug. 16	2029	506	60	1000
Heinrichs, Hermann, Kleinkiepert, near Solingen, Germany, assignor to G. W. Korn, New York, N. Y. Shears	467,808	Jan. 26	2442	620	58	487
Heintz, Christian, Buffalo, N. Y. Apparatus for purifying and aging liquors	482,843	Sept. 20	1505	374	60	1656
Heintz, Lewis J., Buffalo, N. Y. Finger-ring	484,793	Oct. 25	1985	507	61	441
Heintz, Michel, Detroit, Mich. Cash register and indicator	479,215	July 19	1773	445	60	372
Heintz, Peter, Ludwigshafen, Germany. File-cutting machine	471,219	Mar. 22	2157	621	58	1603
Heintzelman, Taylor W., and C. T. Noyes, Sacramento, Cal. Valve-gear for compound engines	471,253	Mar. 22	2503	634 635	58	1612
Heinze, Charles E., Newark, N. J. Bridle-bit	481,172	Aug. 23	2296	596	60	1062
Heinze, Paul, Chicago, Ill. Blue-printing apparatus	469,244	Feb. 23	2087	537	58	959
Heir, George, et al. (See Altmeyer, Matthew, assignor.)						
Heirs, Benjamin F. (See Compton, Richard W., assignor.)						
Heisler, Charles, Altoona, Pa. Coffee-pot	483,554	Oct. 4	57	14	61	14
Heisler, Charles L., Dunkirk, N. Y. Boot-treating machine	476,460	June 7	359	84	59	1507
Heisler, Charles L., Dunkirk, N. Y. Locomotive	482,822	Sept. 20	1480	368 369	60	1651
Heiss, Frank A., Port Jervis, N. Y. Type-writing machine	485,761	Nov. 8	929	249 250	61	780
Heister, Peter, et al. (See Heister, William, assignor.)						
Heister, William, assignor of two-thirds to P. Heister and H. B. Wittkamper, Bellevue, Ky. Joist-lifter	484,365	Oct. 11	1285	328	61	274
Heithecker, August, Long Island City, N. Y. Pressure-regulating valve	475,217	May 17	2132	537	59	1074

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Heithersay, William, <i>et al.</i> (See Russell, William R., assignor.)						
Helbach, William M., Chicago, Ill. Ventilated shoe	479,805	Aug. 2	47	11	60	591
Helbing, Theodore O., assignor of one-fourth to D. Roach, Cadillac, Mich. Fireman's respirator	472,048	Apr. 5	58	15	59	14
Held, August S., Freeport, Ill., and L. Patterson, Allegheny, Pa.; said Patterson assignor to said Held. Spring-hinge	484,200	Oct. 11	1014	259	61	221
Held, Heinrich G., Zwolle, Netherlands. Means for preventing collisions on railways	477,212	June 21	1550	380 381 382 383	59	1774
Held, Julius H., and W. H. Gruenhagen, St. Paul, Minn. Heating-drum	474,656	May 10	1237	316	59	886
Helfrich, Frank N., Hebron, Neb. Punching and shearing machine	482,356	Sept. 13	739	178	60	1495
Heliocaustic Art Company. (See Müller-Jacobs, Armand, assignor.)						
Heller, Frank, and K. Hirsch, New York, N. Y. Child's carriage	487,050	Nov. 29	3021	776	61	1244
Hellinger, Adolph, St. Louis, Mo. Regulating propellers of vessels	474,169	May 3	436	105 106	59	722
Hellstrom, Theodore H., New York, N. Y., assignor to Plume & Atwood Manufacturing Company, Waterbury, Conn. Extension-tube for lamps	478,325	July 5	413	99	60	83
Hellums, William L. (See Whitford, Clark, assignor.)						
Helmer, Oscar. (See Japy and Helmer.)						
Helmers, Ludwig O., assignor to Ichthyol-Gesellschaft Cordes, Hermann & Company, Hamburg, Germany. Therapeutical coating	478,106	July 5	44		60	11
Helms, Allen W., Aylesworth, Ind. Bridle-bit	475,110	May 17	1967	498	59	1043
Helson, Walter R. (See Coates and Helson.)						
Hemenway, George C., assignor of one-half to C. F. Imbrie, New York, N. Y. Fishing-leader	469,015	Feb. 16	1760	449	58	888
Hemenway, George C., assignor of one-half to C. F. Imbrie, New York, N. Y. Snell and gänge for fishing purposes	469,016	Feb. 16	1761	449	58	888
Hemingway, William, Philadelphia, Pa. Baling-press	472,049	Apr. 5	50	15	59	14
Hennenway, Edward A. (See Bray and Hennenway.)						
Hemmer, Frederick L. (See Fraleigh and Hemmer.)						
Hemmer, Frederick L., assignor to C. N. Arnold, Poughkeepsie, N. Y. Nursery-chair	485,382	Nov. 1	360	96, 97	61	646
Hemming, Benjamin, <i>et al.</i> (See Grellet, Frank A., assignor.)						
Hemming, Otto, <i>et al.</i> (See Grellet, Frank A., assignor.)						
Hempel, Henry A., Gotha, Fla. Suspenders	484,095	Oct. 11	855	217	61	189
Hemphill, James, and J. Fawell, Pittsburg, Pa. Governor	482,448	Sept. 13	890	215	60	1521
Hemphill, James, and J. Fawell, Pittsburg, Pa. Governor	482,449	Sept. 13	891	215 216	60	1522
Hemphill, James, and J. Fawell, Pittsburg, Pa. Governor	482,450	Sept. 13	893	216	60	1522
Hemsley, Alexander. (See Lawson, Joseph B., assignor.)						
Hench, Samuel N. (See Richey, Hench, and Dromgold.)						
Henderer, Augustus L., Wilmington, Del. Tool for expanding the ends of boiler-tubes	483,920	Oct. 4	596	151	61	123
Hendershot, Theodore H., Griswold, Iowa. Grain-adjuster	475,861	May 31	3160	802	59	1304
Henderson, Fredrick J., Chicago, Ill. Feed-water purifier	468,084	Feb. 2	263	64	58	575
Henderson, James, assignor to Sheffield Velocipede Car Company, Three Rivers, Mich. Car-truck	472,923	Apr. 12	1384	355	59	278
Henderson, John A., <i>et al.</i> (See Beal, William C., assignor.)						
Henderson, John C., New York, N. Y. Governor	487,265	Dec. 6	40	13	61	1329
Henderson, John C., New York, and F. A. Phelps, Jr., Schenectady, assignors to Edison General Electric Company, New York, N. Y. Steam-engine	480,946	Aug. 16	1900	475 476 498 499	60	976
Henderson, John H., and E. Schutz, Sierra City, Cal. Hydraulic air-compressor	475,111	May 17	1968		59	1043
Henderson, John S., Macon, Ga. Work guiding and grooving attachment for sewing-machines	477,896	June 28	2680	670	59	2008
Henderson, John T., and C. M. Lund, Council Bluffs, Iowa. Decoy-duck	470,564	Mar. 8	1449	377	58	1385
Henderson, John W., assignor to Wharton Railroad Switch Company, Philadelphia, Pa. Electrical indicator	472,500	Apr. 5	774	197	59	147
Henderson, Thomas, Dallas, Tex. Combined pump and motor	474,248	May 3	556	137	59	746
Henderson, Thomas, Liverpool, England. Grate	482,556	Sept. 13	1074	260	60	1558
Henderson, William, Chicago, Ill. Bar and fastening for sashes and like structures	482,087	Sept. 6	209	65	60	1388
Henderson, William, Chicago, Ill. Rail for securing glass	484,590	Oct. 18	1633	415	61	355
Henderson, William B. (See Birch, John T., assignor.)						
Henderson, William T., <i>et al.</i> (See Kemp, Solomon M., assignor.)						
Henderson, Yandell, New Haven, Conn. Skate	486,872	Nov. 29	2707	706	61	1182
Hendley Machine Company. (See Homan, William C., assignor.)						
Hendrick, Augustus D., assignor to I. J. Booth, Birmingham, Conn. Fishing-reel	485,794	Nov. 8	970	260	61	788
Hendrick, William H. (See Case and Hendrick.)						
Hendricks, Frank P., Winterburn, assignor of two-thirds to J. S. Hoy and G. W. Tozier, Penfield, Pa. Clothes-drier	474,931	Oct. 25	2323	573	61	487
Hendryx, Andrew B., New Haven, Conn. Coiled-wire holder	467,722	Jan. 26	2311	547	58	462
Hendryx, Andrew B., New Haven, Conn. Wire-holder	469,941	Mar. 1	439	110	58	1185
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	473,605	Apr. 26	2648	668	59	552
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	473,606	Apr. 26	2704	680	59	562
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	476,536	June 7	467	111	59	1529
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	478,326	July 5	414	99	60	83
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	478,327	July 5	415	100	60	83
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	487,481	Dec. 6	412	106	61	1402
Heneage, Charles R. (See Dole, Charles P., assignor.)						
Henger, Paul, Stuttgart, Germany. Surgical instrument	474,130	May 3	381	91	59	712
Henius, Max W. (See Cohn, Oscar, assignor.)						
Henkel, George, Springfield, Ohio. Water cut-off	470,489	Mar. 8	1353	352	58	1366
Henkle Dental Chair Company. (See Henkle, Samuel T., assignor.)						
Henkle, Samuel T., Baltimore, Md., assignor to Henkle Dental Chair Company, Chicago, Ill. Dental chair	485,383	Nov. 1	361	97	61	647
Henley, Hattie M. (See Kayne, Thomas Y., assignor.)						
Henn, Edwin C. (See Loveland and Henn.)						
Henn, John H., and H. M. Fulwider, Redmon, Ill. Hay-cap	468,276	Feb. 2	565	139	58	633
Henneberg, Hermann O., assignor to Siemens & Halske, Berlin, Germany. Adjustable microphone	472,806	Apr. 12	1215	312	59	243
Henneberg, Wilhelm. (See Pape and Henneberg.)						
Henneberry, Edward, Duluth, Minn. Excavating and shoveling machine	477,933	June 28	2735	685	59	2020
Henneglin, Herbert H., St. Louis, Mo. Sand-box for cars	473,070	Apr. 19	1634	416	59	336
Hennes, Isaac N., Ilwaco, Wash. Steam-excavator	470,565	Mar. 8	1450	377	58	1386
Henney, James, Cloverport, Ky. Brick-kiln	477,364	June 21	1813	443	59	1822

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.'s.	Vol.	Page.
Henney, John W. (See Saladee, Cyrus W., assignor.)						
Hennig, Henry, Pa.erson, N. J. Tea or coffee strainer	473,626	Apr. 26	2593	652	59	541
Henning, Abel, Los Angeles, Cal. Diaphragm for gas-meters	487,051	Nov. 29	3022	776	61	1244
Henning, Carl. (See Michaëlis and Henning.)						
Henning, Frederick S., and W. Pigott, Toronto, Canada. Bag-holder	469,061	Feb. 16	1820	465	58	900
Henning, John E., Kansas City, Mo., assignor, by mesne assignments, of one-half to W. S. Harpell and H. F. Carson, Chicago, Ill. Musical instrument	478,933	July 12	1325	329	60	277
Henrich, Louis A. (See Wallace and Henrich.)						
Henriquez, Jacob M., Coro, Venezuela. Game-board	467,373	Jan. 19	1738	444	58	346
Henry, Archie J., assignor of one-half to E. A. E. Meyer and C. H. Sprague, Watertown, N. Y. Vending-machine	482,683	Sept. 13	1253	305	60	1593
Henry, Archie J., assignor of five-eighths to E. A. E. Meyer, C. H. Sprague, and J. B. Wise, Watertown, N. Y. Electric-actuated vending-machine	471,053	Mar. 15	2186	563	58	1539
Henry, Catharine M., administratrix. (See Moore and Henry.)						
Henry, Charles A., Monticello, Iowa. Hay-loader	488,561	Dec. 27	2186	540	61	1805
Henry Disston & Sons, Incorporated. (See Disston, Thomas S., assignor.)						
Henry, Dorwin A. (See Moore and Henry.)						
Henry, Edward. (See Becker and Henry.)						
Henry, Frank, assignor to Pennsylvania Industrial Development Company, Philadelphia, Pa. Hem folder and presser	484,366	Oct. 11	1225	328	61	274
Henry Huber Company. (See Beaumont, Thomas C., assignor.)						
Henry, Jacob A., assignor of one-half to W. N. Sattley, Chicago, Ill. Combined valve device and vessel-support	468,041	Feb. 2	203	50	58	564
Henry, James E., Zealand, N. H. Logging-car	473,748	Apr. 26	2775	698	59	576
Henry, James M., Wilmerding, and R. B. Wilson, Altoona, Pa. Train signaling apparatus	482,126	Sept. 6	331	79	60	1400
Henry McShane Manufacturing Company. (See Quinn, William J., assignor.)						
Henry McShane Manufacturing Company of Baltimore. (See Schmidt, Charles R., assignor.)						
Henry, William, Detroit, Mich. Influence-generator of electricity	479,941	Aug. 2	256	63	60	631
Henry, William F., W. P. Bolles, and A. McKee, Bloomington, Ill. Whiffletree	481,028	Aug. 16	2030	506	60	1000
Henry, William G. (See Stringer, William G., assignor.)						
Henry, William J., Portland, Me. Trunk-lock	486,227	Nov. 15	1670	442	61	946
Henshall, John E., Philadelphia, Pa. Water-tube boiler	468,501	Feb. 9	933	237	58	715
Henshaw, Francis T. (See Adams and Henshaw.)						
Henson, Joseph W., assignor of one-half to N. E. Jennison, La Grange, Ill. Bill and letter file	474,776	May 10	1423	362	59	923
Hepfer, Harry. (See Bauscher, Albert C., assignor.)						
Hepp, Eduard, Biehrich-on-the-Rhine, Germany. Blue-red dye	466,826	Jan. 12	834	-----	58	169
Hepp, Eduard, assignor to Kalle & Co., Biehrich-on-the-Rhine, Germany. Disulpho-acid of phenyl-rosinduline	466,852	Jan. 12	880	-----	58	177
Hepe, Alexander, Bradford, Pa. Range or stove	476,143	May 31	3603	911	59	1393
Hepe, Christopher J., et al. (See Wuest, Philip, Jr., assignor.)						
Hepe, Florence J., et al. (See Wuest, Philip, Jr., assignor.)						
Heraeus, Heinrich, et al. (See Kitch, Richard, assignor.)						
Heraeus, Wilhelm, et al. (See Kitch, Richard, assignor.)						
Heraeus, Wilhelm C., et al. (See Kitch, Richard, assignor.)						
Herbert, Henry J., Detroit, Mich. Umbrella-runner retainer	486,778	Nov. 22	2543	664	61	1133
Herbert, Michael E., St. Joseph, Mo. Steam-boiler furnace	484,153	Oct. 11	946	{ 242 243 }	61	207
Herbert, Michael E., St. Joseph, Mo. Hot-water heater	487,620	Dec. 6	616	158	61	1444
Herbert, Samuel, Detroit, Mich. Roofing compound	484,794	Oct. 25	1986	-----	61	441
Herbert, William B. (See Betts and Herbert.)						
Herbert, William B., Galveston, Texas. Game-counter	482,575	Sept. 13	1097	266	60	1563
Herbertz, F. A. (See Sahler, Carl, assignor.)						
Herby, John, Jamestown, N. Y. Axle	483,444	Sept. 27	2464	620	60	1855
Herchenbach, Paul. (See Thuener and Herchenbach.)						
Herdegen, Eduard, assignor to Cassidy & Adler, New York, N. Y. Flush-valve for water-closets	485,155	Oct. 25	2561	658	61	555
Herder, Herman, Philadelphia, Pa. Shears	479,090	July 19	1576	395	60	335
Herder, Rudolph H., Chicago, Ill. Machine for washing shavings	482,684	Sept. 13	1254	306	60	1593
Herdman, Frank E., Indianapolis, Ind. Electric elevator	480,845	Aug. 16	1747	{ 436 437 }	60	945
Herdman, Frank E., Indianapolis, Ind. Electric elevator	480,846	Aug. 16	1749	{ 438 439 }	60	945
Herdman, Frank E., Indianapolis, Ind. Elevator	480,847	Aug. 16	1753	439	60	946
Herdman, Frank E., Indianapolis, Ind. Elevator	480,848	Aug. 16	1754	{ 439 440 }	60	946
Herdman, Frank E., Indianapolis, Ind. Elevator	480,849	Aug. 16	1755	440	60	947
Herdman, Frank E., Indianapolis, Ind. Elevator	487,266	Dec. 6	42	13	61	1329
Herdman, Frank E., Indianapolis, Ind. Elevator	487,267	Dec. 6	42	14	61	1330
Herdman, Frank E., Indianapolis, Ind. Elevator	487,268	Dec. 6	43	14	61	1330
Hering, John J., Seattle, Wash. Double piano-stool	486,405	Nov. 15	1955	519	61	1004
Herlick, Christian, Marquette, Mich. Smoke-excluding hood	478,429	July 5	568	137	60	111
Hertl, Franz, and J. Hirschmann, Philadelphia, Pa. Valve-gear for engines	475,942	May 31	3290	{ 830 831 }	59	1329
Herman, Adolph E., Terre Haute, Ind. Fifth-wheel	480,403	Aug. 9	1054	264	60	793
Herman, Charles F., Tobias, Nehr. Cut-off for watering-troughs	473,749	Apr. 26	2776	698	59	576
Herman, David C., St. Louis, Mo. Wind and current wheel	485,933	Nov. 8	1182	311	61	830
Herman, Jacob P. (See Hahn and Herman.)						
Herman, Reinhold, Crafton, Pa. Pipe-coupling	482,922	Sept. 20	1638	412	60	1681
Hermann, Samuel, Cincinnati, Ohio. Trunk or case	472,119	Apr. 5	172	47	59	32
Hermida, Joaquin A., et al. (See O'Kelly, James M., assignor.)						
Herdson, George P., Birmingham, Ala. Upper for boots or shoes	473,314	Apr. 19	2047	514	59	415
Herdson, George P., Birmingham, Ala. Shoe	485,543	Nov. 1	598	159	61	695
Herdson, George P., and J. P. Hollingsworth, Birmingham, Ala.; said Hollingsworth assignor to said Herdson. Shoe						
Héroult, Paul, Lauffen, Switzerland, assignor to United States Aluminium Metal Company, of New York. Apparatus for producing aluminium or other metals	467,006	Jan. 12	1129	286	58	223
Héroult, Paul, Neuhausen, Switzerland, assignor to United States Aluminium Metal Company, of New York. Electrode for use in electro-metallurgical processes	473,118	Apr. 19	1716	435	59	350
Héroult, Paul L. T., Schaffhausen, Switzerland, assignor to United States Aluminium Metal Company, of New York. Electrode	473,117	Apr. 19	1715	434	59	350
Héroux, Georges P. O., Yamachiche, Canada. Accompaniment-indicator for musical instruments	473,393	Apr. 19	2195	551	59	443
	478,107	July 5	45	13	60	11

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Herr, Christian A., Osborn, Ohio. Dental cabinet	480,261	Aug. 9	830	212	60	752
Herr, Homer A., Philadelphia, Pa. Cash-register	487,903	Dec. 13	1094	274	61	1555
Herran y Bolado, José, Aguas Calientes, Mexico. Calculator	475,177	May 17	2063	519	59	1062
Herrburger, Joseph, Paris, France. Piano-action	471,717	Mar. 29	3192	814	58	1749
Herrburger, Joseph, Paris, France. Pilot for piano-actions	483,008	Sept. 6	137	33	60	1362
Herrenschmidt, Henri L., Petit-Quevilly, France. Separating nickel from its ores	466,495	Jan. 5	301		58	57
Herrenschmidt, Henri L., Petit-Quevilly, near Rouen, France. Treating mattes and ores	473,558	May 24	2672		59	1196
Herrera y Gutierrez, Jesus, Mexico, Mexico. Theatrical appliance	479,001	July 19	1441	358	60	310
Herrick, Albert B. (See Hutchinson and Herrick.)						
Herrick, Albert B., Bayonne, N. J. Rheostat	474,957	May 17	1718	437	59	996
Herrick, Frank J., assignor to North and Judd Manufacturing Company, New Britain, Conn. Snap-hook	485,057	Oct. 25	2390	614	61	520
Herrick, Henry F. (See Anderson, Oliver, assignor.)						
Herrick, William, Russell, Minn. Car-coupling	480,092	Aug. 2	530	134	60	683
Herrick, William, Russell, Minn. Guard-gate for drawbridges	483,445	Sept. 27	2465	{ 620 621 }	60	1855
Herring, James H., assignor of one-half to T. P. Chaddick, Murphy, Tex. Shade and curtain fixture	486,040	Nov. 8	1362	362	61	868
Herring, Rudolph, Jr., Brooklyn, N. Y. Swivel for fishing-lines	473,503	Apr. 26	2371	601	59	499
Herrington, Charles R., assignor to J. K. Mower, Springfield, Ohio. Cash-carrier	472,924	Apr. 12	1385	{ 355 356 }	59	278
Herrington, David C. (See Sanders and Herrington.)						
Herrington, Dexter E., Greenwood, Ill. Spring-tooth attachment for cultivators	481,946	Sept. 6	40	9	60	1342
Herrington, William M., Wellsborough, Pa. Fire-shield	482,844	Sept. 20	1506	374	60	1656
Herrinton, Edward E. (See Smith and Herrinton.)						
Herrinton, Edward E., and I. C. Smith, assignors to Grand Rapids Folding Bed Company, Grand Rapids, Mich. Folding bed	485,276	Nov. 1	181	53	61	610
Herrmann, Paul, New York, N. Y. Advertising device	484,314	Oct. 11	1209	307	61	258
Herrmann, Richard. (See Ames and Herrmann.)						
Herron, Robert M. (See Green and Herron.)						
Hersey, Fred E., Wolfeborough, N. H. Machine for punching and trimming belts	483,555	Oct. 4	58	15	61	14
Hersey Manufacturing Company. (See Tilden, James A., assignor.)						
Hersey Manufacturing Company. (See Winton, Henry D., assignor.)						
Hershberger, Jonathan, Walnut Creek, assignor of one-half to W. M. Johnston, Wilmot, Ohio. Thrashing-machine	469,184	Feb. 16	1982	507	58	932
Horshey, Martin E., Harrisburg, Pa. Piston-valve	479,273	July 19	1858	466	60	389
Hersom, Ernest L., New Bedford, Mass. Weft-fork for looms	485,346	Nov. 1	305	81	61	634
Hertel, Max, assignor to National Machine Works, Chicago, Ill. Carving-machine	479,364	July 19	2012	504	60	420
Hertwig, Theodor, New York, N. Y. Slip cover-fastener	474,525	May 10	1033	265	59	847
Hertz & Green. (See Green, Hermann, assignor.)						
Hervey, Jules M. R. (See Demange and Hervey.)						
Hervig, Ernest F. (See Gschwind, Edward, assignor.)						
Herz, Martin, New York, N. Y. Baby-carriage	468,342	Feb. 9	688	170	58	606
Herzberg, Morris, Chambers county, Ala. Inkstand	468,515	Feb. 9	958	244	58	720
Herzberg, Morris, Chambers county, Ala. Combination implement	474,012	May 3	293	47, 48	59	677
Herzberg, Morris, Chambers county, Ala., and S. T. Whitaker, West Point, Ga. Portable storage and delivery fixture	468,516	Feb. 9	960	244	58	720
Herzberg, Morris, Chambers county, Ala., S. T. Whitaker and W. C. Lanier, West Point, Ga. Barrel-stand	485,742	Nov. 8	908	243	61	775
Herzog, August H., Mishawaka, Ind. Foot-ral for counters	470,348	Mar. 8	1124	298	58	1323
Herzog, Philip W., trustee. (See Seely, Herman B., assignor.)						
Heskett, Harrison H., Minneapolis, Minn. Violin-key	466,347	Jan. 5	59	15	58	14
Hess, Alice G. (See Hess, Emil G. and W., assignors.)						
Hess, Amos M., Martinsville, Pa. Top-joint for vehicles	478,696	July 12	955	237	60	205
Hess, Edwin C., Camden, N. J. Telephone-receiver	473,256	Apr. 19	1955	490	59	396
Hess, Emil G. and W., assignors to A. G. Hess, West Toronto Junction, Canada. Machine for fluting wooden knobs	474,383	May 10	807	211	59	804
Hess, George H., Jr., Chicago, Ill. Telethermometer	466,934	Jan. 12	1020	260	58	203
Hess, George W. (See Derr and Hess.)						
Hess, John A., Benton Harbor, Mich. Door operator and supporter	485,934	Nov. 8	1183	{ 311 312 }	61	830
Hess, John R., assignor of one-half to J. H. Fisher, Solon, Iowa. Wagon-reach	488,894	Dec. 27	2699	668	61	1909
Hess, Joseph T., Duffield's, W. Va. Corn-harvester	479,165	July 19	1691	{ 423 424 }	60	357
Hess, Meyer S., et al. (See Meyer, August, assignor.)						
Hess, Myer S., Baltimore, Md. Bicycle-shoe	468,223	Feb. 2	472	117	58	617
Hess, Otto G. (See Zimmer and Hess.)						
Hess, William. (See Hess, Emil G. and W.)						
Hess, Winter D. (See Angle and Hess.)						
Hessenauer, John, et al. (See Myers, Henry, assignor.)						
Hessong, James, Chillicothe, Ohio. Wheel for vehicles	471,117	Mar. 22	2297	590	58	1573
Hessong, James, Chillicothe, Ohio. Device for adjusting the pitch of sulky-bodies	475,218	May 17	2124	537	59	1075
Hetherington, Frederick A., Indianapolis, Ind. Photographic camera	483,688	Oct. 4	248	62	61	52
Hetherington, Frederick A., assignor of one-half to T. E. Hibben, Indianapolis, Ind. Film or plate carrier	476,203	May 31	3706	936	59	1412
Hetherington, Thomas A., assignor of one-half to E. Gutgesell, St. Louis, Mo. Sand and water distributing cylinder for cars	467,809	Jan. 26	2443	620	58	487
Hencken, Conrad. (See Reiter, Johannes, assignor.)						
Hennett, Francis M. (See Nelson and Hennett.)						
Heubings, Samuel M., Jr., and E. Evans, Haddonfield, N. J. Milk-cooler	471,974	Mar. 29	3573	912	58	1823
Heuser & Co., Franz. (See Rempen and Andre, assignors.)						
Heuser, Gustav, Brooklyn, N. Y. Button	477,802	June 28	2518	632	59	1978
Hewitt, Horace B., Indianapolis, Ind. Mail-pouch-releasing device	484,499	Oct. 18	1503	382	61	328
Hewitt, Jackson W., Jackson, Mich. Two-wheeled vehicle	482,739	Sept. 20	1355	335	60	1625
Hewitt, James, Berkeley, Cal. Tripod	478,223	July 5	272	67	60	55
Hewitt, William, assignor to Trenton Iron Company, Trenton, N. J. Grip mechanism for cable-ways	474,249	May 3	557	{ 137 138 }	59	746
Hewitt, William M., Chattanooga, Tenn. Railway cross-tie	484,855	Oct. 25	2089	537	61	461
Hewitt, William R., San Francisco, Cal. Electric releasing device	486,612	Nov. 22	2278	594	61	1078
Hewlett, Alfred M., Kewanee, Ill. Arched street-crossing	466,905	Jan. 12	978	249	58	195
Hewlett, Madra J., and D. C. Cecil, Paducah; said Hewlett assignor to H. F. Carrioco, Graves County, Ky. Water-purifier	488,673	Dec. 27	2366	585	61	1841
Hewson, Robert, San Francisco, Cal. Rotary motor	487,221	Nov. 29	3290	839	61	1296
Hey, Henry T., assignor of one-half to A. A. Poehner, Philadelphia, Pa. Railway-joint	481,758	Aug. 30	3269	795	60	1264

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Heyde, Edward, assignor to Wickes Brothers, East Saginaw, Mich. Bending-roll.....	468,659	Feb. 9	1172	299	58	762
Heyden, F. von, Nachfolger. (See Seifert, Bruno R., assignor.)						
Heydenreich, Ernst C., Mount Clemens, Mich. Plug-cutter.....	475,559	May 24	2673	679	59	1196
Heydenreich, Ernst C., Mount Clemens, Mich. Plug-cutter.....	475,560	May 24	2674	679	59	1196
Heymann, Carl, Berlin, Germany. Christmas-card.....	481,173	Aug. 23	2297	566	60	1063
Heys, John J. (See Bresnahan and Heys.)						
Heyser, Emanuel R., Leon, Mexico. Watchman's electric time-recorder.....	482,251	Sept. 6	534	127	60	1438
Heyssinger, Isaac W., Philadelphia, Pa. Comb.....	466,496	Jan. 5	303	77	58	57
Heywood Bros. & Co. (See Watkins, Gardner A., assignor.)						
Heywood Brothers & Co. (See Messmer, Alexander L. H., assignor.)						
Heywood, Harvey, and J. Holland, Middleton, near Manchester, England. Pegging-machine for pile fabrics.....	479,274	July 19	1860	466	60	390
Heywood, William H., Huddersfield, England. Glazing-bar for skylights.....	479,275	July 19	1862	466	60	390
Hibbard, Angus S., New York, N. Y., assignor to American Telephone and Telegraph Company, of New York. Telephone-exchange apparatus.....	482,174	Sept. 6	419	100	60	1417
Hibbard, Henry D., Pittsburg, Pa. Apparatus for casting pig-iron.....	486,714	Nov. 22	2438	{ 635 636 }	61	1112
Hibben, Thomas E. (See Hetherington, Frederick A., assignor.)						
Hibbs, Thomas, Osage City, Kans. Nut-lock.....	483,921	Oct. 4	597	151	61	124
Hickerson, Samuel C., assignor of one-half to E. L. James, Malta, Ohio. Nut-lock.....	476,382	June 7	243	59	59	1484
Hickey, Michael, Boston, Mass. Apparatus for and method of recovering waste alcohol from liquor-casks.....	484,963	Oct. 25	2265	585	61	496
Hickley, Philip, Evanston, assignor, by mesne assignments, to R. D. Sheppard, Cook county, Ill. Filament for incandescent electric lamps.....	467,169	Jan. 19	1428		58	288
Hickman, James S., Hickman, Ill. Combined cultivator and harrow.....	467,100	Jan. 12	1292	{ 328 329 }	58	254
Hickman, James W. (See Reed, Lewis M., assignor.)						
Hickman, Wilhe, Cherry Camp, W. Va. Life boat and raft.....	473,224	Apr. 19	1908	481	59	386
Hicks, Alfred, New York, N. Y. Upright-piano action.....	482,740	Sept. 20	1356	336	60	1625
Hicks, Dillyard, Waldo, Fla. Cultivator.....	467,374	Jan. 19	1739	444	58	346
Hicks, Henry C., St. Paul, Minn. Combined bench and truck.....	476,268	June 7	59	13	59	1449
Hicks, Horatio F., Ashland, Oreg. Ore-concentrator.....	477,934	June 28	2737	686	59	2020
Hicks, Nehemiah, Wilkinsonville, Mass. Regulating device for warping-machines.....	488,432	Dec. 20	1977	{ 493 494 }	61	1747
Hicks, Oliver H., Chicago, Ill. Paper-roll fixture.....	469,855	Mar. 1	304	79	58	1160
Hicks, Oliver H., Chicago, Ill. Paper box.....	487,528	Dec. 6	485	127	61	1417
Hicks, Oliver H., Chicago, Ill., assignor to Morgan Envelope Company, Springfield, Mass. Package of toilet paper.....	468,534	Feb. 9	991	253	58	726
Hicks, Shelby, assignor of one-half to J. W. Givens, Providence, Ky. Mechanical motor.....	480,724	Aug. 16	1567	392	60	908
Hicks, Thomas H., assignor of one-half to H. L. Oletz, Detroit, Mich. Alternating-current motor.....	479,187	July 19	1734	435	60	364
Hicks, Thomas H., assignor of one-half to G. F. Case, Detroit, Mich. Pneumatic tire for cycles.....	483,493	Sept. 27	2522	635	60	1866
Hicks, Thomas H., assignor of one-half to G. F. Case, Detroit, Mich. Seat.....	484,367	Oct. 11	1286	328	61	274
Hickson, Stephen, New York, N. Y. Booking gold-leaf.....	467,347	Jan. 19	1702	435	58	340
Hidden, Edward S., Milburn, N. J. Machine for cutting rags.....	487,621	Dec. 6	617	158	61	1444
Hide, Arthur C., assignor to Disc Wheel Company, Limited, London, England. Wheel for velocipedes.....	478,191	July 5	188	48	60	39
Heatzman, Arthur H., assignor of one-half to H. D. Heatzman, Baltimore, Md. Conduit-trolley for street-cars.....	479,327	July 19	1932	483	60	404
Heatzman, Harry D. (See Heatzman, Arthur H., assignor.)						
Hien, Phillip, Chicago, Ill. Car-coupling.....	476,958	June 14	1141	275	59	1677
Hien, Phillip, Chicago, Ill. Car-coupling.....	487,926	Dec. 13	1135	{ 283 284 }	61	1562
Hien, Philip, Rock Island, assignor to National Hollow Brake Beam Company, Chicago, Ill. Brake-beam.....	480,194	Aug. 2	695	176	60	713
Hieronymus, Jasper N., Fairbury, Ill. Wood-joint.....	477,118	June 14	1387	338	59	1727
Hiers, James L. (See Pinkston, James A., assignor.)						
Higden, Arne A., and S. Carlsson, East Grand Forks, Minn. Seeding-machine.....	470,379	Mar. 8	1175	301	58	1332
Higgins, John L., Diona, Ill. Gate.....	474,250	May 3	560	138	59	747
Higgin, Henry, Newport, Ky. Band-shell for wheel-hubs.....	480,093	Aug. 2	531	135	60	683
Higginbottom, Lloyd. (See Smith, Goddard, Higginbottom, and Mannock.)						
Higgins, Charles M., Brooklyn, N. Y. Bottle for mucilage, &c.....	471,003	Mar. 15	2120	544	58	1527
Higgins, Charles M., Brooklyn, N. Y. Ink.....	483,446	Sept. 27	2467		60	1855
Higgins, Charles M., Brooklyn, N. Y. Ink.....	483,447	Sept. 27	2468		60	1855
Higgins, Charles S., Brooklyn, N. Y. Soap-holder.....	486,599	Nov. 22	2254	{ 589 590 }	61	1074
Higgins, Charles S., assignor to M. F. B. Higgins, Brooklyn, N. Y. Coupling-hook.....	476,013	May 31	3394	856	59	1350
Higgins, Charles S., assignor to M. F. B. Higgins, Brooklyn, N. Y. Soap-holder.....	476,014	May 31	3395	856	59	1350
Higgins, Crafts W., assignor to Schuttler Manufacturing Company, Chicago, Ill. Ratchet-drill.....	472,120	Apr. 5	173	47	59	32
Higgins, Edward S., and H. C. Jenkins, London, England. Inking device for type-writing machines.....	472,999	Apr. 19	1520	388	59	316
Higgins, Frank L., assignor of one-half to P. H. Sloan, Chicago, Ill. Furnace.....	482,741	Sept. 20	1357	336	60	1625
Higgins, George H., et al. (See Cobham, Frederick P., assignor.)						
Higgins, Joseph C., and T. Lea, assignors of one-twentieth to A. V. Baldwin, New Brunswick, N. J. Expandible horseshoe-calk.....	477,542	June 21	2091	520	59	1878
Higgins, Martin, Niles, Ohio. Sash-fastener.....	471,118	Mar. 22	2299	590	58	1574
Higgins, Mary F. B. (See Higgins, Charles S., assignor.)						
Higgins, Van H., and W. D. Smith, Chicago, Ill. Pressure-regulator.....	483,516	Sept. 27	2575	616	60	1876
Higgins, Van H., and W. D. Smith, Chicago, Ill. Mercurial gas-governor.....	483,517	Sept. 27	2579	646	60	1877
Higgins, Werter C., Norwich, Conn. Steam-generator.....	468,423	Feb. 9	806	{ 201 202 }	58	690
Higgins, Werter C., Norwich, Conn. Steam-generator.....	486,467	Nov. 22	2051	{ 542 543 544 }	61	1035
Higginson, Henry C., Newburg, N. Y. Chasing-mill.....	487,146	Nov. 29	3173	813	61	1275
Higginson, Montagu, et al. (See Westrup, Oliver F., assignor.)						
Higham, Charles C., St. Louis, Mo., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Locomotive-engine frame.....	475,112	May 17	1972	499	59	1043
Higham, Daniel, Boston, Mass., assignor, by mesne assignments, to Higham Electric Company, Portland, Me. Electric-arc lamp.....	486,377	Nov. 15	1908	505	61	994
Higham Electric Company. (See Higham, Daniel, assignor.)						
Higham, John, Oakland, Cal. Baby-jumper.....	472,351	Apr. 5	542	140	59	101

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Highfill, William F., assignor of one-half to T. Bailey, Danville, Va. Subsoiling attachment for plows	469,434	Feb. 23	2381	611	58	1016
Hightower, Thomas A., Heidelberg, Miss. Fertilizer-distributor	469,245	Feb. 23	2089	537	58	959
Hilbert, Calvin H., Rutledge, Mo. Cultivator	469,140	Feb. 16	1919	491	58	920
Hilborn, Louis B., assignor of one-half to H. G. Underwood, Milwaukee, Wis. Inhaler and vaporizer	473,225	Apr. 19	1909	481	59	386
Hildebrandt, Albert, Brooklyn, N. Y. Beverage apparatus	479,594	July 26	2398	597	60	508
Hilditch, Jacob, assignor to Norwegian Siphon Company, Limited, Christiania, Norway. Siphon	478,108	July 5	46	13	60	11
Hildner, Christian, <i>et al.</i> (See Trump, John G., assignor.)						
Hildrup, William T., Jr., <i>et al.</i> (See Forbes, John, assignor.)						
Hilgard, Ernest F. (See Smith, Stephen R., assignor.)						
Hilgeman, Charles E. (See Riepe and Hilgeman.)						
Hilger, Anson N. (See Sutton, Harry S., assignor.)						
Hill, A. C., <i>et al.</i> (See Carter, Joseph, J., assignor.)						
Hill, Alanson G., Kendallville, Ind. Bee-smoking apparatus	478,006	June 28	2851	713	59	2042
Hill, Andrew G., deceased, Prescott, Canada; T. E. Bissell, administrator. Disk cultivator	473,257	Apr. 19	1957	491	59	397
Hill, Andrew G., deceased, Prescott, Canada; T. E. Bissell, administrator. Disk harrow	487,622	Dec. 6	621	159	61	1445
Hill, Arthur G. (See Ulrich, Max, assignor.)						
Hill, Charles, Newark, assignor to T. Russell, Montclair, N. J., and R. W. Ferguson, New York, N. Y., trustees. Thread-winding machine	482,308	Sept. 6	635	152 153 154	60	1459
Hill, Charles B. (See Stokoe, John M., assignor.)						
Hill, Charles D., St. Louis, Mo., assignor of one-half to E. Black, Monmouth, Ill. Horse-detaching device	470,127	Mar. 1	722	180	58	1240
Hill, Charles E. (See Close, Walter R., assignor.)						
Hill, Charles E., <i>et al.</i> (See Reinhardt, James H., assignor.)						
Hill, Charles E., <i>et al.</i> (See Smith, Samuel, assignor.)						
Hill, Christian C. (See Bacon and Hill.)						
Hill, David H., Philadelphia, Pa. Circular-knitting machine	475,058	May 17	1880	476 477	59	1026
Hill, David J., Lampasas, Tex. Plow	469,435	Feb. 23	2382	611	58	1016
Hill, David J., Lampasas, assignor of one-half to W. T. Campbell, M. Lasker, J. A. Kemp, and H. Kempner, Galveston, Tex. Plow	471,336	Mar. 22	2621	665	58	1635
Hill, David K., <i>et al.</i> (See Beck, Marshall, assignor.)						
Hill, Edgar A., <i>et al.</i> (See Hill, Edward A., assignor.)						
Hill, Edgar J., Troy, Pa. Reel	472,263	Apr. 5	403	194	59	75
Hill, Edward, Keighley, England. Loom pattern-chain and barrel therefor	486,337	Nov. 15	1848	466	61	982
Hill, Edward A., assignor of one-half to J. L. Mallery and E. A. Hill, Chicago, Ill. Grain-door for cars	479,070	July 19	1545	386	60	329
Hill, Elias M., assignor of one-half to H. Brady, Pittsburg, Pa. Nut-lock	472,706	Apr. 12	1080	277	59	216
Hill, Elijah W. (See Wyatt, Daniel M., assignor.)						
Hill, Ernest, Sheffield, England. Pavement	479,002	July 19	1442	358	60	310
Hill, Eugene N., Buffalo, N. Y. Railway-torpedo	479,879	Aug. 2	159	40	60	613
Hill, Ezra N., assignor to J. G. Slater, Washington, D. C. Means for insuring travelers against loss by accident. (Reissue)	11,270	Sept. 13	1306	319	60	1604
Hill, Ezra N., and J. G. Slater, Washington, D. C. Means for securing travelers against loss by accident	467,872	Jan. 26	2544	645	58	506
Hill, Francis H., Chicago, Ill. Metallic casket	482,557	Sept. 13	1075	261	60	1559
Hill, Frank O., <i>et al.</i> (See Keizer, William H. H., assignor.)						
Hill, Frank R., Ross Station, Tex. Band-cutter and feeder for thrashing-machines	485,499	Nov. 1	531	140 141	61	680
Hill, George. (See Hall, Solomon E., assignor.)						
Hill, George, New Brunswick, N. J. Valve for radiators or other heating apparatus	468,874	Feb. 16	1505	383	58	838
Hill, George, Lombard, Ill. Toy game apparatus	480,725	Aug. 16	1568	392	60	908
Hill, George M., and F. P. Alter, Centralia, Wis. Change maker and receiver	488,007	Dec. 13	1267	315 316	61	1590
Hill, George W., Brooklyn, N. Y. Waxing or waterproofing shoe-counters	474,013	May 3	205	48	59	677
Hill, George W., Oberlin, Ohio. Trunk-carrier	488,357	Dec. 29	1859	465	61	1725
Hill, Harry J., Perry's Mills, N. Y. Poison-distributor	477,119	June 14	1389	338	59	1728
Hill, Harry W., Cleveland, Ohio. Friction-clutch	468,616	Feb. 9	1109	282 283	58	749
Hill, Harry W., Cleveland, Ohio. Clutch	476,640	June 7	622	150	59	1560
Hill, Harry W., Cleveland, Ohio. Clutch	476,641	June 7	625	151	59	1561
Hill, Harry W., Cleveland, Ohio. Pillow-block	477,543	June 21	2092	520	59	1878
Hill, Harry W., and L. J. Hirt, Cleveland, Ohio; said Hirt assignor to said Hill. Friction-clutch	468,615	Feb. 9	1106	282	58	749
Hill, Henry. (See Jefferson, John, assignor.)						
Hill, Homer C., and C. W. Frey, Clinton, Ill. Folding ironing-table	483,353	Sept. 27	2335	587	60	1829
Hill, Hugh W., Decatur, Ill. Hog-ring pinchers	475,767	May 31	2892	759	59	1271
Hill, James, Keighley, England. Loom pattern-chain	486,336	Nov. 15	1847	466	61	982
Hill, James F., Fleetwood, Pa. Air and steam coupling for railway-cars	472,807	Apr. 12	1216	312 313	59	243
Hill, James W., St. Louis, Mo. Combined order-book, file, and coupon system	473,875	Apr. 26	2973	750	59	614
Hill, John, Columbus, Ga. Automatic fire-extinguisher	466,414	Jan. 5	162	44	58	32
Hill, John J., Chicago, Ill. Railway-switch apparatus	485,868	Nov. 8	1078	286	61	809
Hill, John L. (See Eglin, William, assignor.)						
Hill, John T., and B. Meiring, Cleveland, Ohio. Track-rail	484,315	Oct. 11	1211	308	61	258
Hill, John W., Chicago, Ill. Mechanical movement	472,539	Apr. 12	834	213	59	172
Hill, Leroy, Jr., Denver, Colo. Index-book	470,380	Mar. 8	1177	302	58	1333
Hill, Leroy D., Wilkes-Barré, Pa. Mill for rolling axle-blanks	470,243	Mar. 8	919	227	58	1286
Hill, Leroy D., assignor to Sheldon Axle Company, Wilkes-Barré, Pa. Axle-skelp	470,787	Mar. 15	1783	459	58	1461
Hill, Louis, Waterbury, Conn. Compound for insulating electric wires	472,352	Apr. 5	543		59	101
Hill, Nelson H., Armada, Mich. Wagon-spring	470,297	Mar. 8	1036	262	58	1307
Hill, Nicholas S. (See Swain, James E., assignor.)						
Hill, Roland F., <i>et al.</i> (See Willis, William H., assignor.)						
Hill, Thomas, <i>et al.</i> (See Whitworth, Charles E., assignor.)						
Hill, Thomas, assignor to Electric Wheel Company, Quincy, Ill. Machine for beading spokes	470,566	Mar. 8	1452	377	58	1386
Hill, Thomas, assignor to Adams Tobacco Press Company, Quincy, Ill. Device for cutting plug-tobacco	471,859	Mar. 29	3416	871 872 873	58	1792
Hill, Thomas E., Rahway, assignor of one-half to W. T. Bothwell, Jersey City, N. J. Railway and drawbridge signal	470,875	Mar. 15	1929	493	58	1489

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hill, Thomas E., Rahway, assignor of one-half to W. T. Bothwell, Jersey City, N. J. Rail-way-signal.	470,876	Mar. 15	1931	494	58	1489
Hill, Thomas E., Rahway, assignor of one-half to W. T. Bothwell, Jersey City, N. J. Rail-way signal mechanism.	472,808	Apr. 12	1218	313	59	243
Hill, Thomas E., Rahway, N. J., assignor of one-half to A. R. Boluss, Norwood, Ohio, and W. T. Bothwell, Jersey City, N. J. Locomotive attachment for signals.	470,877	Mar. 15	1932	494	58	1489
Hill, Wade H. (See Rheutan, Abram A., assignor.)						
Hill, Walter S., Boston, Mass. Fireproof paint.	484,714	Oct. 18	1835		61	395
Hill, Warren, Chicago, Ill. Toilet powder-box.	472,217	Apr. 5	332	85	59	62
Hill, Warren, assignor of one-third to E. Chiles, Chicago, Ill. Perfume-holder.	476,269	June 7	61	13	59	1450
Hill, William, Collinsville, Conn. Regenerative furnace.	468,617	Feb. 9	1111	283	58	750
Hill, William E., Kalamazoo, Mich. Log loader and turner.	466,682	Jan. 5	586	152	58	114
Hill, William E., Kalamazoo, Mich. Log loader and turner.	484,013	Oct. 11	745	{ 186 187 }	61	167
Hill, William E., Kalamazoo, Mich. Log-turner.	485,696	Nov. 8	830	223	61	759
Hill, William H. (See Cummings and Hill.)						
Hill, William H. (See Sanford, George S., assignor.)						
Hill, William H., Atlanta, Ga. Gold-concentrator.	474,014	May 3	206	48	59	677
Hilliard, Paul H., Westerly, R. I. Game-counter.	481,947	Sept. 6	42	9, 10	60	1342
Hilliard, Paul H., Stonington, Conn. Toy.	481,948	Sept. 6	43	10	60	1342
Hille, Gustav L., London, England. Process of and apparatus for the manufacture of hol-low caoutchouc balls.	482,088	Sept. 6	271	65, 66	60	1389
Hillebrand, Louis, assignor to Hillebrand & Wolf, Philadelphia, Pa. Trunk-stay.	467,481	Jan. 19	1903	486	58	379
Hillebrand & Wolf. (See Hillebrand, Louis, assignor.)						
Hillerscheidt, Oscar, Berlin, Germany. Self-locking hoisting device.	484,932	Oct. 25	2224	{ 573 574 }	61	488
Hilles & Jones Company. (See Jones, Henry C., assignor.)						
Hillhouse, Charles B. (See Stoner, John B., assignor.)						
Hilliard, Charles E., Big Run, Pa. Lamp-hanger.	483,448	Sept. 27	2469	621	60	1855
Hilliard, Frank R., et al. (See Beckwith, Theodore A., assignor.)						
Hilliard, John S., Philadelphia, Pa. Adding-machine.	477,416	June 21	1887	464	59	1837
Hillman, George W. (See Finnigan, Frank B., assignor.)						
Hillman, Joseph B. (See Thomas and Hillman.)						
Hillman, William, assignor to Auto Machinery Company, Limited, Coventry, England. Means or apparatus for gaging and sorting spherical rollers or balls.	482,636	Sept. 13	1183	286	60	1579
Hills, Addison K., Erie, Pa. Coal-cleaner.	474,045	May 3	262	64	59	688
Hills, Edwin A., Wethersfield, Conn. Horseshoe.	480,924	Aug. 16	1868	466	60	969
Hills, James D., Menomonee, Wis. Lumber puller and washer.	485,935	Nov. 8	1185	{ 312 313 314 315 316 }	61	831
Hills, James D., Menomonee, Wis. Lumber pulling, washing, and assorting machine.	485,936	Nov. 8	1188	{ 313 314 315 316 }	61	831
Hills, James E. (See Williams, Frank E., assignor.)						
Hills, James E., et al. (See Mosbacher, Samuel, assignor.)						
Hills, James E., New York, N. Y. Attachment for telephones.	471,549	Mar. 29	2936	747	58	1703
Hills, Lester S., et al. (See Badt, Francis B., assignor.)						
Hills, Louis, New York, N. Y. Electric search-light.	481,964	Oct. 25	2267	585	61	496
Hills, Robert E. (See Delaney and Hills.)						
Hilsabeck, Thara M. (See Denney and Hilsabeck.)						
Hilton, Frederick S., South Framingham, Mass. Fall-hook.	472,353	Apr. 5	544	141	59	102
Hilton, Henry R., Jersey City, N. J., and J. E. Wilson, New York, N. Y. Clam or oyster rake or dredge.	484,615	Oct. 18	1836	467	61	396
Hilton, John. (See Ratcliffe, Hilton, and Mellor.)						
Hilton, William, assignor of one-half to J. Booth, Reynoldsville, Pa. Filter.	470,620	Oct. 8	1532	399	58	1403
Hilts, George S., assignor of two-thirds to D. McLachlan, Groton, N. Y. Pipe-wrench.	483,785	Mar. 4	399	99	61	83
Hin, Jean J., Paris, France. Walking-stick, &c.	476,015	May 31	3397	857	59	1351
Himmelstein, John, Milwaukee, Wis. Horse-collar fastener.	478,603	July 12	834	205	60	181
Himrod, Charles. (See Curtis and Himrod.)						
Hinchman, Carey S. (See Cook and Hinchman.)						
Hinckley, Howard, Trenton, N. J. Pressure-regulator for railway-brakes.	468,618	Feb. 9	1112	283	58	750
Hinckley, Howard, Trenton, N. J. Pressure-regulator for railway-brakes.	468,619	Feb. 9	1115	284	58	750
Hinckley, Howard, Trenton, N. J. Slack take-up for car-brakes.	475,014	May 17	1816	{ 460 461 }	59	1013
Hinckley, Howard, Trenton, N. J. Automatic car-brake attachment.	475,015	May 17	1818	461	59	1014
Hinckley, Howard, Trenton, N. J. Car-brake.	488,314	Dec. 20	1783	449	61	1709
Hinckley, Sylvester B. (See Dix, Henry S., assignor.)						
Hinden, Mathias J., assignor to Julius King Optical Company, Cleveland, Ohio. Lens-measuring instrument.	483,354	Sept. 27	2336	587	60	1830
Hinderer, Gustav L., Philadelphia, Pa. Heater for food, &c.	481,759	Aug. 30	3269	796	60	1264
Hindman, Joseph A., Iuka, Ill. Device for securing animals.	474,251	May 3	561	138	59	747
Hinds, Jesse L., assignor to Electric Engineering and Supply Company, Syracuse, N. Y. Electric switch.	477,595	June 21	2172	539	59	1894
Hine, Charles M., Pittsburg, assignor to H. D. Shields, Allegheny county, Pa. Sewing-machine.	477,302	June 21	1714	{ 419 420 }	59	1803
Hine, James W. (See Foster and Hine.)						
Hine, Lemon G. (See Fowler, Joseph C., assignor.)						
Hines, Amos J. (See Nolley, David D., assignor.)						
Hinesley, Daniel, Beard, Ind. Fence-post.	482,637	Sept. 13	1184	287	60	1579
Hininger, Charles. (See Turner, George W., assignor.)						
Hinkel, John P., Washington, D.C. Detachable opera-glass holder.	471,082	Mar. 15	2236	574	58	1549
Hinkelman, Louis, Albany, N. Y. Self loading and dumping sleigh.	477,265	June 21	1814	443	59	1822
Hinkle, Leonard, Indianapolis, Ind. Combination-tool.	474,384	May 10	808	211	59	804
Hinkle, Leonard, Indianapolis, Ind. Bed-bottom.	484,912	Oct. 25	2187	563	61	481
Hinkley, Aaron F., Lakeville, and J. S. Welch, Lynn, Mass. Voter's compartment and shelf.	480,925	Aug. 16	1870	466	60	970
Hinkley, Adelbert H., assignor to H. Blundell & Co., Providence, R. I. Friction-clutch.	467,686	Jan. 26	2243	571	58	449
Hinkley, George M., assignor of one-half to Edward P. Allis Company, Milwaukee, Wis. Sawmill-carriage.	467,007	Jan. 12	1130	{ 286 287 }	58	223
Hinkley, George M., assignor of one-half to Edward P. Allis Company, Milwaukee, Wis. Saw-guide.	477,861	June 28	2622	657	59	1997
Hinman, Clement F., and M. G. Bunnell, assignors to F. C. Austin, Chicago, Ill. Dump-ing-wagon.	475,312	May 24	2264	{ 583 584 }	59	1119

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hinman, Clement F., and M. G. Bunnell, assignors to F. C. Austin, Chicago, Ill. Fifth-wheel.....	475,313	May 24	2267	584	59	1118
Hinman, Portus M., Rochester, N. Y., and J. B. Thompson, assignors to said Thompson and W. F. Smith, Providence, R. I. Ice-cream freezer.....	475,240	May 17	2163	550	59	1082
Hinote, E. T. (See Moomaw, Henry E., assignor.)						
Hinsdale, William R., Newark, N. J. Ingot-protector.....	476,383	June 7	245	59	59	1484
Hinsdale, William R., Newark, N. J. Preventing segregation in large ingots.....	479,120	July 19	1627	407	60	344
Hinschwood, Thomas K., assignor of one-half to H. Popp, Philadelphia, Pa. Type-casting machine.....	481,760	Aug. 30	3270	{ 796 797 }	{ 60 60 }	1265
Hinson Car Coupler Company. (See Reagan, Paul M., assignor.)						
Hinson, James A., Des Moines, Iowa. Draft-rigging for car-couplings.....	466,348	Jan. 5	60	15, 16	58	14
Hinson, James A., Des Moines, Iowa. Draw-bar and spring.....	466,683	Jan. 5	588	{ 152 153 }	{ 58 58 }	114
Hinson, James A., Des Moines, Iowa. Draw-bar and spring.....	466,684	Jan. 5	590	153	58	114
Hinson, James A., Chicago, Ill. Car-coupling.....	482,358	Sept. 13	742	179	60	1495
Hinson, James A., Chicago, Ill. Draft-rigging for railway-cars.....	487,269	Dec. 6	44	14	61	1330
Hinstin, Joseph, Paris, France. Furnace.....	468,875	Feb. 16	1507	{ 384 385 }	{ 58 58 }	838
Hinze, Carl, Des Moines, Iowa. Device for pressing bridges in pianos.....	467,539	Jan. 26	2023	512	58	409
Hinze, Carl, Des Moines, Iowa. Sounding-board for pianos.....	472,878	Apr. 12	1314	337	59	263
Hinze, Louis C. (See Witherell, Silas, assignor.)						
Hipperling, William, New York, N. Y., assignor to S. A. Ginna, Plainfield, N. J., and R. A. Donaldson, Brooklyn, N. Y. Machine for manufacturing tin cans.....	487,270	Dec. 6	46	15	61	1331
Hipperling, William, New York, N. Y., assignor to S. A. Ginna, Plainfield, N. J., and R. A. Donaldson, Brooklyn, N. Y. Machine for manufacturing tin cans.....	488,674	Dec. 27	2366	{ 585 586 587 }	{ 61 61 61 }	1841
Hipperling, William, New York, N. Y., assignor to S. A. Ginna, Plainfield, N. J., and R. A. Donaldson, Brooklyn, N. Y. Machine for the manufacture of tin cans.....	488,675	Dec. 27	2370	{ 587 588 }	{ 61 61 }	1841
Hipwell, Harry H., Long Island City, N. Y. Lamp-wick raiser.....	472,354	Apr. 5	544	141	59	102
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp-filler.....	471,791	Mar. 29	3321	846	58	1774
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp-shade support.....	472,790	Apr. 12	1195	307	59	239
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp.....	477,366	June 21	1815	{ 443 444 }	{ 59 59 }	1822
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Supporting-ring for lamps.....	479,880	Aug. 2	160	40	60	613
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Lamp-burner.....	480,404	Aug. 9	1055	264	60	793
Hipwell, Thomas, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Wick-raiser for Argand lamps.....	488,968	Dec. 27	2827	697	61	1936
Hirner, Emil A., Allentown, Pa. Circular-knitting machine.....	471,920	Mar. 22	2459	625	58	1603
Hirsch, Isaac, Chicago, Ill. Manufacturing cutlery.....	475,314	May 24	2268		59	1120
Hirsch, Isaac, Chicago, Ill. Die and machine for rolling cutlery.....	475,315	May 24	2269	584	59	1120
Hirsch, Isaac, Chicago, Ill. Rolling-machine for cutlery.....	480,325	Aug. 9	932	236	60	771
Hirsch, Kalman. (See Heller and Hirsch.)						
Hirsch, Robert, assignor of one-half to H. Meminger, Milwaukee, Wis. Commutator-brush.....	471,792	Mar. 29	3322	846	58	1774
Hirsch, Robert, and H. Meminger, Milwaukee, Wis. Commutator-brush.....	474,600	May 10	1150		59	869
Hirschfelder, Salomon, Munich, Germany. Photographic camera.....	488,810	Dec. 27	2572	{ 638 639 }	{ 61 61 }	1882
Hirschmann, Christoph, assignor to H. Foerster, Newark, N. J. Skate.....	475,241	May 17	2165	550	59	1082
Hirschmann, Josef. (See Herlt and Hirschmann.)						
Hirsh, Adolph. (See Levy, Henry, assignor.)						
Hirst, John F., Sabattus, Me. Hinge.....	481,492	Aug. 23	2827	695	60	1163
Hirt, Louis J. (See Hill and Hirt.)						
Hirt, Louis J., Arlington, Mass. Friction-clutch.....	487,736	Dec. 13	818	208	61	1500
Hirt, Louis J., Arlington, Mass. Trolley-wheel.....	488,811	Dec. 27	2573	639	61	1883
Hirth, Bernhard, et al. (See Hoffman, Austin D., assignor.)						
Hisey, Charles S., Aurora, Ind., assignor to Standard Cartridge Company, of New Jersey. Cartridge-loading machine.....	480,015	Aug. 2	401	{ 99 100 101 }	{ 60 60 60 }	658
Hisley, Stephen T., Syracuse, N. Y. Buckle.....	479,003	July 19	1443	358	60	310
Hiss, Nelson. (See Coyle, Andrew M., assignor.)						
Hiss, Nelson. (See Fowler and Gustafson, assignors.)						
Hiss, William J., et al. (See Spofford, Charles, assignor.)						
Hitch, John E., Wilmington, Ohio. Sample-case.....	470,567	Mar. 8	1453	378	58	1386
Hitchcock, Dexter, et al. (See Weaver, William, assignor.)						
Hitchcock, Halbert K., Louisville, Ky., assignor of one-half to C. W. Kellogg, Brookline, Mass. Electric switch.....	473,504	Apr. 26	2372	{ 601 602 }	{ 59 59 }	499
Hitchcock, J. W. (See Strant, Hooper B., assignor.)						
Hitchcock, Luke R., Four Mile, N. Y. Sucker-rod socket.....	471,975	Mar. 29	3575	912	58	1824
Hitchings & Co. (See Gibbons, Henry W., assignor.)						
Hitchings & Company. (See Hanscom, Charles E., assignor.)						
Hite, John M. (See Mendenhall and Hite.)						
Hitt, Addison W., St. Louis, Mo., assignor of one-half to H. C. King, Charleston, S. C. Syringe.....	468,820	Feb. 9	1117	284	58	751
Hitzeroth, Lorenz D. (See Macdonald, Williams, and Hitzeroth.)						
Hixon, Hiram W., El Paso, Tex. Apparatus for condensing flue-dust.....	471,860	Mar. 29	3418	873	58	1793
Hixson, Robert O., Russellville, Ind. Grain-door for cars.....	475,449	May 24	2490	635	59	1161
Hoad, Edward H. (See Frank and Hoad.)						
Hoadley, David, Nantauk, Conn. Bevel.....	480,016	Aug. 2	405	101	60	658
Hoadley, George M., and S. A. Bemis, Springfield, Mass. Railway-car.....	477,935	June 28	2738	686	59	2021
Hoadley, Isaac N., assignor to Monitor Packing Company, Bradford, Pa. Well-packer.....	480,926	Aug. 16	1871	466	60	970
Hoadley, Joseph H., San Francisco, Cal. Steam-generator.....	474,385	May 10	809	211	59	804
Hoadley, Joseph H., San Francisco, Cal. Porcupine steam-generator.....	474,386	May 10	811	212	59	804
Hoadley, Miles S. (See Ziegler, William R., assignor.)						
Hoag, John E., Springport, Mich. Fence-making machine.....	467,306	Jan. 19	1635	416	58	327
Hoag, William H., Amsterdam, N. Y. Covering for fire-door openings.....	484,636	Oct. 18	1714	435	61	370
Hoagland, James. (See Stivers and Hoagland.)						
Hoagland, William K., Peru, Ill. Harrow.....	471,384	Mar. 22	2702	689	58	1651
Hoar, John, Brookline, Mass. Horse-hoot.....	481,790	Aug. 30	3326	811	60	1276
Hobart, Alvah S., Yonkers, N. Y. Combination-lock.....	476,642	June 7	627	151	59	1561
Hobart, James C., assignor to Triumph Compound Engine Company, Cincinnati, Ohio. Valve for compound steam-engines.....	467,933	Feb. 2	48	11	58	534

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hobart, M. M., <i>et al.</i> (See Facer, Wilson E., assignor.)						
Hobbs, Alfred C., and C. R. Richards, assignors to Union Metallic Cartridge Company, Bridgeport, Conn. Machine for sizing and polishing paper tubes	480,017	Aug. 2	407	<div>101 102 103 104</div>	60	659
Hobbs, George P., Wheeling, W. Va. Jar-cap spanner	468,804	Feb. 16	1401	355	58	818
Hobinger, Joseph E., <i>et al.</i> (See Pool, John G., assignor.)						
Hobinger, Nicholas W., <i>et al.</i> (See Pool, John G., assignor.)						
Hobrecker, John, Jr. (See Newby, Albert S., assignor.)						
Hobson, George A., Richmond, England. Metal flooring or roofing	469,804	Mar. 1	225	57	58	1145
Hochheimer, John, Hamilton, Ohio. Calendar	476,461	June 7	362	84	59	1507
Hochheimer, John, Hamilton, Ohio. Calendar	476,462	June 7	365	85	59	1508
Hochman, Bernard, Long Island City, N. Y. Producing adhesive fabrics	471,611	Mar. 29	3020	769	58	1718
Hock, Henry W., assignor of one-half to W. S. McMannus, Chester, Pa. Grinding attachment for sewing-machines	473,000	Apr. 19	1523	389	59	316
Hock, Henry W., assignor of one-half to W. S. McMannus, Philadelphia, Pa. Safety attachment for purses	475,503	May 24	2583	657	59	1179
Hocken, Richard, <i>et al.</i> (See Oldfield, Joseph, assignor.)						
Hocking, William C., Sheffield, Iowa. Dry-measuring vessel	467,101	Jan. 12	1296	329	58	255
Hockley, Edgar A., Ouray, Colo. Ore-slimer	466,753	Jan. 5	710	183	58	135
Hockley, Edgar A., assignor of one-half to R. W. Haskins, Ouray, Colo. Ore-concentrator	477,936	June 28	2741	687	59	2021
Hodel, Joseph A., Cumberland, Md. Chimney-cap	470,568	Mar. 8	1455	378	58	1387
Hodgdon, Lue S., Bangor, Me. Fire-escape	480,041	Nov. 8	1363	362	61	868
Hodge, Albert S., assignor of one-half to J. H. Hodge, Boston, Mass. Automatic relief-valve for radiators	479,806	Aug. 2	48	12	60	591
Hodge, George Y. (See Bradley and Hodge.)						
Hodge, J. Henry. (See Hodge, Albert S., assignor.)						
Hodge, William, Memphis, Tenn. Cotton-harvester	469,568	Feb. 23	2598	666	58	1057
Hodgen, Samuel P., Pittsfield, Ill. Horse-protector	466,786	Jan. 12	773	201	58	157
Hodges, Charles C., <i>et al.</i> (See McCoy, Elijah, assignor.)						
Hodges, Clarence B. (See Hodges, Henry C. and C. B.)						
Hodges, Fred G., Racine, Wis. Sawing-machine	469,447	Feb. 23	2405	616	58	1020
Hodges, Henry C., <i>et al.</i> (See McCoy, Elijah, assignor.)						
Hodges, Henry C., Detroit, Mich. Car construction	468,176	Feb. 2	407	101	58	603
Hodges, Henry C. and C. B., Detroit, Mich. Car-truck	477,657	June 28	2291	574	59	1933
Hodges, Horace F., and D. J. Havenstrite, Boston, Mass. Condenser for refrigerating or ice-making machines	473,876	Apr. 26	2975	750	59	614
Hodges, Schuyler G., Pontiac, assignor to Acme Safety Emery Wheel Company, Detroit, Mich. Wheel	467,252	Jan. 19	1554	396	58	312
Hodges, Schuyler G., Pontiac, assignor to Acme Safety Emery Wheel Company, Detroit, Mich. Wheel	467,253	Jan. 19	1555	396	58	312
Hodges, Schuyler G., Pontiac, assignor to Acme Safety Emery Wheel Company, Detroit, Mich. Forming emery-wheels	467,254	Jan. 19	1556	396	58	313
Hodgkinson, James, Manchester, England. Mechanical stoker	467,008	Jan. 12	1133	<div>287 288</div>	58	223
Hodgson, Isaac and M. A., Springfield, Mass. Geographical globe	488,071	Dec. 13	1389	345	61	1616
Hodgson, John G. (See Moore and Hodgson.)						
Hodgson, John G. (See Norton and Hodgson.)						
Hodgson, John G., assignor to E. Norton, Maywood, and O. W. Norton, Chicago, Ill. Sheet-metal-stamping press	487,271	Dec. 6	50	16	61	1331
Hodgson, Mary A. (See Hodgson, Isaac and M. A.)						
Hodgson, Sam. (See Carter, Russell H., assignor.)						
Hodgson, William. (See Froehlich, Amadeus A., assignor.)						
Hodgson, William H., Winona, Minn. Furnace	476,270	June 7	62	13	59	1450
Hodgson, William H., Winona, Minn. Mold-board-shaping press	476,271	June 7	63	13	59	1450
Hodnett, William C., Douglasville, and J. D. Waggoner, Lone Oak, Ga.; said Waggoner assignor to said Hodnett. Cotton-elevator	466,685	Jan. 5	591	153	58	115
Hodsdon, Charles F., New York, N. Y. Portable wooden booth	469,017	Feb. 16	1761	449	58	888
Hodsdon, Charles F., New York, N. Y. Ballot-box	478,283	July 5	353	85	60	71
Hoe, Robert, <i>et al.</i> (See Crowell, Luther C., assignor.)						
Hoe, Robert, <i>et al.</i> (See Crowell, Luther C., assignor.) (Reissue.)						
Hoe, Robert, <i>et al.</i> (See Scott, Walter, assignor.)						
Hoefler, Emil A., assignor to Warner Manufacturing Company, Freeport, Ill. Stovepipe-damper	471,718	Mar. 29	3192	814	58	1750
Hoefler, Henry, Philadelphia, Pa. Butcher's or bow saw	480,697	Aug. 9	1520	378	60	884
Hoffend, Nickolaus, Rochester, N. Y. Means for hanging moldings	482,742	Sept. 20	1359	336	60	1626
Hoefler, Albert, <i>et al.</i> (See Kellogg, James F., assignor.)						
Hoefler, Albert, <i>et al.</i> (See Pynchon, Edwin, assignor.)						
Hoefler, Albert, <i>et al.</i> (See Stuck, Levi, assignor.)						
Hoefler, Adolph, and F. L. G. Chapman, Stevens Point, Wis. Vehicle-axle	473,189	Apr. 19	1849	466	59	374
Hoegren, Anders G. (See Bertheau and Hoegren.)						
Hoehl, Frederick D., Pittsburg, Pa. Alarm-clock	467,109	Jan. 12	1318	334	58	259
Hoeller, Otto A., Cincinnati, Ohio. Surgical knife	476,272	June 7	65	14	59	1450
Hoelscher, Herman M., assignor to L. Wolf Manufacturing Company, Chicago, Ill. Portfolio	472,264	Apr. 5	406	104	59	76
Hoeninghansen, Adolph, and C. R. Mueller, Jr., Detroit, Mich. Lamp attachment	487,482	Dec. 6	413	106	61	1402
Hoenscheid, Peter, assignor to Whitman & Barnes Manufacturing Company, Akron, Ohio. Twist-drill milling-machine	486,970	Nov. 29	2898	748	61	1220
Hoerle, William M., assignor to Pittsburgh Brass Company, Allegheny, Pa. Wick-raising device for central-draft lamps	466,919	Jan. 12	999	256	58	199
Hoersch, Gottlieb, assignor to H. Hoersch, Philadelphia, Pa. Reversible window-sash	483,763	Oct. 4	362	91	61	76
Hoersch, Henry. (See Hoersch, Gottlieb, assignor.)						
Hoerschelmann, Valentine, Brooklyn, N. Y. Refrigerator	477,803	June 28	2519	632	59	1978
Hoerschelmann, Valentine, Brooklyn, N. Y. Refrigerator	477,804	June 28	2520	632	59	1979
Hoerschen, Henry, assignor to E. A. Benson, Omaha, Nebr. Coin-controlled phonograph	488,278	Dec. 20	1725	435	61	1699
Hoerster, Otto G. (See Wentz, William F., assignor.)						
Hoeyeler, William A., and T. J. McGighe, Pittsburg, Pa.; said McGighe assignor to said Hoeyeler. System for distributing gas under pressure. (Reissue)	11,283	Nov. 15	1979	525	61	1008
Hoeyeler, William A., and T. J. McGighe, Pittsburg, Pa.; said McGighe assignor to said Hoeyeler. System for distributing gas under pressure. (Reissue)	11,284	Nov. 15	1981	526	61	1009
Hoev, John W., <i>et al.</i> (See Hamilton, William J., assignor.)						
Hofbauer, Frank, assignor of two-thirds to O. Lever and W. S. Grundy, Philadelphia, Pa. Machine for forming and cutting fringe loops on edges of fabrics	486,253	Nov. 15	1718	<div>452 453</div>	61	955

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Hofbauer, John. (See Renner and Hofbauer.)						
Hofe, Julius von, Brooklyn, N. Y. Fishing-reel	488,408	Dec. 20	1935	485	61	1740
Hoff, Bogdan, Jaroslau, and J. Frommel, Pawlosiow, Austria-Hungary. Rectifying apparatus	475,961	May 31	3322	838	59	1335
Hoff, Charles, Cincinnati, Ohio. Sheet-metal-seaming machine	470,755	Mar. 15	1734	447	58	1452
Hoff, Charles, Cincinnati, Ohio. Soap-press	473,505	Apr. 26	2375	602	59	499
Hoff, Leopold, Hamburg, Germany. Treatment of beer	470,621	Mar. 8	1534		58	1404
Hoff, Peter, assignor of three-fourths to E. E. Bryant, G. H. Barnes, and E. H. Gillman, Detroit, Mich. Car-coupling	476,016	May 31	3398	857	59	1351
Hoffman, Alvan S. (See Chaffee, Hoffman, and Green.)						
Hoffman, Andrew E., Fort Wayne, Ind. Veneer-saw	480,428	Aug. 9	1097	274	60	800
Hoffman, Austin D., assignor to Hoffman Manufacturing Company, Minneapolis, Minn. Price-scale	487,272	Dec. 6	52	16	61	1332
Hoffman, Austin D., Minneapolis, Minn., assignor to Standard Syndicate, of Minnesota. Box-lid holder	487,566	Dec. 6	539	138	61	1428
Hoffman, Austin D., assignor to C. G. Bates, M. E. Wallace, and B. Hirth, Minneapolis, Minn. Water-closet valve	468,376	Feb. 16	1511	386	58	839
Hoffman, Clara E., administratrix. (See Hoffman, Ferdinand A.)						
Hoffman, Ferdinand A., deceased, Byron, Cal.; C. E. Hoffman, administratrix. Fumigator	483,484	Sept. 27	2510	632	60	1864
Hoffman, Henry C., assignor of one-half to D. Hogan, Mound City, Ill. Gate-latch	484,752	Oct. 18	1904	485	61	411
Hoffman, John, and H. F. Turner, Oakley, Kans. Wind-motor	477,544	June 21	2093	521	59	1879
Hoffman, John W. (See Gordon, William M., assignor.)						
Hoffman, John W., Chicago, Ill. Galvanic battery	484,096	Oct. 11	855	217	61	189
Hoffman, Joseph L., Longtown, Mo. Hay-carrier	479,423	July 26	2126	532	60	456
Hoffman Manufacturing Company. (See Hoffman, Austin D., assignor.)						
Hoffman, Ross J., Binghamton, N. Y. Speed-regulator	472,355	Apr. 5	545	141	59	102
Hoffman, Rutledge T., St. Louis, Mo., assignor to S. Smith, Little Rock, Ark. Plant or tree supporter	469,246	Feb. 23	2090	537	58	960
Hoffman, William H., Brewster, N. Y. Attrition-mill	486,560	Nov. 22	2223	583	61	1068
Hoffman, William H., Brewster, N. Y. Bushing for attrition-mills	486,581	Nov. 22	2224	584	61	1068
Hoffmann, Carl, Charlottenburg, assignor to Siemens & Halske, Berlin, Germany. Apparatus for rock-boring	474,297	May 3	642	162	59	761
Hoffmann, Francis H. (See Hoffmann, Hermann H. and F. H.)						
Hoffmann, Friedrich. (See Brandt and Hoffmann.)						
Hoffmann, Hermann H., Chicago, Ill. Bill-holder	472,576	Apr. 12	880	226	59	182
Hoffmann, Hermann H. and F. H., Chicago, Ill. Blank-book	487,014	Nov. 29	2967	764	61	1233
Hoffmann, Louis, et al. (See Kayser, William J., assignor.)						
Hoffmann, Meinhard, Mainkur, near Frankfort-on-the-Main, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Manufacture of yellow dyes	472,121	Apr. 5	175		59	33
Hoffmann, Meinhard, Mainkur, near Frankfort-on-the-Main, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Dyeing black	473,928	May 3	68		59	649
Hoffmann, Meinhard, Mainkur, near Frankfort-on-the-Main, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Manufacture of yellow dyes. (Reissue.)	11,267	Sept. 6	686		60	1470
Hoffmann, Meinhard, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Diazo dye	480,326	Aug. 9	933		60	772
Hoffmann, Paul W. (See Quinn and Hoffmann.)						
Hoffmann, Solomon D., Moscow, Russia. Composition for and method of making heads and limbs of dolls	480,094	Aug. 2	532		60	684
Hoffmeister, John, Hincley, Ill. Clothes-line reel	470,674	Mar. 15	1615	419	58	1428
Hofheimer, Maurice, assignor of one-half to C. M. Becker, New York, N. Y. Street-sign	472,050	Apr. 5	61	16	59	14
Hofheimer, Maurice, New York, N. Y., assignor to Electrical Reflector Company, of New Jersey. Street-sign	484,097	Oct. 11	856	217	61	190
Hofman, John, Rochester, N. Y. Show-case corner	474,015	May 3	208	48, 49	59	678
Hofmann, Emil, assignor to Craighead & Kintz Company, Ballard Vale, Mass. Adjustable armature for electro-magnets	472,480	Apr. 5	740	188	59	140
Hofmann, Johann, assignor to Mollenkamp & Binne, Cincinnati, Ohio. Washing-machine	486,468	Nov. 22	2053	544	61	1036
Hogan, Daniel. (See Hoffman, Henry C., assignor.)						
Hogan Engineering Company. (See Hogan, John J., assignor.)						
Hogan, George P., Chicago, Ill. Spool for carrying and applying gold-leaf	472,051	Apr. 5	62	16	59	14
Hogan, James E., Oakland, Cal. Automatic cut-off for gas-burners	467,287	Jan. 19	1609	410	58	322
Hogan, James T., Jersey City, N. J., assignor to National Machine Company, Troy, N. Y. Sewing-machine for stitching buttonholes	472,501	Apr. 5	775	197, 198	59	147
Hogan, John J., St. Louis, Mo. Reclining-chair	469,569	Feb. 23	2600	667	58	1057
Hogan, John J., St. Louis, Mo. Foot-rest for chairs	470,128	Mar. 1	724	180	58	1240
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Split-pulley clamp	473,459	Apr. 26	2309	584	59	487
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Plumber's-safe connection	473,460	Apr. 26	2310	584	59	487
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Tank connection	473,461	Apr. 26	2311	584	59	488
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Coupling for pipes with flared ends	473,462	Apr. 26	2312	585	59	488
Hogan, John J., Brooklyn, assignor to Hogan Engineering Company, New York, N. Y. Pipe-turning tool	473,877	Apr. 26	2977	750	59	615
Hogan, Silas J. (See Hawley and Hogan.)						
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	473,839	Apr. 26	2908	731	59	602
Hogan, Thomas J., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Air-brake	482,058	Sept. 6	221	53	60	1378
Hogarth, James, Kirkcaldy, Scotland. Mechanism for testing and recording the properties of flour	474,636	May 10	1205	307, 308, 309	59	880
Hogate, Enoch G., et al. (See Cox, Jacob R., assignor.)						
Hoge, K. J., et al. (See Altmeyer, Matthew, assignor.)						
Hogebloom, Levi S. (See Desjardin and Stewart, assignors.)						
Hogg, Alexander, Akron, Ohio. Fruit-picker	488,243	Dec. 20	1671	417	61	1688
Hoggson, Samuel H., assignor to Stevenson-Hoggson Electric Company, St. Louis, Mo. Time-stamp	483,151	Sept. 27	1992	505, 506	60	1764
Hogle, Thomas C., Grand Rapids, Mich. Metallic-vessel closure	476,745	June 7	778	191	59	1592
Hoglen, George W., Dayton, Ohio. Vessel for fire-extinguishers or other purposes	470,569	Mar. 8	1456	378	58	1387
Hohenshell, Walter B. (See Fuller and Hohenshell.)						
Hohorst, Frederick, Brooklyn, N. Y. Sling for packages	471,861	Mar. 29	3419	873	58	1793

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hoke, John I., South Bend, Ind. Corn-harvesting machine.....	471,119	Mar. 22	2300	{ 590 591 }	58	1574
Hoke, John I., South Bend, Ind. Harrow.....	473,155	Apr. 19	1778	449	59	362
Hoke, Quinton J., assignor of one-half to S. L. Miller, Yorkville, and J. W. Roddey, Rock Hill, S. C. Car-coupling.....	474,909	May 17	1641	419	59	980
Holbrook, Charles W., Windsor Locks, assignor, by mesne assignments, to Gray Automatic Telephone Pay Station Company, Hartford, Conn. Coin signal-sounding device.....	481,903	Aug. 30	3506	859	60	1310
Holcomb, Clifford A., Beloit, Wis. Mechanical movement.....	482,743	Sept. 20	1360	{ 336 337 }	60	1626
Holcomb, Edwin L., Springfield, Mass. Micrometer-calipers.....	479,807	Aug. 2	49	12	60	591
Holcomb, Horace, Wilkes-Barre, Pa. Device for cutting grooves in axle-collars.....	468,085	Feb. 2	265	64	58	576
Holdam, James F., Crab Orchard, Ky. Gage-cock.....	484,316	Oct. 11	1312	308	61	259
Holden, Clark, Barre, Vt. Bush-hammer.....	470,570	Mar. 2	1457	378	58	1387
Holden, Daniel L., New York, N. Y. Ice-making machine.....	471,684	Mar. 29	3135	799	58	1739
Holden, Daniel L., New York, N. Y. Refrigerating-machine.....	473,156	Apr. 19	1779	449	59	362
Holden, Daniel L., New York, N. Y. Refrigerating apparatus.....	473,157	Apr. 19	1781	449	59	363
Holden, Daniel L., New York, N. Y. Refrigerating apparatus.....	473,176	Apr. 19	1826	460	59	370
Holden, Daniel L., New York, N. Y. Refrigerating apparatus.....	484,913	Oct. 25	2188	564	61	481
Holden, Daniel L., New York, and J. J. Hayes, Brooklyn, N. Y. Exhaust and pressure pump.....	467,578	Jan. 26	2085	528	58	420
Holder, Edward P. (See Brown and Holden.)						
Holden, Edward R., Denver, Colo. Purifying hyposulphite leaching solutions.....	471,550	Mar. 29	2938		58	1704
Holden, Elbridge G., Fulton, Tex. Mosquito-bar frame.....	472,879	Apr. 12	1316	338	59	263
Holden, George R. (See Ross, James J., assignor.)						
Holden, George W., Springfield, Mass. Book-cover.....	473,575	Apr. 26	2509	633	59	526
Holden, Lewis E. (See Burton, Charles C., assignor.)						
Holden, Martha B., Chicago, Ill. Carpet-sweeper.....	488,562	Dec. 27	2190	541	61	1806
Holden, William H. (See Verburg, Simon, assignor.)						
Holden, William H., Detroit, Mich. Bottle-corking machine.....	484,591	Oct. 18	1635	415	61	355
Holden, William H., Hamilton, Canada. Lamp-kettle.....	487,326	Dec. 6	147	42	61	1349
Holder, Alfredo R., Barcelona, Spain, assignor to Society Edoux et Cie, Paris, France. Elevator.....	486,161	Nov. 15	1577	418	61	928
Holder, William, Mokelumne Hill, Cal. Atmospheric bed-covering.....	469,247	Feb. 23	2092	538	58	960
Holding, Charles, Urbana, Ohio. Register and stop-motion mechanism therefor for weaving-machines.....	485,869	Nov. 8	1081	287	61	810
Holdridge, Charles H., Westerly, R. I. Vehicle-gear.....	483,381	Sept. 27	2386	599	60	1838
Holdship, George L., Allegheny, Pa. Apparatus for beading and curling sheet-metal vessels.....	487,529	Dec. 6	487	{ 127 128 }	61	1417
Holdsworth, Charles H., Elyria, Ohio. Bicycle-saddle spring.....	478,430	July 5	570	138	60	111
Holdsworth, Nathan B., Spencerville, Ohio. Leather-splicing device.....	472,052	Apr. 5	63	16	59	15
Holdeger, James P., Spokane, Wash. Street-railway-switch appliance.....	482,903	Sept. 20	1613	404	60	1675
Holladay, John M., Holladay, Va. Knock-down hen-hovel.....	479,942	Aug. 2	259	64	60	632
Holladay, William M., Houlika, Miss. Planter.....	486,971	Nov. 29	2900	749	61	1221
Hollafolla, George, Syracuse, N. Y. Vehicle-wheel.....	482,175	Sept. 6	422	100	60	1418
Holland, Charles A., Maxton, N. C. Strainer-point for driven wells.....	468,343	Feb. 9	690	171	58	667
Holland, Charles L., Revere, Mass. Self-countersinking screw-head.....	466,463	Jan. 5	246	62	58	47
Holland, Curtis, Millis, Mass. Skate-sharpener.....	484,201	Oct. 11	1016	259	62	221
Holland, Jackson. (See Patten, James S., assignor.)						
Holland, James M., assignor to Mount Pleasant Road Grader Company, Mount Pleasant, Iowa. Road-grader.....	484,428	Oct. 18	1388	355	61	305
Holland, James M., assignor to Mount Pleasant Road Grader Company, Mount Pleasant, Iowa. Road-scraper.....	484,429	Oct. 18	1390	{ 355 356 }	61	305
Holland, John. (See Heywood and Holland.)						
Holland, John, Cincinnati, Ohio. Fountain-pen.....	471,175	Mar. 22	2387	609	58	1590
Holland, John, Cincinnati, Ohio. Fountain-pen.....	485,795	Nov. 8	971	260	61	788
Holland, John P., Newark, N. J. Submergible torpedo-boat.....	472,670	Apr. 12	1018	263	59	205
Holland, William, South Bend, Ind., assignor of one-half to J. Zaehule. Pitch-gage for bevel-gears.....	486,042	Nov. 8	1365	363	61	868
Hollands Manufacturing Company. (See Parnall, Alfred N., assignor.)						
Hollandt, Herman, Jersey City, N. J., assignor to Silver & Company, New York, N. Y. Pan cover.....	487,443	Dec. 6	359	93	61	1392
Hollar, William H., Elizabeth, N. J., and F. S. Holmes, Malden, Mass., assignors to J. W. Torrey, Merchantville, N. J. Electric lock.....	477,897	June 28	2681	{ 670 671 }	59	2008
Hollar, William H., Elizabeth, N. J., and F. S. Holmes, Malden, Mass., assignors to J. W. Torrey, Merchantville, N. J. Electric lock.....	477,898	June 28	2683	671	59	2009
Hollenbeck, Frank A., assignor to Baker Gun and Forging Company, Batavia, N. Y. Breakdown gun.....	481,327	Aug. 23	2567	630	60	1113
Holler, John M., Albany, N. Y. Wagon running-gear.....	472,295	Apr. 5	450	116	59	85
Hollerith, Herman, Washington, D. C. Keyboard-punch.....	487,737	Dec. 13	820	{ 208 209 }	61	1501
Holley, Clarence E., Fort Fairfield, Me. Wagon running-gear.....	472,053	Apr. 5	64	16	59	15
Hollinger, Isaac K., Weaver's Station, Ohio. Fence-stay.....	473,001	Apr. 19	1525	389	59	316
Hollingshead, William B., Bronxville, assignor of one-half to S. H. Carney, New York, N. Y. Compound sheet-metal plate.....	488,499	Dec. 20	2085	518	61	1771
Hollingsworth, Charles M., Cleveland, Ohio. Vapor-stove.....	470,756	Mar. 15	1736	447	58	1452
Hollingsworth, Charles M., Cleveland, Ohio. Vapor-stove.....	471,289	Mar. 22	2555	649	58	1622
Hollingsworth, Charles M., Cleveland, Ohio. Passenger-railway system.....	474,657	May 10	1238	{ 316 317 }	59	886
Hollingsworth, Charles M., Cleveland, Ohio. Roundabout.....	474,658	May 10	1243	{ 317 318 }	59	887
Hollingsworth, Charles M., Cleveland, Ohio. Rotary pavilion.....	474,659	May 10	1245	318	59	887
Hollingsworth, Charles M., Cleveland, Ohio. Railway-car.....	474,660	May 10	1246	318	59	888
Hollingsworth, Gibson R., Hagerstown, Md. Bridle appliance for subduing horses.....	474,739	May 10	1371	347	59	913
Hollingsworth, John P. (See Herndon and Hollingsworth.)						
Hollingsworth, Jephtha G., Kansas City, Mo. Forming dental crowns.....	488,008	Dec. 13	1269	316	61	1590
Hollingsworth, Sidney P., Washington, D. C. Electric locomotive.....	470,627	Mar. 8	1540	401	58	1405
Hollingsworth, Sidney P., Washington, D. C. Car-brake.....	474,958	May 17	1720	{ 437 438 }	59	996
Hollingsworth, Thomas H., assignor of two-thirds to N. B. Josey and A. McDowell, Scotland Neck, N. C. Attachment for knitting-machines.....	475,113	May 17	1973	{ 499 500 }	59	1044
Hollingworth, Edward, Dobcross, England. Loom.....	469,210	Feb. 16	2041	521	58	941
Hollingworth, Edward, Dobcross, England, assignor to Knowles Loom Works, Worcester, Mass. Automatic stopping and restarting mechanism for looms.....	466,754	Jan. 5	713	184	58	135
Hollis, Albert D., assignor to himself and C. L. Cahill, Philadelphia, Pa. Measuring-faucet.....	471,238	Mar. 22	2482	630	58	1607

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hollis, Albert D., deceased; A. M. Hollis, administratrix, assignor to C. L. Cahall, Philadelphia, Pa. Measuring-vessel.....	474,939	May 17	1723	438	59	997
Hollis, Annie M., administratrix. (See Hollis, Albert D.)						
Hollis, Frank J., Kansas City, Mo. Combined self-feeding coffee-mill and storage-receptacle.....	473,394	Apr. 19	2196	551	59	443
Hollis, George W. (See Buckner, James, assignor.)						
Hollis, Guy E., Benton Harbor, Mich. Clock-hand remover.....	478,009	June 28	2853	714	59	2043
Hollis, Henry L., Chicago, Ill. Elevator.....	476,017	May 31	3399	857 858	59	1352
Hollister, Edgar J., Tecumseh, Mich. Vegetable-washer.....	486,180	Nov. 15	1600	424	61	932
Holloway, Charles T., Baltimore, Md. Vehicle for fire-department use.....	469,998	Mar. 1	536	133	58	1203
Holloway, William, Jr., Wayne, Pa. Electric-railway system.....	470,129	Mar. 1	736	180	58	1240
Hollweg, Carl, Barmen, Germany. Clasp-buckle.....	485,544	Nov. 1	599	160	61	695
Holly, Edgar P., assignor to himself, A. M. Cushing, and W. B. C. Pearsons, Springfield, Mass. Valve-packing device.....	473,554	Apr. 26	2451	620	59	513
Holly, Peter B., et al. (See Seip, Thomas A., assignor.)						
Holly, Willis, Washington, D. C. Car-coupling.....	484,430	Oct. 18	1394	356	61	306
Holm, Charles W., Troy, Ohio. Iron fence-post.....	483,060	Sept. 20	1853	470	60	1726
Holman, Daniel F., Chicago, Ill. Combined rail-brace and tie-plate.....	485,384	Nov. 1	364	98	61	647
Holman, Edward E., administrator. (See Cavanaugh, Alexander R.)						
Holman, Henry J., Waveland, Ind. Automatic wagon-brake.....	469,740	Mar. 1	114	30	58	1192
Holman, Jacob, Liberty, Ill. Stackers.....	477,937	June 28	2743	687	59	2022
Holman, Silas W., Newton, Mass. Electric conductor for metallic circuits.....	469,248	Feb. 23	2094	538	58	960
Holman, William L., et al. (See Green, John, assignor.)						
Holme, Eric W. H., Toronto, Canada. Demijohn-holder.....	480,095	Aug. 2	532	135	60	684
Holmer, John B. (See Ericson, Herman, assignor.)						
Holmes, Britain. (See Holmes, Edward and B.)						
Holmes, Buckley H., and J. R. Ralston, Goshen, Ind. Type-cleaner for type-writing machines.....	472,760	Apr. 12	1154	296	59	231
Holmes, Catherine L. (See Holmes, John M., assignor.)						
Holmes, Daniel M., Arlington, N. J. Ash-cart.....	479,760	July 26	2682	666	60	560
Holmes, Daniel M., Arlington, N. J., assignor to J. R. Van Derveer, New York. Machine for applying chocolate to cream-drops.....	485,326	Nov. 1	268	73	61	626
Holmes, Edward and B., Buffalo, N. Y. Gang edging-machine.....	484,431	Oct. 18	1396	357	61	307
Holmes, Ezra S., Grand Rapids, Mich. Fishing-reel.....	470,130	Mar. 1	727	181	58	1241
Holmes Fibre-Graphite Manufacturing Company. (See Holmes, Philip H., assignor.)						
Holmes Fibre Graphite Manufacturing Company. (See Howson, Henry, assignor.)						
Holmes, Franklin, assignor of one-half to C. N. Sandford, King City, Mo. Kitchen-cabinet.....	483,219	Sept. 27	2108	534 535	60	1788
Holmes, Frederick S. (See Hollar and Holmes.)						
Holmes, Frederick S., Boston, Mass., assignor to J. W. Torrey, Philadelphia, Pa. Electric lock.....	467,465	Jan. 19	1874	478 479	58	374
Holmes, Harry W. (See Stephens and Holmes.)						
Holmes, John M., assignor to C. L. Holmes, Glens Falls, N. Y. Disintegrating-machine.....	469,141	Feb. 16	1920	491 492	58	920
Holmes Manufacturing Company. (See Carter, Henry and T. A., assignors.)						
Holmes Manufacturing Company. (See Lynch, George D., assignor.)						
Holmes, Mark. (See Briedwell, Edgar M., assignor.)						
Holmes, Philip H., Gardiner, Me. Drawing-roll.....	480,195	Aug. 2	696	176	60	714
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Projectile.....	468,621	Feb. 9	1119	285	58	751
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Projectile.....	468,622	Feb. 9	1120	285	58	751
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Composition of matter.....	469,142	Feb. 16	1922	492	58	921
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Composition of matter for journal-bearings.....	481,949	Sept. 6	45	10	60	1343
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Composition of matter.....	482,176	Sept. 6	423	.....	60	1418
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Electrical conductor.....	482,177	Sept. 6	424	101	60	1418
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Bearing.....	482,309	Sept. 6	647	155	60	1462
Holmes, Philip H., Gardiner, Me., assignor to Holmes Fibre-Graphite Manufacturing Company, Chicago, Ill. Manufacturing composition journal-bearings.....	482,310	Sept. 6	648	.....	60	1462
Holmes, Waldo E. (See McFarlane, Robert, assignor.)						
Holmes, Watson M., Hoosick Falls, N. Y. Apparatus for raising and lowering harvester-platforms.....	475,862	May 31	3161	802	59	1304
Holmes, William S. (See Hall and Holmes.)						
Holmok, Charles. (See Tischler and Holmok.)						
Holmqvist, Victor, Chicago, Ill. Extension-ladder.....	475,279	May 17	2219	569	59	1095
Holroyd, James, Albany, N. Y. Undershirt and making the same.....	479,276	July 19	1862	467	60	390
Holstein, Sigmund A., Cleveland, Ohio. Bed-lounge.....	479,071	July 19	1545	386	60	329
Holsten, John B., New York, N. Y. Floating pot.....	482,638	Sept. 13	1186	287	60	1580
Holmstrom, Anders, New York, N. Y. Piano.....	477,938	June 28	2744	688	59	2022
Holmström, Carl. (See Acland and Holmström.)						
Holmström, Carl, assignor of one-half to F. E. D. Acland, Westminster, England. Breech-loading quick-firing gun.....	469,814	Mar. 1	239	60, 61	58	1148
Holsclaw, Wilford H., assignor to B. F. Avery & Sons, Louisville, Ky. Wheel for seed-planters.....	468,136	Feb. 2	346	86	58	592
Holsclaw, Wilford H., assignor to B. F. Avery & Sons, Louisville, Ky. Whiffletree.....	473,226	Apr. 19	1910	481	59	387
Holson, Albert E., Chicago, Ill., assignor to Holson Electric Harness and Supply Company, of Illinois. Electrical device for stopping horses.....	470,155	Mar. 1	759	189	58	1247
Holson Electric Harness and Supply Company. (See Holson, Albert E., assignor.)						
Holstein, Adolf M., Syracuse, N. Y. Extension-table.....	468,042	Feb. 2	205	50, 51	58	564
Holt, Albert T., assignor to B. F. Goodrich Company, Akron, Ohio. Syringe.....	468,877	Feb. 16	1512	386	58	839
Holt, Benjamin, Stockton, Cal. Traveling harvester.....	483,449	Sept. 27	2470	621 622	60	1856
Holt, Charles C., assignor of one-half to T. Hall, Lawrence, Mass. Screw.....	468,543	Feb. 9	1002	256	58	729
Holt, Charles F., assignor of one-half to W. S. Starr, New London, Conn. Electric actuator for registering mechanisms.....	475,399	May 24	2410	615	59	1147
Holt, Dudley T., Harrold, Tex. Combined measure and funnel.....	485,545	Nov. 1	600	160	61	696
Holt, Frederic W., St. George, Canada. Fluid-meter.....	479,277	July 19	1864	467	60	390
Holt, Gardner L., Springfield, Mass. Ratchet-brace.....	468,911	Feb. 16	1561	397	58	849

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Cr.	Vol.	Page.
Holt, George, Philadelphia, Pa. Tile-stand	475,980	May 31	3352	845	59	1341
Holt, Herbert L., Trivoli, Ill. Traction-wheel	483,220	Sept. 27	2109	535	60	1788
Holt, Herbert L., Ellsworth, Me. Adjustable electric-light hanger	483,556	Oct. 4	59	15	61	14
Holt, John M., Manchester, Va., assignor of one-half to A. L. Wilkinson, Sr. Filter	471,385	Mar. 22	2704	689	58	1651
Holt, Noah W., Manchester, Mich. Combined scalper, purifier, and grader	484,202	Oct. 11	1017	260	61	221
Holt, Sam. T. H., Philippi, W. Va. Heating-chimney	469,700	Mar. 1	46	15	58	1107
Holter, Christian C., Roland, Iowa. Farm-gate	475,316	May 24	2270	585	59	1120
Holtz, William. (See Botsford and Holtz.)						
Holtzer-Cabot Electric Company. (See Holtzer and Cabot, assignors.)						
Holtzer, Charles W., and G. E. Cabot, Brookline, assignors to Holtzer-Cabot Electric Com- pany, Boston, Mass. Electric indicator	466,787	Jan. 12	774	201 202	58	157
Holwell, Jeremiah J., New York, N. Y. Door-check	472,880	Apr. 12	1317	338	59	263
Holyoke Envelope Company. (See Ball, James, assignor.)						
Holyoke Machine Company <i>et al.</i> (See Keene, Samuel D., assignor.)						
Holzappel, Albert C. A., London, England. Portable punching and riveting machine	472,356	Apr. 5	546	141	59	102
Holzappel, Albert C. A., London, England. Portable punching and riveting machine	472,357	Apr. 5	547	142	59	102
Holzappel, Albert C. A., London, England. Machine for shaping and flanging metal plates	474,661	May 10	1249	318	59	888
Holzappel, Albert C. A., London, England. Construction of vessels	476,643	June 7	628	152	59	1561
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Wick-adjust- ing device	471,083	Mar. 15	2236	574	58	1549
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Wick-raiser for central-draft lamps	477,862	June 28	2624	657	59	1998
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Wick-raiser for central-draft lamps	477,863	June 28	2625	657	59	1998
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Lamp-fount for central-draft lamps	477,864	June 28	2627	658	59	1998
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Central-draft lamp	477,865	June 28	2629	658	59	1999
Homan, William C., Meriden, assignor to Hendey Machine Company, Torrington, Conn. Tool-holder for lathes	484,317	Oct. 11	1213	308	61	259
Hombach, Peter W. (See McCann, Patrick, assignor.)						
Homer, Chauncey S., and W. H. Pickett, Warren, Pa. Extension-table	472,881	Apr. 12	1318	338 339	59	263
Homes, Gustave A., St. Louis, Mo. Wagon-drag	488,812	Dec. 27	2754	639	61	1883
Homolka, Benno, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on- the-Main, Germany. Making rosaniline dyes	471,638	Mar. 29	3061	.....	58	1726
Honey-Brook Novelty Company. (See Chmenson, William W., assignor.)						
Honigmann, Moritz, Grevenberg, near Aix-la-Chapelle, Germany. Engine	477,367	June 21	1817	444	59	1823
Honigmann, Moritz, Grevenberg, near Aix-la-Chapelle, Germany. Apparatus for super- heating vapors and gases	485,796	Nov. 8	972	260	61	789
Honiss, William H. (See Lorenz, William A., assignor.)						
Honiss, William H. (See Mildrum, Ernest W., assignor.)						
Honscheid, William, Elmira, N. Y. Work-holder for metal-planers	469,815	Mar. 1	242	62	58	1148
Hood, Arnold S. (See Winchester and Hood.)						
Hood, Horace W., Nashua, N. H. Sash-fastener	488,358	Dec. 20	1860	466	61	1725
Hood, John, and S. H. Reynolds, Boston, Mass. Dental bracket	466,464	Jan. 5	247	62, 63	58	47
Hood, Otis, Onset, Mass. Car-coupling	479,881	Aug. 2	162	40	60	613
Hood, Willis F., assignor of one-half to J. W. Brenkert, Detroit, Mich. Game apparatus	475,561	May 24	2675	679	59	1196
Hoogerzeil, Peter, Beverly, Mass. Stove-oven	467,292	Jan. 19	1616	412	58	323
Hoogerzeil, Peter, Beverly, Mass. Wheelbarrow	486,469	Nov. 22	2054	544	61	1036
Hooker & Co., Truman. (See Ball, William P., assignor.)				425 426 427 428 429 430		
Hooker, John, Beccles, England. Machinery for setting up type	488,265	Dec. 20	1702	425 426 427 428 429 430	61	1694
Hooker, John D., Los Angeles, Cal. Hydrant-valve	470,571	Mar. 8	1457	379	58	1387
Hooker, Walter. (See Harrison and Hooker.)						
Hoop, James, Ogden, Utah Ter. Stamp-holding apparatus	470,572	Mar. 8	1458	379	58	1388
Hooper, George, 2d, Marblehead, Mass. Shoe-sewing machine	474,450	May 10	921	237	59	825
Hooper, George B., Stoughton, Mass. Boot or shoe	485,813	Nov. 8	992	266	61	793
Hooper, Judson V. (See Opsion and Hooper.)						
Hooper, William H., Moscow, Idaho. Car-coupling	487,030	Nov. 29	2991	770	61	1237
Hooper, William J., Baltimore, Md. Machine for making nets	484,893	Oct. 25	2151	532 533 534	61	474
Hoopes Bro. & Darlington. (See Hoopes, Russell, assignor.)						
Hoopes, David J., Philadelphia, Pa. Driving mechanism for bicycles	474,740	May 10	1373	347	59	913
Hoopes, Russell, assignor of one-half to Hoopes Bro. & Darlington, West Chester, Pa. Ma- chine for trimming wheel-rims	485,156	Oct. 25	2562	658	61	556
Hoops, Henry A. (See Mundt and Hoops.)						
Hoos, Florence W., and E. Mann, Philadelphia, Pa. Ice-machine	469,999	Mar. 1	537	133	58	1203
Hoover, Frederick A., Rockton, Pa. Horseshoe	477,658	June 28	2293	574	59	1934
Hoover, Jeremiah L., Fishertown, Pa. Draft-equalizer	480,262	Aug. 9	831	212	60	753
Hoover, Joseph, and A. W. Jay, Minerva, Iowa. Cow-milker	474,830	May 17	1527	389	59	956
Hope, Charles H., assignor to J. Hope & Sons, Providence, R. I. Pantograph engraving- machine	474,324	May 3	689	181	59	771
Hope Electric Appliance Company. (See Wright, Augustus, assignor.)						
Hope, John, Providence, R. I. Ruling-machine	480,498	Aug. 9	1206	302	60	833
Hope, John, Providence, R. I. Pantograph engraving-machine	486,210	Nov. 15	1642	435	61	940
Hope, John, assignor to John Hope & Sons Engraving and Manufacturing Company, Provi- dence, R. I. Grinding-machine	482,947	Sept. 20	1682	423	60	1689
Hope-Jones, Robert, Birkenhead, England. Telephony	477,866	June 28	2631	658	59	1999
Hope, Patrick, Janesville, Minn. Combined hay rake and loader	468,035	Feb. 2	194	47, 48	58	562
Hope & Sons, John. (See Hope, Charles H., assignor.)						
Hopedale Electric Company. (See Usher, Edward P., assignor.)						
Hopedale Electric Company. (See Usher and Draper, assignors.)						
Hopedale Machine Company. (See Bancroft and Rhoades, assignors.)						
Hopedale Machine Company. (See Rhoades, Alonzo E., assignor.)						
Hopkin, George E., Philadelphia, Pa. Riveting-machine	469,143	Feb. 16	1923	492	58	921
Hopkin, George E., assignor to Abram Cox Stove Company, Philadelphia, Pa. Metal punching and cutting machine	471,084	Mar. 15	2237	574 575	58	1550
Hopkins, Adelbert C., Ashippun, Wis. Carriage for separators	470,867	Mar. 15	1913	489	58	1486

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Hopkins, Adelbert C., Ashippun, Wis. Railway	473,227	Apr. 19	1912	482	59	387
Hopkins, Ami, Centralia, Wash. Stump-puller	468,344	Feb. 9	691	171	58	667
Hopkins, Andrew J., Beaver Falls, Pa. Pump-valve	474,579	May 10	1132	287	59	864
Hopkins, Byron S. (See Goodell and Hopkins.)						
Hopkins, Edwin F., assignor to S. De Grow, Cleveland, Ohio. Thill-coupling	485,194	Nov. 1	62	19	61	585
Hopkins, Floyd, Belvidere, Ill. Gate	482,792	Sept. 20	1438	356	60	1641
Hopkins, George G., Brooklyn, N. Y. Sash-fastener	479,595	July 26	2400	598	60	508
Hopkins, Harvey L., assignor to Harvey L. Hopkins Company, Chicago, Ill. Automatic bearing-box adjuster	472,122	Apr. 5	176	48	59	33
Hopkins, Henry S., <i>et al.</i> (See Schiemer, Jacob, assignor.)						
Hopkins, Henry T., Cape Vincent, assignor of one-half to E. M. Parmelee, Dansville, N. Y. Grain-drier	487,738	Dec. 13	822	210	61	1501
Hopkins, Hiland E., assignor of one-half to W. W. Miles, Barton, Vt. Compound for tempering steel	488,433	Dec. 20	1979		61	1748
Hopkins, James D., Midway, Ky. Flue-stopper	487,327	Dec. 6	148	42	61	1350
Hopkins, John A., Murray, Ohio. Rope-oiling device	470,000	Mar. 1	538	134	58	1203
Hopkins, Marcus S. (See Dickson and Hopkins.)						
Hopkins, Michael R. (See Greenwald and Hopkins.)						
Hopkins, Nevil M., Washington, D. C. Burglar-alarm contact	483,844	Oct. 4	483	120	61	100
Hopkins, Samuel M., Frankfort, Kans. Windmill	484,795	Oct. 25	1987	507	61	441
Hopkins, Thomas A., Elgin, assignor to M. C. Eppenstein & Co., Chicago, Ill. Watchcase-pendant	485,581	Nov. 1	657	174	61	708
Hopkins, Thomas A., Elgin, assignor to M. C. Eppenstein & Co., Chicago, Ill. Pendant for watchcases	487,052	Nov. 29	3023	776	61	1244
Hopkins, Thomas J. (See Eyre and Hopkins.)						
Hopkins, William H., assignor to W. Thompson & Co., Chicago, Ill. Ice-cream freezer	486,779	Nov. 22	2544	664	61	1133
Hopkins, Willie E. (See Spencer, Gaston N., assignor.)						
Hopkinson, Daniel W., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Hopkinson, John A. and J. Huddersfield, England. Water-gage	481,493	Aug. 23	2828	695	60	1164
Hopkinson, Joseph. (See Hopkinson, John A. and J.)						
Hoppe, Charles, assignor to Pettibone Manufacturing Company, Cincinnati, Ohio. Helmet attachment	470,131	Mar. 1	728	181	58	1241
Hopper, George B., assignor to Fairbank Canning Company, Chicago, Ill. Machine for making sheet-metal cans	484,014	Oct. 11	746	187 188	61	167
Hoppes, John J., Springfield, Ohio; assignor, by mesne assignments, to Thomson-Houston Electric Company, of Connecticut. Trolley-catcher	483,689	Oct. 4	250	62	61	52
Horan, Patrick H., Boston, Mass. Apparatus for baking altar-bread	474,601	May 10	1151	292 293	59	869
Horcheler, William. (See Spencer, Charles F., assignor.)						
Horgan, Dennis A., Boston, Mass. Trap for sinks, &c.	483,961	Oct. 4	659	166	61	137
Horgan, Stephen H., Jersey City, N. J. Printing plate and block	478,749	July 12	1044	256	60	223
Horgan, Stephen H., Jersey City, N. J. Printing-block	478,750	July 12	1045	257	60	223
Hornel, August. (See Tilton and Hornel.)						
Horn, George W. and J. L., Farmington, assignors to W. W. Norman, Delta, Mo. Purifying-pump	480,096	Aug. 2	533	135	60	684
Horn, Josiah L. (See Horn, George W. and J. L.)						
Horn, Norbert, New York, N. Y. Gaseous-fuel generator and burner	481,494	Aug. 23	2831	695 696	60	1164
Horn, Schooler C., Bladensburg, Ohio. Ironing-board	483,922	Oct. 4	598	152	61	124
Horn, Thomas. (See Garnett and Moore, assignors.)						
Hornbeck, Cornelius F., assignor of one-half to E. D. Coburn, Owego, N. Y. Lifting-jack	473,002	Apr. 19	1526	389	59	317
Hornby, William H., Toronto, and L. M. Lent, Ridgetown, Canada. Washing-machine	471,862	Mar. 29	3420	873 874	58	1793
Horne, Henry M. and J. W. Asbell, Annie, Ga. Combined planter and cultivator	471,863	Mar. 29	3422	874	58	1794
Horne, James. (See Whinfield and Horne.)						
Horne, John H. (See Dillon, Peter, assignor.)						
Horne, John H., and C. E. Barrett, assignors to J. H. Horne & Sons Company, Lawrence, Mass. Paper-cutting machine	487,739	Dec. 13	824	210 211	61	1501
Horne-Payne, Georgiana, London, England. Tray	486,780	Nov. 22	2545	665	61	1133
Horne, Robert. (See Foose, George C., assignor.)						
Horner, Elwood T., assignor of one-half to J. A. Spence, Cambridge City, Ind. Metal-shears	484,203	Oct. 11	1025	261	61	222
Horner, Elwood T., assignor of one-half to J. A. Spence, Cambridge City, Ind. Metal-rolling machine	484,368	Oct. 11	1287	328 329	61	274
Horner, Elwood T., assignor of one-half to J. A. Spence, Cambridge City, Ind. Combined metal punching and shearing machine	484,369	Oct. 11	1289	329	61	275
Horner, Elwood T., assignor of one-half to J. A. Spence, Cambridge City, Ind. Metal-shears	484,370	Oct. 11	1290	329	61	275
Horner, Frank S., Madison, Wis. Platen-printing-press feed-gage	470,675	Mar. 15	1615	419	58	1428
Horney, Charles, St. Louis, Mo. Harness-saddle	473,627	Apr. 26	2593	652	59	541
Hornig, Julius L., St. Louis, Mo. Exhaust-head	485,195	Nov. 1	63	19	61	585
Hornig, Julius L., St. Louis, Mo. Smoke-consumer	486,781	Nov. 22	2546	665	61	1133
Horning, Jacob E., and E. D. Clapp, Washington, D. C. Lock-up mechanism for printers' forms	473,750	Apr. 26	2777	698	59	576
Hornsby, Richard O., <i>et al.</i> (See Whitley, Albert, assignor.)						
Horovitz, Bernhard, Stillwater, Minn. Rubber shoe	480,097	Aug. 2	534	135	60	684
Horrie, David, Antigo, Wis. Railway frog and switch combined	471,004	Mar. 15	2121	545	58	1527
Horrigan, Michael, Newton, Mass. Wrench	468,177	Feb. 2	410	101	58	604
Horricks, Christopher, <i>et al.</i> (See Pearce, James, assignor.)						
Horricks, John, <i>et al.</i> (See Pearce, James, assignor.)						
Horry, William S. (See Ries and Horry.)						
Horsfield, Thomas. (See Willoughby and Horsfield.)						
Horstmannshoff, Friedrich W., assignor of one-half to P. M. Kling, St. Louis, Mo. Combined sled and roller-coaster	471,639	Mar. 29	3062	779	58	1726
Horton, A. M. (See Parker, Joseph R., assignor.)						
Horton, Charles H., Wellington, Ohio. Brick-truck	487,835	Dec. 13	982	247	61	1534
Horton, Emmet, Dundee, and F. E. Fitch, Elmira, N. Y.; said Horton assignor to said Fitch. Steam boiler and generating appliance	474,795	May 10	1462	371 372	59	931
Horton, Erastus J., <i>et al.</i> (See Raymond, Silas H., assignor.)						
Horton, James W., Madison, Ind. Mail-bag catcher	478,604	July 12	835	206	60	181
Horton, John T., Lowville, N. Y. Hydraulic feed for wood-pulp machines	481,174	Aug. 23	2298	566	60	1064
Horton, Thomas. (See Thornton, Edward S., assignor.)						
Horton, William P., Jr., assignor of one-half to A. B. Jones, Cleveland, Ohio. Adjustable electrode for dental purposes	467,738	Jan. 26	2333	592	58	466

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Hosea, Lewis M., Cincinnati, Ohio. Elevator	479,943	Aug. 2	261	64	60	632
Hosea, Raphael M., Denver, Colo. Coal-chute	482,009	Sept. 6	138	73, 34	60	1362
Hosford, Henry H., Cleveland, Ohio. Solenoid and its electrical connections	473,929	May 3	69	13	59	649
Hosford, Henry H., assignor of one-half to C. W. Foote, Cleveland, Ohio. Electric motor or dynamo-electric machine	470,194	Mar. 8	846	208	58	1272
Hosford, William B., Mishawaka, Ind. Journal-box	472,729	Apr. 12	1106	285	59	222
Hosford, William B., Mishawaka, Ind. Feed-water purifier	488,813	Dec. 27	2575	639	61	1883
Hoskins, Adeline E. (See Payne, William H., assignor.)						
Hoskins, Clammer P., et al. (See Payne, William H., assignor.)						
Hosmer, Francis E., Boston, Mass. Steam-generator	484,716	Oct. 18	1838	467	61	396
Hostetler, Joseph W. (See Robberson, Alexander J., assignor.)						
Hotchkiss, Wright S., Wichita, Kans. Concrete-mixing machine	467,170	Jan. 19	1429	364 } 365 }	58	288
Hotchkiss, Arthur E., Cheshire, Conn. Elevated railway	488,200	Dec. 20	1593	399	61	1673
Hotchkiss, Arthur E., Mount Holley, N. J. Vehicle	488,201	Dec. 20	1598	399	61	1675
Hotchkiss, Charles A., assignor to Ives, Blakeslee & Williams Company, Bridgeport, Conn. Toy acrobat	466,980	Jan. 12	1094	277	58	216
Hotchkiss, Charles A., assignor of one-half to H. C. Ives, Bridgeport, Conn. Lamp-bracket for pianos	488,608	Dec. 27	2260	561	61	1821
Hotchkiss, Francis A., Cedar Falls, Iowa. Car-coupling	480,584	Aug. 9	1335	333	60	849
Hotchkiss Ordnance Company. (See Benét, Laurence V., assignor.)						
Hotchkiss Ordnance Company. (See Koerner, Alfred C., assignor.)						
Hotchkiss Ordnance Company. (See Paine, Frederick H., assignor.)						
Hottes, Charles, Dayton, Ohio. Shutter-worker	487,071	Nov. 29	3050	782	61	1250
Hottes, Frederick. (See Fach and Hottes.)						
Hottman, Charles W., Philadelphia, Pa. Mixing-machine	468,805	Feb. 16	1402	356	58	818
Houck, George W., Buffalo, N. Y. Friction-clutch	467,723	Jan. 26	2312	587	58	462
Houck, Oliver W., et al. (See Snyder, Ossill P., assignor.)						
Hougen, Ole T., and G. W. Paulus, Grand Rapids, Wis. Implement-holder for tablets, &c.	478,794	July 12	1127	278	60	238
Hough, Alexander, Dover, N. J. Vehicle-hub	468,494	Feb. 9	924	235	58	713
Hough, Azel C., South Butler, N. Y. Cash-recorder	484,501	Oct. 18	1506	363	61	329
Hough, Azel C., South Butler, N. Y. Lock	486,107	Nov. 15	1491	392 } 393 }	61	910
Hough, John C., Pittsburg, Pa. Trolley-stand for electric railways	483,061	Sept. 20	1853	470	60	1726
Houghtlin, Alfred A., Brooklyn, N. Y. Attachment to roll-carrying spindles for web-printing presses	480,499	Aug. 9	1207	302	60	823
Houghton, Arthur A., and R. D. Haines, assignors to Clay Glass Tile Company, Corning, N. Y. Plating clay with glass and in articles made accordingly	479,365	July 19	2017	504	60	421
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	470,132	Mar. 1	729	181 } 182 }	58	1241
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	472,604	Apr. 12	922	227 } 228 }	59	189
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	472,605	Apr. 12	924	228 } 229 }	59	189
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	472,882	Apr. 12	1321	339	59	264
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Die for cut-nail machines	475,768	May 31	2993	759	59	1271
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	483,720	Oct. 4	290	72, 73	61	61
Houghton, Charles E., assignor of one-half to H. R. Johnson, Northumberland, Pa. Nail-machine	487,567	Dec. 6	541	139	61	1428
Houghton, Edward J., and W. White, London, England. Automatic regulator	488,121	Dec. 13	1460	368	61	1630
Houghton, Levi W., Bath, Me. Car-coupling	487,568	Dec. 6	542	140	61	1428
Houghton, Lewis T., and A. A. Barker, Worcester, Mass. Snow-guard	472,296	Apr. 5	452	116	59	85
Houghton, Thomas, and A. D. Dick, Philadelphia, Pa. Identity-indicator	475,400	May 24	2411	615	59	1147
Houghton, Thomas J., Lancaster, Pa. Vehicle-pole tip	481,791	Aug. 30	3327	812	60	1276
Houlbrook, Edward, Rossall, England. Tool-sharpener	487,328	Dec. 6	149	43	61	1350
Houlihan, Dennis. (See Wright, George E., assignor.)						
Houlihan, John A., Rochester, N. Y. Violin-bow frog	485,038	Oct. 25	2391	614 } 111 } 112 }	61	520
Hourtney, Rudolph G., Chicago, Ill. Station-indicator	476,537	June 7	465	112 }	59	1530
House, Edward P., Greeley, Colo. Type-writing machine	466,788	Jan. 12	776	202	58	157
House, James A., Bridgeport, Conn. Corset-boning implement	475,562	May 24	2676	680	59	1197
House, John, assignor of two-thirds to I. V. Catlin, Chestertown, and J. Smith, Annapolis, Md. Portable safety-heater	485,008	Oct. 25	2342	603	61	511
House, John H. B. (See Pickering, Charles H., assignor.)						
House, Louis, Syracuse, N. Y. Horse-hitching device	488,475	Dec. 20	2042	508 } 509 }	61	1762
Houseman, Harry A., assignor to Standard Machine Company, Philadelphia, Pa. Automatic circular-knitting machine	484,737	Oct. 18	1872	477 } 478 }	61	403
Houseman, Harry A., assignor to Standard Machine Company, Philadelphia, Pa. Circular-knitting machine	484,738	Oct. 18	1877	478 } 479 } 480 }	61	404
Houseman, Thomas R., Philadelphia, Pa. Circular-knitting machine	470,757	Mar. 15	1739	447 } 448 }	58	1453
Houser, Frank B., Felicity, Ohio. Hasp-lock	475,962	May 31	3323	838	59	1335
Houser, William C., Utica, Ohio. Corn-harvester	473,840	Apr. 26	2911	731 } 732 }	59	603
Housh, Frank E., Brattleborough, Vt. Toilet paper slot-machine	471,705	Mar. 29	3164	807	58	1745
Housh, Frank E., Brattleborough, Vt. Trousers-stretcher	472,655	Apr. 12	994	257	59	202
Housh, Frank E., Brattleborough, Vt. Graphoscope	482,793	Sept. 20	1439	356	60	1642
Housh, Frank E., Boston, Mass. Toilet paper slot-machine	488,500	Dec. 20	2066	518	61	1771
Housman, Ernest, New York, N. Y., assignor to W. J. Smith, Philadelphia, Pa. Coloring or moistening device for paper	476,204	May 31	3707	936	59	1412
Housman, Moses, Brooklyn, N. Y. Colored transparency	477,120	June 14	1391	338	59	1728
Housser, Isaac W., Winnipeg, Canada. Pen-rack	488,609	Dec. 13	1271	316	61	1590
Houston, Colin, and W. A. Mackie, Glasgow, Scotland. Circulation of water in fish-wells	471,501	Mar. 22	2873	731	58	1683
Houston, James F., Lewisburg, Tenn. Gate-actuating mechanism	479,278	July 19	1867	467	60	391
Houston, John B., San Francisco, Cal. Piston-rod packing	488,434	Dec. 20	1979	494	61	1748
Houston, John V., Linkville, Oreg. Scrap-hook	485,937	Nov. 8	1195	316	61	834
Houston, Levi, Montgomery Station, Pa. Mortising-machine	478,431	July 5	571	138	60	112

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Houston, Robert C. (See Tiner, John F., assignor.)						
Houston, Samuel. (See Burdon and Houston.)						
Houze, W. P., <i>et al.</i> (See Wood, William T., assignor.)						
Hov, Torger F., Hillsborough, N. D. Ornamental tray for writing-tables, &c	471,424	Mar. 22	2763	704	58	1662
Hoval, John, Stafford, Tex. Nut and bolt wrench	481,230	Aug. 23	2394	590	60	1083
Hove, John J., assignor of one-third to M. M. Vold, Minneapolis, Minn. Liquid-measure.	469,805	Mar. 1	226	57	58	1145
Hove, John J., assignor of two-thirds to W. E. Lawrence, Minneapolis, Minn. Cash register, indicator, and automatic change-maker	479,711	July 26	2534	646	60	544
Hovendick, John E., near Blair, Nebr. Machine for distributing and reeling fence-wire	458,563	Dec. 27	2191	541	61	1806
Hover, William, Freeport, Ill. Padlock	471,482	Mar. 22	2848	725	58	1678
Hovland, Anton L., Faribault, Minn. Furnace	420,769	Aug. 16	1636	409	60	923
How, Fred, B. (See Thurston and How.)						
How, Woodbury S., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental pliers	468,746	Feb. 9	1307	332	58	790
How, Woodbury S., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental heater	469,884	Mar. 1	350	89	58	1169
How, Woodbury S., assignor to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Rubber-dam clamp	477,546	June 21	3095	521	59	1879
Howard, Antoinette, New York, N. Y. Atomizer	469,144	Feb. 16	1925	493	58	921
Howard, Ashbury E. S., Springfield, Ill. Cockeye	471,640	Mar. 29	3063	779	58	1726
Howard, Charles D., Syracuse, N. Y. Heating and ventilating apparatus	472,054	Apr. 5	65	17	59	15
Howard, Charles D., Syracuse, N. Y., assignor to Howard Thermostat Company. Automatic draft-regulator	469,185	Feb. 16	1984	507	58	933
Howard, Charles D., Syracuse, N. Y., assignor to Howard Thermostat Company. Automatic damper	480,263	Aug. 9	832	212	60	753
Howard, Charles D., assignor to Howard Thermostat Company, Syracuse, N. Y. Automatic damper-regulator	488,895	Dec. 27	2700	669	61	1909
Howard, Charles E., Leighton, Iowa. Horseshoe	471,864	Mar. 29	3423	874	58	1794
Howard, Frank A. (See Jones, James W., assignor.)						
Howard, Frank A., Belfast, Me. Screw-driver	470,001	Mar. 1	539	131	58	1203
Howard, Frank H., Irvington, N. J. Apparatus for electroplating	484,535	Oct. 18	1560	397	61	339
Howard, Frank P., assignor to G. T. Brown and J. H. Kelly, Sedalia, Mo. Sign	477,417	June 21	1890	465	59	1837
Howard, Henry. (See Unwin and Howard.)						
Howard, Henry, Halesowen, England. Arc metal-working apparatus	467,752	Jan. 26	2355	597	58	470
Howard, Henry, Halesowen, near Birmingham, England. Carbon-holder	472,055	Apr. 5	66	17	59	15
Howard, Henry, Halesowen, near Birmingham, England. Heating and welding by electricity	473,003	Apr. 19	1527	389 } 390 }	59	317
Howard, Henry, Halesowen, near Birmingham, England. Electric welding	481,030	Aug. 16	2032	507	60	1001
Howard, Herbert R. (See Howard, James and H. R.)						
Howard, James and H. R., Englewood, N. J. Brake mechanism for cars	474,451	May 10	924	238	59	825
Howard, James and H. R., New York, N. Y. Car-brake	485,385	Nov. 1	365	98	61	647
Howard, James H., Medford, Mass. Telephone	471,745	Mar. 29	3240	825	58	1758
Howard, James H., Medford, Mass. Plunge-battery	473,463	Apr. 26	2314	585	59	488
Howard, James S., New Bedford, Mass. Drinking attachment for cups, mugs, &c	478,861	July 12	1220	303	60	257
Howard, John, Farnworth, near Bolton, assignor to Concave Paddle Wheel Company, Limited, Liverpool, England. Paddle-wheel for steamers	481,668	Aug. 30	3109	759	60	1233
Howard, John, and J. H. Geddes, Sydney, New South Wales. Machine for clipping wool	471,425	Mar. 22	2764	705	58	1662
Howard, John E., Altoona, Pa. Device for heating railway-cars by steam	488,202	Dec. 20	1601	399 } 400 }	61	1675
Howard, John H., Pasadena, Cal. Cooking-steamer	468,952	Feb. 16	1640	418	58	863
Howard Manufacturing Company. (See De Graff, James W., assignor.)						
Howard Manufacturing Company. (See Howard, William C., assignor.)						
Howard Manufacturing Company. (See Witherell, Alonzo E., assignor.)						
Howard, Robert A., Richmond, Ind. Race-track	475,769	May 31	2995	760	59	1272
Howard, Rufus P., La Crosse, Wis. Disk harrow	472,656	Apr. 12	994	257	59	202
Howard, Rufus P., La Crosse, Wis. Seed-drill	488,072	Dec. 13	1391	345 } 346 }	61	1616
Howard Thermostat Company. (See Howard, Charles D., assignor.)						
Howard, William A., Chicago, Ill. Vaginal instrument	471,865	Mar. 29	3424	874	58	1794
Howard, William C., Brooklyn, N. Y., assignor to Howard Manufacturing Company, Boston, Mass. Razor-stop	478,934	July 12	1326	329	60	278
Howard, William G., and C. E. North, London, England. Waistcoat-protector	478,010	June 28	2854	714	59	2043
Howard, William H., Lowell, Mass., assignor to Waukenhose Company, Portland, Me. Assortment of stockings	478,751	July 12	1046	257	60	223
Howarth, Alfred. (See Meagher and Howarth.)						
Howarth, John B. (See Howe, Solon G., assignor.)						
Howarth, John T. (See Shrum and Howarth.)						
Howarth, John T., Beaver Falls, Pa. Wire mat	488,335	Dec. 20	1824	456	61	1717
Howat, Andrew, assignor to Deflector Safety Lamp and Miner's Appliance Company, Limited, Manchester, England. Lamp for burning mineral oils	472,056	Apr. 5	67	17, 18	59	15
Howe, Charles A., Buchanan, Mich. Fireplace attachment	470,244	Mar. 8	920	228	58	1287
Howe, Charles F., <i>et al.</i> , trustees. (See Severy, Melvin L., assignor.)						
Howe, Daniel K., assignor of one-half to J. Gill, Portland, Oreg. Fishing-fly hook	485,582	Nov. 1	658	175	61	708
Howe, Edwin J., assignor of one-half to F. Conklin, Newark, N. J. Combined forceps and tractor	485,039	Oct. 25	2392	614	61	520
Howe, Eugene L., Cleveland, Ohio. Snap-hook	473,315	Apr. 19	2048	514	59	415
Howe, Eugene L., Cleveland, Ohio. Hame	475,263	May 31	3162	802	59	1305
Howe, Eugene L., Cleveland, Ohio. Hame-tug	476,881	June 14	1010	245	59	1652
Howe, Eugene L., Cleveland, Ohio. Separating apparatus	478,159	July 5	132	33	60	29
Howe, Eugene L., Cleveland, Ohio. Hame-tug	486,378	Nov. 15	1909	505	61	994
Howe, Eugene L., Cleveland, Ohio. Fifth-wheel	488,010	Dec. 13	1271	316	61	1591
Howe, George. (See Waters, Frank J., assignor.)						
Howe, George M., Fulton, N. Y. Cash register and indicator	481,495	Aug. 23	2834	696 } 697 }	60	1165
Howe, Henry E., Merrill, Wis. Coin-holder	475,563	May 24	2677	680	59	1197
Howe, Hemon A., Middletown, Conn. Window-sash	472,458	Apr. 5	704	180	59	133
Howe, James P., Cass City, Mich. Beading-machine	470,573	Mar. 8	1460	379	58	1388
Howe, John B., Danbury, Conn. Machine for pouncing hats	480,098	Aug. 2	535	136	60	684
Howe, John C., assignor to J. J. and J. M. Warren, Worcester, Mass. Air-gun	483,651	Oct. 4	197	49	61	41
Howe, Merrill A., San Francisco, Cal. Insertible saw-bit	471,326	Mar. 22	2607	661	58	1639
Howe, Nathan, and A. L. Bush, assignors to Glasco Thread Company, Worcester, Mass. Thread-unwinding device for sewing-machines	471,054	Mar. 15	2188	564	58	1540
Howe, Orrin P., Augusta, Me. Portable house	477,757	June 28	2454	613	59	1967
Howe, Patrick, Boston, Mass. Cloth-cutting machine	472,172	Apr. 5	252	66	59	47

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Howe, Patrick, Boston, Mass. Cloth-laying machine.....	472,173	Apr. 5	253	66, 67	59	47
Howe, Samuel, Chicago, Ill. Farm-wagon.....	478,432	July 5	572	138	60	112
Howe, Solon G., assignor of one-half to J. B. Howarth, Detroit, Mich. Combination safety railway-track.....		June 28	2932	732	59	2057
Howe, Theodore C., Genesee Fork, Pa. Register.....	473,751	Apr. 26	2778	698	59	576
Howe, Warren B., Chicago, Ill. Paper box.....	482,480	Sept. 13	936	228	60	1530
Howe, Warren B., and F. B. Davidson, Chicago, Ill. Box.....	482,479	Sept. 13	934	228	60	1530
Howe, William A. (See Lane, Bradford, assignor.)						
Howell, Abram. (See Warne, Amuzott A., assignor.)						
Howell, Clara S. (See Odell and Howell.)						
Howell, Commodore P., Chattanooga, Tenn. Railway tie and chair.....	473,071	Apr. 19	1636	416	59	337
Howell, Edward D., Brooklyn, N. Y. Game apparatus.....	483,062	Sept. 20	1655	471	60	1726
Howell, Freeman R. (See Kelly and Howell.)						
Howell, G. A., et al. (See Wood, Albert A., assignor.)						
Howell, George B., Philadelphia, Pa. Coupling for water-closets.....	484,318	Oct. 11	1215	308	61	259
Howell, George C., Alameda, Cal. Fruit-pitter.....	484,154	Oct. 11	948	243	61	207
Howell, George W., Covington, Ky. Door-mat.....	477,545	June 21	2094	521	59	1879
Howell, Hampton C., et al. (See Foster, Washington H., assignor.)						
Howell, John A., Washington, D. C. Torpedo-launching apparatus.....	484,658	Oct. 18	1759	{ 447 } 448	61	380
Howell, John W., Newark, N. J., assignor to Edison General Electric Company, New York, N. Y. Electrical pressure-indicator.....	480,947	Aug. 16	1903	476	60	976
Howell, Richard, Troy Hills, N. J. Fire-escape.....	487,569	Dec. 6	543	140	61	1428
Howell, William B., Albany, Mo. Cattle-dehorner.....	483,557	Oct. 4	61	15	61	14
Howell, William H., assignor of one-half to A. Hansel, Thorold, Canada. Apparatus for making bisulphite of lime.....	487,887	Dec. 13	1070	268	61	1550
Hoves, Albert P., Worcester, Mass. Automatic sprinkler.....	473,628	Apr. 26	2594	653	59	541
Howison, Allen P., et al. (See Riggs, Lewis S., assignor.)						
Howland, Austin T., et al. (See Ashley, William A. G., assignor.)						
Howland, George B., Pontiac, Ill. Artist's easel.....	467,653	Jan. 26	2192	557	58	440
Howland, George B., assignor to F. N. Smith, Pontiac, Ill. Board-rule.....	463,363	Feb. 23	2272	583	58	995
Howlett, Charles W., assignor of one-third to D. S. Gerber, Kansas City, Mo. Rail-brake.....	481,029	Aug. 16	2031	507	60	1000
Howson, Henry, Philadelphia, Pa., assignor to Holmes Fibre Graphite Manufacturing Company, Chicago, Ill. Bearing.....	476,144	May 31	3604	911	59	1393
Howson, Henry, Philadelphia, Pa., assignor to Holmes Fibre Graphite Manufacturing Company, Chicago, Ill. Making composition bearings.....	476,145	May 31	3605	911	59	1393
Howze, William, Cairo, Ga. Well-bucket sinker.....	473,576	Apr. 26	2510	633	59	526
Hoxie, Edmund, Everett, Mass. Ballot-box.....	488,203	Dec. 20	1602	400	61	1675
Hoxie, John C., Albany, N. Y. Ice-cream freezer.....	467,934	Feb. 2	50	12	58	535
Hoy, Henry S., Louisville, N. Y. Hay-rack.....	481,175	Aug. 23	2299	567	60	1064
Hoy, John S., et al. (See Hendricks, Frank P., assignor.)						
Hoyt, Albert W. (See Hoyt and Leffler, assignors.)						
Hoyt, Alphonso O., and P. W. Leffler, assignors of one-third to A. W. Hoyt, Minneapolis, Minn. Switch for overhead wires.....	475,504	May 24	2584	658	59	1179
Hoyt, Buckingham S., New York, N. Y. Perpetual monthly calendar.....	471,120	Mar. 22	2302	591	58	1574
Hoyt, Charles A., Butte City, Mont. Chloridizing ores of precious metals.....	467,171	Jan. 19	1432		58	288
Hoyt, Charles M., et al. (See Beckwith, Theodore A., assignor.)						
Hoyt, Charles N., Brooklyn, N. Y. Calendar.....	474,602	May 10	1152	293	59	869
Hoyt, Charles N., Brooklyn, N. Y. Calendar.....	481,563	Aug. 30	2949	{ 724 } 725	60	1203
Hoyt, Clarence L., et al. (See Beckwith, Theodore A., assignor.)						
Hoyt, Frank R., Watkins, N. Y. Photographic shutter.....	472,883	Apr. 12	1323	339	59	265
Hoyt, Fred J., Chicago, Ill. Gravel-screen.....	474,662	May 10	1250	319	59	889
Hoyt, Fred J., Chicago, Ill. Ore separator and amalgamator.....	484,933	Oct. 25	2227	574	61	488
Hoyt, Fred J., Chicago, Ill., assignor to Hoyt Macadam Gravel Road Company, of Illinois. Gravel road.....	478,862	July 12	1221		60	257
Hoyt, George W. (See Bradshaw, George, assignor.)						
Hoyt, Henry. (See Seibold, Otto F., assignor.)						
Hoyt, James T., New York, N. Y. Cabinet for toilet paper.....	476,644	June 7	629	152	59	1562
Hoyt, James T., New York, N. Y. Cabinet for toilet paper.....	478,863	July 12	1222	303	60	257
Hoyt Macadam Gravel Road Company. (See Hoyt, Fred J., assignor.)						
Hoyt, Sherman, Brooklyn, N. Y. Portable bowling-alley.....	469,249	Feb. 23	2096	539	58	960
Hoyt, William D., Rush Centre, Kans. Wire-tightener.....	471,551	Mar. 29	2939	748	58	1704
Hoz, Adolf, Lindau, Germany, assignor of one-half to A. Westermann, Hottingen, Switzerland, and J. Zervas, New York, N. Y. Colors for printing on textile fabrics.....	486,873	Nov. 29	2708		61	1182
Hubbard, Arthur, Buffalo, N. Y. Lever for starting cars.....	475,770	May 31	2996	760	59	1272
Hubbard, Arthur O., Robbinsdale, assignor to W. R. Sweatt, Minneapolis, Minn. Wheelbarrow.....	487,053	Nov. 29	3024	777	61	1245
Hubbard, Charles W., Jr., Pittsburg, Pa. Manufacture of axes.....	487,948	Dec. 13	1169	291	61	1569
Hubbard, Clement S. (See Clark, George M., assignor.)						
Hubbard, Eber., Chicago, Ill. Press for forming hollow articles from pulp.....	480,466	Aug. 9	1160	291	60	813
Hubbard, Eber., Chicago, Ill. Molded pail from fibrous pulp.....	487,031	Nov. 29	2992	770	61	1238
Hubbard, Eber., Chicago, Ill., assignor to Standard Fiber-Ware Company, Mankato, Minn. Machine for making vessels from fibrous pulp.....	474,637	May 10	1209	{ 309 } 310	59	880
Hubbard, Frederic P., Durham, Conn. Letter-box.....	470,803	Mar. 15	1815	466	58	1467
Hubbard, Harvey F., assignor of one-half to F. H. Haley, Manitowoc, Wis. Magazine air-gun.....	471,176	Mar. 22	2388	609	58	1590
Hubbard, J. E., et al. (See Kilbourn, Washington H., assignor.)						
Hubbard, Moses G., Jr. (See McGuire and Hubbard.)						
Hubbard, Moses G., Chicago, Ill. Car-truck.....	466,349	Jan. 5	62	16	58	14
Hubbard, Moses G., Chicago, Ill. Car-truck.....	487,740	Dec. 13	827	211	61	1502
Hubbard, Moses G., Philadelphia, Pa. Car-truck.....	487,273	Dec. 6	54	17	61	1332
Hubbard, William H., and A. Goodrich, Auburn, N. Y. Stand, rack, &c.....	468,502	Feb. 9	935	238	58	715
Hubbard, William J. (See Bowen, William J., assignor.)						
Hubbell, Harvey, Bridgeport, Conn. Electric switch.....	471,612	Mar. 29	3022	769	58	1718
Hubbell, Harvey, Bridgeport, Conn. Changeable-speed screw-driver.....	481,304	Aug. 23	2529	621	60	1106
Hubbell, Myron R., Wolcott, Vt. Latch.....	482,794	Sept. 20	1440	356	60	1642
Hubbell, Myron R., Wolcott, Vt. Reversible plow.....	486,530	Nov. 22	2139	564	61	1053
Hubbell, Thomas J., San Bernardino, Cal. Tree-prop.....	477,939	June 28	2745	688	59	2022
Hubbell, Thomas J., assignor of one-third to G. H. Smith, San Bernardino, Cal. Harrow and cultivator.....	484,739	Oct. 18	1883	480	61	406
Hubbell, William W., Appomattox county, Va. Car-coupling.....	476,273	June 7	66	14	59	1451
Huber, Edward, Marion, Ohio. Belt-tightener for thrashing-machines.....	481,176	Aug. 23	2300	567	60	1064
Huber, Ernest, New York, N. Y. System of electric lighting.....	481,904	Aug. 30	3507	659	60	1319

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Huber, Ernst, and F. J. Kneuper, assignors of one-third to J. R. Davies, New York, N. Y. Nautical signal or sea-telephone.	467,102	Jan. 12	1297	{ 329 330 }	58	255
Huber, John B. (See Bissell and Huber.)						
Huber, John F., and G. L. Marvin, Central City, Nebr. Towel-rack.	462,869	Sept. 20	1549	387	60	1665
Huber, John H., and G. M. Ervin, Johnstown, Pa. Nut-lock.	484,204	Oct. 11	1026	261	61	223
Huber, John P., St. Louis, Mo. Vehicle-seat.	470,381	Mar. 8	1179	302	58	1333
Huber, John P., St. Louis, Mo. Vehicle-seat.	475,083	May 17	1916	488	59	1033
Huber, Susan L., York, Pa. Heater attachment for illuminating apparatus.	477,368	June 21	1818	445	59	1823
Huber, William J., assignor, by mesne assignments, of two-thirds to St. Louis Carriage Manufacturing Company, St. Louis, Mo. Fifth-wheel.	479,563	July 26	2358	588	60	501
Hubert, Bradford L., Parma, Mich. Seed-extracting machine.	468,026	Feb. 16	1772	452	58	890
Hubert, Bradford L., Parma, Mich. Bag-fastener.	483,450	Sept. 27	2473	622	60	1856
Hubert, Edgar. (See Hutton and Hubert.)						
Hübner, Paul, Milwaukee, Wis. Life-boat.	484,592	Oct. 18	1637	415	61	355
Huck, Louis C., Chicago, Ill. Apparatus for purifying, moistening, and attenuating air.	476,274	June 7	68	14, 15	59	1451
Huckey, Benjamin, Gorin, Mo. Swinging gate.	468,769	Feb. 9	1341	339	58	797
Hucks, William, London, England. Method of and apparatus for aerating beverages.	476,645	June 7	630	{ 152 153 }	59	1562
Huddleston, George W., Thorntown, Ind. Cultivator-fender support.	468,418	Feb. 9	801	200	58	689
Hudgens, Charles W., Elizabeth, Ark. Thread-cabinet.	468,924	June 14	1078	260	59	1665
Hudgens, George E., assignor of one-half to R. M. and W. S. Anderson, Charleston, S. C. Switch-stand.	488,204	Dec. 20	1606	401	61	1676
Hudson, Charles E., Loomister, Mass. Adjustable clamp for securing stands to various objects.	468,450	Feb. 9	842	213	58	697
Hudson, Charlie A., Schroon Lake, N. Y., assignor to Leach, Roaster & Baker Company. Broom-support.	488,501	Dec. 20	2088	519	61	1771
Hudson, George E., Pittsburg, Pa. Apparatus for registering the number of words written on type-writers.	488,521	Dec. 20	2128	527	61	1778
Hudson, John C. (See McQuarry, Hector, assignor.)						
Hudson, Thomas, <i>et al.</i> (See Aldrich, George W., assignor.)						
Hudson, William B., Orwell, Ohio. Fence.	475,865	May 31	3164	803	59	1305
Hudson, William E., Washington, D. C. Draft-bridle.	475,864	May 31	3163	802	59	1305
Huebel, Otto H. (See Manger and Huebel.)						
Huebner, George, La Grange, assignor of one-half to C. L. Melcher, Swiss Alp, Tex. Road graveling and grading machine.	466,465	Jan. 5	249	63	58	47
Huebner, Julius, Newark, N. J. Device for grinding button-blanks.	487,741	Dec. 13	828	{ 212 211 }	61	1502
Hueg, Herman, New York, N. Y. Razor-guard.	473,464	Apr. 26	2315	585	59	488
Huelson, Felix J., and J. Nagal, Cleveland, Ohio. Vehicle-wheel.	477,659	June 28	2294	575	59	1934
Huenenjaeger, Friedrich, Michigan City, Ind. Plow.	471,290	Mar. 22	2557	649	58	1622
Huestis, Harvey, Providence, R. I. Finger-ring.	474,638	May 10	1214	310	59	881
Hueston, James. (See Aldrich and Hueston.)						
Huetter-Barler Manufacturing Company. (See Barler, Augustus C., assignor.)						
Huewe, George A., assignor to Keys, Lee & Huewe Company, Cincinnati, Ohio. Order-holder.	470,824	Mar. 15	1856	475	58	1475
Huewe, George A., assignor to himself, T. H. Huewe, Cincinnati, Ohio, J. B. Keys and E. R. Lee. Binder for filing and binding papers.	471,055	Mar. 15	2189	564	58	1540
Huewe, Theodore H., <i>et al.</i> (See Huewe, George A., assignor.)						
Huey, William, assignor to H. S. Brevington and G. R. Cooper, Baltimore, Md. Garbage-cart.	468,316	Feb. 2	637	159	58	648
Huff, Charles C. (See Huff, William, assignor.)						
Huff, Charles H., Tropic, Cal. Music-leaf turner.	475,317	May 24	2271	585	59	1121
Huff, John, and E. Johnson, Lusk, Wyo. Bracket.	479,424	July 26	2128	532	60	457
Huff, Sylvester, Wabash, Ind. Waterproof composition.	483,451	Sept. 27	2474		60	1857
Huff, William, assignor of one-half to C. C. Huff, Landess, Ind. Gate.	473,752	Apr. 26	2779	699	59	577
Huffman, William C., and J. Le Favour, Albany, Ind. Trousers.	484,015	Oct. 11	748	188	61	168
Hufman, Margaret J., Ashland, Pa. Sash-cord fastener.	487,570	Dec. 6	544	140	61	1429
Huger, Frank, <i>et al.</i> (See Coleman, John, assignor.)						
Hugershoff, William. (See Laubensdorfer and Lipp, assignors.)						
Hugershoff, William, and F. Lipp, New York, N. Y. Atomizer-nozzle.	474,526	May 10	1034	265	59	847
Huggins, Frederick E., assignor to E. W. Conable, Clinton, Iowa. Churn-vent.	481,564	Aug. 30	2951	725	60	1204
Huggins, Ulysses S., assignor to C. N. Brady and B. D. Northrop, Washington, Pa. Supporting-holder for glass-molds.	481,142	Aug. 16	2240	552	60	1039
Hughes, Anna L., Ashley, Pa. Grass-catching attachment for lawn-mowers.	471,326	Mar. 22	2706	690	58	1651
Hughes, Christian B., Niles, Ohio. Furnace.	469,664	Feb. 23	2729	702	58	1086
Hughes, Cornelia B., <i>et al.</i> (See Hughes, William W., assignor.)						
Hughes, Curtis A., Spokane, Wash. Rein-holder.	477,547	June 21	2097	521	59	1879
Hughes, Edmund, Cookport, Pa. Fence-machine.	473,930	May 3	71	14	59	650
Hughes, Frank M., Milford, Mass. Combined water-tower and fire-escape.	483,001	Sept. 20	1763	{ 445 446 }	60	1706
Hughes, Henry C. (See Carter and Hughes.)						
Hughes, James, Boston, Mass. Car-brake.	488,676	Dec. 27	2375	588	61	1842
Hughes, James E., <i>et al.</i> (See Landon, William E., assignor.)						
Hughes, John, <i>et al.</i> (See Lancaster and Sturgeon, assignors.)						
Hughes, John, Chester, England. Propulsion of street, tramway, or other railway cars or carriages.	466,415	Jan. 5	164	44, 45	58	32
Hughes Manufacturing Company. (See Gardner, William, assignor.)						
Hughes, Otis, assignor to himself and J. S. Hull, Lock Spring, Ind. Ditching-machine.	467,810	Jan. 26	2445	621	58	488
Hughes, Owen, Cleveland, Ohio. Heating and puddling furnace.	467,413	Jan. 19	1795	{ 457 458 }	58	357
Hughes, Robert. (See Knickerbacker and Hughes.)						
Hughes, Robert, Waterford, assignor to J. Knickerbacker, Troy, N. Y. Slide-gate valve.	466,350	Jan. 5	63	16	58	15
Hughes, Rowland H., <i>et al.</i> (See Hughes, William W., assignor.)						
Hughes, Russell M., Louisville, Ky. Apparatus for making vinegar.	483,063	Sept. 20	1858	471	60	1727
Hughes, Samuel. (See Chisolm, William B., assignor.)						
Hughes, Samuel, assignor of one-half to W. B. Chisolm, Charleston, S. C. Grinding-mill.	469,145	Feb. 16	1925	493	58	921
Hughes, Samuel, assignor of one-half to W. B. Chisolm, Charleston, S. C. Apparatus for removing iron and alumina.	479,882	Aug. 2	163	41	60	614
Hughes, Samuel, and W. B. Chisolm, Charleston, S. C. Apparatus for treating phosphate rock.	483,452	Sept. 27	2475	622	60	1857
Hughes, Smith E., Philadelphia, Pa. Water-closet.	481,761	Aug. 30	3275	798	60	1266
Hughes, Thomas, Cleveland, Ohio. Cutter.	467,414	Jan. 19	1796	458	58	357
Hughes, William B., Newark, N. J. Tobacco-pipe.	473,666	Apr. 26	2649	668	59	553
Hughes, William W., assignor to R. H. and C. B. Hughes, Urbana, Ohio. Caster.	467,873	Jan. 26	2545	645	58	507

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hughson, Caleb S. (See Hulbert, Charles B., assignor.)						
Huguet, Charles K., New Orleans, La. Electric meter	466,686	Jan. 5	593	154	58	115
Unillard, Alfonse. (See Delvaux, Georges, assignor.)						
Huizer, Samuel L., The Hague, Holland. Apparatus for drying coffee, &c.	483,923	Oct. 4	599	152	61	124
Hulbert, Charles B., Ironia, assignor of one-half to C. S. Hughson, Randolph, N. J. Horse-shoe with removable calks	484,740	Oct. 18	1884	480	61	407
Hulbert, Ralph D., assignor of one-half to F. B. Comstock, Indianapolis, Ind. Washing-machine	483,721	Oct. 4	293	73	61	61
Hulett, George H., Cleveland, Ohio. Hoisting and conveying apparatus	483,558	Oct. 4	62	15, 16	61	15
Hulett, George H., Cleveland, Ohio. Coal-storage conveyer	487,865	Dec. 13	1035	259	61	1544
Hulett, John F., assignor of one-half to H. Gould, Excelsior Springs, Mo. Seed-planter	477,369	June 21	1819	445	59	1823
Hulett, Joseph B., and L. J. Beers, Middletown, N. Y. Car-coupling	488,814	Dec. 27	2576	640	61	1883
Hulin, Léon, Froges, France, assignor to G. P. Lowrey, New York, N. Y. Manufacture of carbon blocks	473,841	Apr. 26	2913	732	59	603
Hulings, John D., Hulings, W. Va. Steam-boiler	483,805	Oct. 4	424	105	61	88
Hull, Abijah H., Odebolt, Iowa. Shutter-worker	474,831	May 17	1528	390	59	957
Hull, Abijah H., Odebolt, Iowa. Shutter-opener	484,098	Oct. 11	857	217 218	61	190
Hull, Abijah H., Odebolt, Iowa. Shutter-worker	486,108	Nov. 15	1493	393	61	910
Hull, Andrew J., Newark, N. J. Grate	475,866	May 31	3165	803	59	1305
Hull, Charles C. (See Parry and Hull.)						
Hull, George, Binghamton, N. Y. Car-wheel	483,064	Sept. 20	1859	471	60	1727
Hull, Henry A., New Brunswick, N. J. Electric alarm	486,338	Nov. 15	1949	486	61	982
Hull, Herbert H., Cleveland, Ohio. Combined dust-pan and support	473,004	Apr. 19	1528	390	59	317
Hull, James H., Lennoxville, Canada. Weather-strip	476,646	June 7	633	153	59	1562
Hull, Jeremiah S. (See Hughes, Otis, assignor.)						
Hull, John W., Dublin, Ind. Collar for animals	485,630	Nov. 8	729	190	61	738
Hull, Nicholas A., Peru, Ind. Ornamental wood veneer	471,552	Mar. 29	2939	748	58	1704
Hull, Uriah L. (See Bowyer and Hull.)						
Hull, Uzal, and W. W. McEwan, assignors to New York Wood Fibre Company, Belvidere, N. J. Hot-pressing machine for paper pails	471,996	Mar. 29	3602	920	58	1829
Hull, Wayne J., assignor of one-half to C. W. McCrone, Alexandria, S. D. Powder-dividing apparatus	469,364	Feb. 23	2272	583	58	995
Hull, William S. (See Hale and Sparks, assignors.)						
Hull, William S., Sheffield, Ala. Electric jail-plate	480,099	Aug. 2	539	137	60	685
Hull, William S., Sheffield, Ala. Electric screen for doors or windows	480,100	Aug. 2	540	137	60	685
Hull, William S., Sheffield, Ala. Insulated rivet	483,806	Oct. 4	424	105	61	88
Hull, Wolcott A., assignor to Ansonia Brass and Copper Company, New York, N. Y. Wick-raising mechanism for lamps	467,975	Feb. 2	96	24	58	543
Hullhorst, William G., assignor to Ransom & Randolph, Toledo, Ohio. Wash-stand and means for supplying hot and cold water thereto	467,353	Jan. 19	1709	437	58	341
Hullinger, Andrew, Bolivar, Ohio. Wrench	469,701	Mar. 1	47	15	58	1107
Hulse, Frank, Gosben, N. Y. Weeder	470,133	Mar. 1	731	182	58	1242
Hulse, James V., Jr., Brooklyn, N. Y. Type-writing machine	470,429	Mar. 8	1260	323	58	1348
Hult, Carl A., Stockholm, Sweden. Centrifugal cream-separator	473,005	Apr. 19	1530	390 391	59	318
Hult, John, Burlington, Iowa. Wire-fence gate	475,867	May 31	3167	803 804	59	1306
Hultgren, William H., assignor of one-half to A. B. Ellithorpe, Chicago, Ill. Thrust-bearing	468,043	Feb. 2	207	51	58	565
Hultgren, William H., assignor of one-half to A. B. Ellithorpe, Chicago, Ill. Valve-operating device for elevators	468,044	Feb. 2	209	51	58	565
Hultgren, William H., assignor of one-half to Michigan Elevator and Engine Company, Detroit, Mich. Automatic stop-valve for hydraulic elevators	488,763	Dec. 27	2497	621	61	1867
Hultman, Carl A. W., Stockholm, Sweden. Underground conduit for electric cables	470,329	Mar. 8	1093	279	58	1318
Hultman, John A., Omaha, Neb. Organ	470,868	Mar. 15	1914	489	58	1486
Humbert, Cecil J., Philadelphia, Pa. Gem-setting	487,623	Dec. 6	623	159	61	1445
Hume, Robert D., Gold Beach, Ore. Can-lacquering machine	487,571	Dec. 6	545	140	61	1429
Hume, Robert D., San Francisco, Cal. Can-body-forming machine	488,476	Dec. 20	2050	509	61	1763
Hume, Thomas J., assignor of one-half to W. F. Guthrie, Atchison, Kans. Cash indicator and register	474,558	May 10	1085	277 278	59	857
Hume, Thomas J., assignor of one-half to W. F. Guthrie, Atchison, Kans. Cash register and indicator	477,548	June 21	2098	522 523	59	1879
Hume, William W., Chicago, Ill. Medal	476,538	June 7	470	112	59	1530
Hummel, Franklin P., Blissfield, Mich. Mechanical movement	478,795	July 12	1129	278	60	239
Hummel, Louis, New York, N. Y. Pocketbook	472,174	Apr. 5	254	67	59	48
Humphrey, James D., Towanda, Pa. Numbering and marking machine	473,688	May 24	2857	722 723	59	1233
Humphrey, William H., New York, N. Y. Paint-brush bridge	475,114	May 17	1974	500	59	1044
Humphreys, Andrew J., Pomeroy, Ohio. Belt-stretcher	474,892	May 17	1529	390	59	957
Humphreys, Edwin W., Chicago, Ill. Coal-sifter	471,177	Mar. 22	2390	610	58	1590
Humphreys, John C., Sutton, W. Va. Churn	471,337	Mar. 22	2622	665	58	1636
Humphreys, William J., Crozet, Va. Construction of legged articles	467,811	Jan. 26	2447	621	58	489
Humphreys, William P., assignor to A. M. Stinson, San Francisco, Cal. Rotary excavator for hydraulic dredging machines	467,607	Jan. 26	2128	540	58	428
Humphries, George S. N., Philadelphia, Pa. Slate-pencil sharpener	486,470	Nov. 22	2055	545	61	1036
Hunersdorff, Oscar von, Philadelphia, Pa. Game apparatus	476,146	May 31	3606	911 912	59	1393
Hungad, John W., Rochester, N. Y. Blackboard attachment	466,606	Jan. 5	477	122	58	91
Hungerford, Maurice C., Huntington, W. Va. Gutter-former	475,318	May 24	2276	586	59	1132
Hunick, Henry A., St. Louis, Mo. Smelting ores containing zinc	487,444	Dec. 6	360	94	61	1332
Hunn, Robert E., Vallejo, Cal. Tile	484,741	Oct. 18	1886	481	61	407
Hunsberger, Abram C., Portland, Pa. Game apparatus	486,471	Nov. 22	2056	545	61	1036
Hunt, Alexander E. (See Fenwick, Robert W., assignor.)						
Hunt, Alexander E. (See Fowler, Jonathan O., Jr., assignor.)						
Hunt, Almon, Atlantic, Iowa. Draft-equalizer	481,357	Aug. 23	2609	641	60	1121
Hunt, Alonzo B. (See Reynolds, Frank, assignor.)						
Hunt, Charles B., London, England. Sewing-machine	474,663	May 10	1252	320	59	889
Hunt, Charles B., London, England. Sewing-machine	476,647	June 7	635	154	59	1563
Hunt, Charles B., London, England. Sewing-machine	483,454	Sept. 27	2477	623	60	1857
Hunt, Charles B., London, England. Tension device for sewing-machines	455,546	Nov. 1	601	160	61	696
Hunt, Charles F., et al. (See Walker, James E., assignor.)						
Hunt, Charles W., West New Brighton, N. Y. Weighing apparatus	468,108	Feb. 2	301	73	58	582
Hunt, Charles W., West New Brighton, N. Y. Conveyer	468,109	Feb. 2	302	73	58	582

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
Hunt, Charles W., West New Brighton, N. Y. Railway.....	468,110	Feb. 2	303	73	58	583
Hunt, Charles W., West New Brighton, N. Y. Coupling.....	472,707	Apr. 12	1080	277	59	217
Hunt, Charles W., West New Brighton, N. Y. Driving mechanism for cars.....	484,914	Oct. 25	2189	564	61	481
Hunt, Edwin N., (See Hunt, John P., assignor.)						
Hunt, Ellwood C., New York, N. Y. Package of marking material.....	483,453	Sept. 27	2476	622	60	1857
Hunt, Ferdinand S., Chicago, Ill. Cash register and indicator.....	472,123	Apr. 5	179	48	59	33
Hunt, Franklin B., assignor of one-half to J. T. Clements and G. S. Chase, Washington, D. C. Thill-coupling.....	477,053	June 14	1286	312	59	1707
Hunt, Harry. (See Steers and Hunt.)						
Hunt, Helm & Ferris. (See Ferris, Henry L., assignor.)						
Hunt, James H., Massillon, Ohio. Cover-plate for lamp-chimneys.....	487,624	Dec. 6	624	159	61	1445
Hunt, James W., (See Chapman and Hunt.)						
Hunt, Jesse, Baltimore, Md. Compound steam-engine.....	477,006	June 14	1209	293	59	1691
Hunt, John, New York, assignor to J. Macbeth, Brooklyn, N. Y. Magneto-electric machine.....	468,451	Feb. 9	843	{ 213 214 }	58	698
Hunt, John A., Indianapolis, Ind. Fire-escape.....	481,565	Aug. 30	2952	795	60	1204
Hunt, John P., assignor of one-half to E. N. Hunt, London, Canada. Nut or pipe wrench.....	487,742	Dec. 13	831	212	61	1503
Hunt, Jonathan A., Westborough, Mass. Saddle for velocipedes.....	471,685	Mar. 29	3136	{ 799 800 }	58	1739
Hunt, Jonathan A., Westborough, Mass. Velocipede-saddle.....	483,559	Oct. 4	63	16	61	15
Hunt, Marshall E., assignor to C. C. Schlagel, Davenport, Iowa. End-gate.....	471,178	Mar. 22	2391	610	58	1591
Hunt, Marshall E., and F. W. Lerch, Davenport, Iowa. Clevis.....	483,221	Sept. 27	2110	535	60	1788
Hunt, Murray E., Paxton, Ill. Cooking-pan.....	466,416	Jan. 5	168	45	58	33
Hunt, Richard R., et al. (See Browne, James R., assignor.)						
Hunt, Robert F., Washington, D. C. Fan-operating device.....	479,425	July 26	2129	532	60	457
Hunt, Roland, assignor to himself and W. Brown, Philadelphia, Pa. Stocking and producing the same.....	466,417	Jan. 5	169	45, 46	58	33
Hunt, Thomas M., Caldwell, Tex. Staple-extractor.....	475,689	May 24	2861	724	59	1233
Hunt, Thomas S., deceased, and J. Douglas, New York, N. Y.; J. Douglas, executor of said Hunt. Separating copper from cupriferos nickel ores.....	483,924	Oct. 4	601		61	124
Hunt, Walter J., et al. (See Browne, James R., assignor.)						
Hunter, Andrew, Chicago, Ill. Middlings-purifier.....	466,962	Jan. 12	1061	269	58	210
Hunter, Andrew, Chicago, Ill. Support for photographs, pictures, and analogous articles.....	482,973	Sept. 20	1725	436	60	1698
Hunter, Andrew, Chicago, Ill., assignor of one-half to J. W. Ward, Postville, Iowa. Tri-cycle.....	483,495	Sept. 27	2525	{ 635 636 }	60	1867
Hunter, Charles S., Rock Creek, Kans. Sampling device for baled material.....	473,316	Apr. 19	2048	514	59	415
Hunter, David, Minneapolis, Minn. Pneumatic dispatch-tube.....	468,419	Feb. 9	802	200	58	690
Hunter, David C., Chicago, Ill. Perspective gage.....	486,782	Nov. 22	2548	665	61	1134
Hunter, Della R., (See Hunter, William A., assignor.)						
Hunter, Gaylord S., Pawtucket, R. I. Ball-cock.....	487,671	Dec. 6	702	179	61	1460
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. System for adjusting to temperature watch-balances and hair-springs.....	484,796	Oct. 25	1988	{ 507 508 509 510 511 512 513 }	61	441
Hunter, George E., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Mechanism for timing and adjusting watch-balances and hair-springs.....	484,797	Oct. 25	1992	{ 511 512 513 }	61	441
Hunter, Jacob S., Nickerson, Kans. Car-coupling.....	481,567	Aug. 30	2955	726	60	1204
Hunter, James. (See Brock and Hunter.)						
Hunter, James, et al. (See Tuerk, Frederick W., Jr., assignor.)						
Hunter, James M., Chicago, Ill. Coin-operated vending-machine.....	469,636	Feb. 23	2682	690	58	1075
Hunter, James M., Chicago, Ill. Coin-actuated machine.....	480,018	Aug. 2	415	{ 104 105 }	60	660
Hunter, John, et al. (See Tuerk, Frederick W., Jr., assignor.)						
Hunter, John H., Webb City, Ark. Cultivator.....	470,574	Mar. 8	1461	380	58	1388
Hunter, John S., (See Smith, Walton D., assignor.)						
Hunter, Joseph, assignor, by mesne assignments, to W. F. Meader, J. E. Phillips, Chicago, Ill., A. Powell, and M. Sahlin. Currycomb.....	488,923	Dec. 27	2755	680	61	1920
Hunter, Joseph H., Pittsburg, Pa. Electric chime or bell.....	476,463	June 7	366	85	59	1508
Hunter, Joseph H., Pittsburg, Pa. Apparatus for annealing wire or metallic rods by electricity.....	484,637	Oct. 18	1716	435	61	370
Hunter, Joseph H., assignor to Acme Safe and Lock Company, Cincinnati, Ohio. Permutation-padlock.....	467,506	Jan. 26	1947	497	58	395
Hunter, Joseph H., Pittsburg, and J. S. Luecock, Allegheny, Pa. Apparatus for indicating the positions of railway-cars.....	484,205	Oct. 11	1027	{ 361 262 }	61	223
Hunter, Marshall E., et al. (See Shaw, Samuel J., assignor.)						
Hunter, Patchen & Havens. (See Hamilton, James, assignor.)						
Hunter, Robert, London, England, assignor, by mesne assignments, to Farrand & Votey Organ Company, Detroit, Mich. Organ.....	487,222	Nov. 29	3291	{ 839 840 }	61	1296
Hunter, Robert G., (See Parker and Hunter.)						
Hunter, Rudolph M., Philadelphia, Pa. Dental engine.....	476,944	June 14	1117	269	59	1673
Hunter, Rudolph M., Philadelphia, Pa. Apparatus for holding and sewing fabrics.....	488,969	Dec. 27	2827	698	61	1936
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, of Connecticut. Turn-table connection for electric railways.....	468,912	Feb. 16	1563	397	58	849
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Cleaning-brush for electric railways.....	474,472	May 10	947	244	59	830
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric railway.....	480,850	Aug. 16	1757	440	60	947
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric-railway conduit.....	482,964	Sept. 20	1704	430	60	1694
Hunter, Rudolph M., Philadelphia, Pa., assignor, by mesne assignments, to Thomson-Houston Electric Company, Boston, Mass. Electric-railway conductor.....	483,494	Sept. 27	2524	635	60	1867
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric motor or generator.....	472,708	Apr. 12	1081	277	59	217
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp.....	478,510	July 5	688	167	60	136
Hunter, Rudolph M., Philadelphia, Pa., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.....	481,905	Aug. 30	3510	859	60	1311
Hunter, Rudolph M., Philadelphia, Pa., assignor to E. M. Florence, New York, N. Y. Chair for theatrical or other purposes.....	485,277	Nov. 1	182	54	61	610
Hunter, Rudolph M., Philadelphia, assignor to Johnson Company, Johnstown, Pa. Girder-rail and manufacturing the same.....	486,211	Nov. 15	1643	435	61	940

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Hunter, William, assignor of nine-sixteenths to H. L. Elkins and R. P. Tapley, Jr., Haverhill, Mass. Sad-iron	477,660	June 28	2295	575	59	1934
Hunter, William A., assignor to D. R. Hunter, Terre Haute, Ind. Harness	476,797	June 14	869	214	59	1623
Hunter, William C. (See Schimpf and Hunter.)						
Hunter, William C., Newport, Ky. Fastening for metal plates	481,566	Aug. 30	2954	725	60	1204
Hunter, William H., Farnhamville, Iowa. Fish-hook	478,864	July 12	1223	303	60	258
Hunter, William S., Belleville, and W. H. Avis, Toronto, Canada. Spinning-machine	481,278	Aug. 23	2485	612	60	1099
Hunting, Alfred A., Salem, Mass. Machine for shaving hides or skins	479,072	July 19	1546	{ 386 387 }	60	330
Hunting, Eben B. (See Mahaffey, James B., assignor.)						
Hunting, Nelson, Albany, N. Y. Distilling apparatus	468,913	Feb. 16	1566	397	58	850
Huntington, Frank A., San Francisco, Cal. Crushing-mill	468,544	Feb. 9	1002	257	58	729
Huntington, Frank A., San Francisco, Cal. Ore-car	487,572	Dec. 6	546	141	61	1429
Huntington, George M. (See Anderson and Huntington.)						
Huntoon, Frank D. (See Coram and Huntoon.)						
Huntoon, Llewellyn H., Madison, Me. Fabric-measuring device	479,091	July 19	1577	395	60	336
Huntress, John H., Janesville, Wis. Pole for supporting electric wires	471,759	Mar. 29	3257	830	58	1761
Hunziker, Adolph A., St. Louis, Mo. Temporary binder	468,199	Feb. 2	442	110	58	611
Hunzinger, George, New York, N. Y. Combined table and chair	475,505	May 24	2586	658	59	1179
Hupp, George N., Bourbon, assignor of one-half to T. B. Lee and D. L. Dickinson, Plymouth, Ind. Ratchet-wrench	487,072	Nov. 29	3051	783	61	1250
Hurd, George B., New York, N. Y. Box for stationery, &c.	474,062	May 3	288	69	59	693
Hurd, Hutton R., Cleveland, Ohio. Horse-boot	482,041	Sept. 6	191	46	60	1373
Hurd, John B., Red Bank, N. J., assignor to Western Union Telegraph Company, New York, N. Y. Telegraph apparatus for branch offices	469,856	Mar. 1	306	79	58	1160
Hurd, John F., Chicago, Ill. Pickpocket and coat-thief detector	477,940	June 28	2746	{ 688 689 }	59	2022
Hurd, Lewis C., Durango, Colo. Wrench	474,741	May 10	1374	348	59	913
Hurd, Lorenzo D., Wellsville, N. Y. Running-gear for wagons	473,577	Apr. 26	2511	634	59	527
Hurd, Norman B., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Sash-fastener	471,553	Mar. 29	2940	748	58	1704
Hurdell, Nellie F., New York, N. Y. Convertible bath and washtub	469,570	Feb. 23	2602	667	58	1058
Hurdell, Nellie F., New York, N. Y. Hat-case	479,643	July 26	2474	615	60	522
Hurdle, John, Polo, Ill. Feed-trough	483,925	Oct. 4	603	152	61	124
Hurdley, Walter, Youngstown, Ohio. Boiler-furnace	478,433	July 5	573	138	60	112
Hurley, Andrew O., Jeannette, Pa. Glass-heating oven	478,328	July 5	416	{ 100 101 }	60	83
Hurley, Daniel J., Erie, Pa. Tapping device	466,946	Jan. 12	1039	264	58	206
Hurley, James H., assignor of one-half to W. J. Shea, Hartford, Conn. Lathe-tool	488,145	Dec. 13	1496	376	61	1637
Hurley, John M., and J. R. Westing, Lancaster, Wis. Cultivator	467,415	Jan. 19	1797	458	58	358
Hurley, John M., and J. R. Westing, Lancaster, Wis. Subsoil attachment	475,042	May 17	1854	470	59	1021
Hurley, Joseph M., Buffalo, N. Y. Service-box for water or gas pipes	479,909	Aug. 2	198	49	60	621
Hurlmann, Gustave. (See Senf, Friedrich, assignor.)						
Hurson, Gregory, Milwaukee, Wis. Cabin roof and deck for boats	472,884	Apr. 12	1324	340	59	265
Hurst, John C. F., Holton, Kans. Hog-trough	487,836	Dec. 13	983	247	61	1534
Hürzeler, Friedrich, St. Gall, Switzerland. Fabric-holding frame for embroidering-machines	478,192	July 5	189	48	60	39
Husbands, Bernard A., assignor to Husbands & Werkheiser, Indianapolis, Ind. Baby-jumper	488,609	Dec. 27	2261	561	61	1821
Husbands & Werkheiser. (See Husbands, Bernard A., assignor.)						
Huse, Warren D., Laconia, N. H. Thread-tension device for sewing-machines	467,103	Jan. 12	1308	330	58	258
Husemann, Gottlieb D., St. Louis, Mo. Ore-concentrator	479,279	July 19	1868	468	60	391
Husnik, Jacob, Prague, Austria-Hungary. Making relief-plates by photography	473,753	Apr. 26	2780	59	577	
Huson, Cornelius W., Nevada City, Cal. Water-wheel	485,196	Nov. 1	65	19, 20	61	585
Huson, Winfield S., Taunton, Mass., assignor to Campbell Printing Press and Manufacturing Company, New York, N. Y. Mechanical movement	475,771	May 31	2997	{ 760 761 }	59	1272
Huson, Winfield S., Taunton, Mass., assignor to Campbell Printing Press and Manufacturing Company, New York, N. Y. Mechanical movement	475,772	May 31	3000	761	59	1273
Huson, Winfield S., Taunton, Mass., assignor to Campbell Printing Press and Manufacturing Company, New York, N. Y. Stopping and reversing mechanism for printing-presses	482,359	Sept. 13	744	179	60	1495
Huss Brothers Company. (See Huss, William C., assignor.)						
Huss, Rudolph W. (See Moffat and Huss.)						
Huss, William C., Cincinnati, Ohio. Combined arm-rest and guard for counters, &c.	470,002	Mar. 1	541	134	58	1203
Huss, William C., Cincinnati, Ohio. Combined bar drainer and cooler	477,758	June 28	2455	614	59	1967
Huss, William C., assignor to Huss Brothers Company, Cincinnati, Ohio. Combined counter-rail, foot-bracket, and cuspidor	481,568	Aug. 30	2956	726	60	1205
Huss, William C., assignor to Huss Brothers Company, Cincinnati, Ohio. Bottle and glass tray for counters	485,743	Nov. 8	909	244	61	776
Husselbee, Alfred, assignor to D. Rylands, Stairfoot, Barnsley, England. Glass-lined bend, elbow, or pipe-fitting	476,648	June 7	637	155	59	1563
Hussey, Charles A., New York, N. Y. Brush-holder for electric motors or dynamo-electric machines	471,819	Mar. 29	3364	856	58	1782
Hussey, George B., Providence, R. I. Packing-case	469,942	Mar. 1	440	110	58	1185
Hussey, George B., Providence, R. I. Metallic bale-covering	474,046	May 3	263	64	59	688
Hussey, John E. A. (See Allen, Herbert B., assignor.)						
Hussey, Levi, and E. McCann, New York, N. Y. Grease-extractor	468,345	Feb. 9	692	{ 171 172 }	58	667
Hussey, Silvanus, Brant, N. Y. Wrench	475,450	May 24	2491	635	59	1161
Hussey, Silvanus, Brant, N. Y. Ratchet-wrench	484,753	Oct. 18	1905	486	61	411
Hustis, Eda F., Milwaukee, Wis. Sewing-machine brake	485,631	Nov. 8	730	190	61	738
Huston, J. N. (See McIlwain, Henry C., assignor.)						
Huston, John B., assignor to himself, J. B. Parsons, E. P. Williams, Cleveland, Ohio, and S. B. Lamoreaux, Whiting, Ind. Removing sulphurous compounds from oils	486,406	Nov. 15	1956	519	61	1004
Hustvedt, H. B., et al. (See Wheelock, Willis W., assignor.)						
Hutcheson, William, Baltimore, Md. Screw-cutting tool	475,564	May 24	2679	680	59	1197
Hutchings, George B., Cleveland, Ohio. Automatic boiler-feeder	469,250	Feb. 23	2097	539	58	961
Hutchins, Carleton B., Detroit, Mich. Railway-car	484,593	Oct. 18	1638	{ 415 416 }	61	356
Hutchins, Carleton B., Detroit, Mich. Freight-car	487,743	Dec. 13	832	212	61	1503
Hutchins, Eugene R., assignor to Hutchins Refrigerator Car Company, Chicago, Ill. Refrigerator-tank car	474,603	May 10	1154	{ 293 294 }	59	870
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Automatic stopping and restarting mechanism for looms	466,525	Jan. 5	346	86	58	67

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Swivel-loom ..	474,170	May 3	438	106	59	723
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Swivel-loom ..	477,180	June 14	1489	365		
Hutchins, George F., assignor to Knowles Loom Works, Worcester, Mass. Take-up mechanism for looms ..	480,851	Aug. 16	1760	440	60	948
Hutchins, George K., Baltimore, Md. Electric snap-switch ..	474,473	May 10	948	244	59	830
Hutchins, Retrigrerator Car Company. (See Hutchins, Eugene R., assignor.)						
Hutchins, Thomas W., Wyoming, Pa. Track construction for railways ..	479,808	Aug. 2	51	12	60	592
Hutchins, William, Melbourne, Victoria. Sash-cord fastener ..	478,234	July 5	273	67	60	55
Hutchinson, Alfred B., Brooklyn, assignor to Glen Cove Machine Company, Limited, New York, N. Y. Feed mechanism for planing-machines ..	468,045	Feb. 2	210	51, 52	58	565
Hutchinson, Alfred B., assignor to Glen Cove Machine Company, Limited, Brooklyn, N. Y. Planing-machine ..	482,481	Sept. 13	938	228	60	1531
Hutchinson, Arthur H., assignor to L. N. Hutchinson, Kansas City, Mo. Air-compressor ..	481,143	Aug. 16	2242	552	60	1039
Hutchinson, Cary T., assignor to Edison General Electric Company, New York, N. Y. Method of and apparatus for controlling electric motors and generators ..	467,230	Jan. 19	1514	387	58	305
Hutchinson, Charles G., New York, N. Y., assignor to C. G. Hutchinson Shoe Blacking Machine Company. Blacking-machine ..	475,773	May 31	3002	762		
Hutchinson, Frederick, Jefferson, Iowa. Fence-measuring machine ..	481,792	Aug. 30	3329	812	60	1276
Hutchinson, James P. (See Hatch and Hutchinson.)						
Hutchinson, James P. (See Westmacott and Hutchinson.)						
Hutchinson, Joseph, New York, N. Y. Lamp-socket and terminal therefor ..	488,205	Dec. 20	1607	401	61	1676
Hutchinson, Joseph, assignor to Edison General Electric Company, New York, N. Y. Snap-switch ..	480,048	Aug. 16	1905	476	60	977
Hutchinson, Joseph, New York, N. Y., and A. B. Herrick, Bayonne, N. J. Terminal and safety-catch connection ..	474,960	May 17	1724	438	59	997
Hutchinson, Lanra N. (See Hutchinson, Arthur H., assignor.)				439		
Hutchinson, Mamie W., et al. (See Hebron, Charles B., assignor.)						
Hutchinson, Warren B., Passaic, N. J. Electric railway ..	467,699	Jan. 26	2271	576	58	454
Hutchinson, William S., Chicago, Ill. Furnace ..	480,327	Aug. 9	934	237	60	772
Hutchinson, William S., Chicago, Ill. Furnace and attachment therefor ..	480,328	Aug. 9	935	237	60	772
Hutchinson, George D., et al. (See Walton, James, assignor.)						
Huther, Angus E. (See Huther, Warren B., assignor.)						
Huther, Warren B., assignor of one-half to A. E. Huther, Rochester, N. Y. Cutting-head ..	486,874	Nov. 29	2709	706	61	1183
Hutt, James W., and A. J. Phillips, Toronto, Canada. Paper-feeding apparatus ..	478,329	July 5	418	101	60	84
				102		
Hutt, James W., and A. J. Phillips, Toronto, Canada. Printing apparatus ..	480,467	Aug. 9	1161	291	60	814
				292		
Hutton, George H., Baltimore, Md. Jump-seat for vehicles ..	481,358	Aug. 23	2610	641	60	1121
Hutton, Homer F. (See Bull, Dickey, and Hutton.)						
Hutton, Homer F., Ennis, Mont. Rack ..	468,461	Feb. 9	861	217	58	701
Hutton, Homer F., Ennis, Mont. Halter ..	485,278	Nov. 1	184	54	61	611
Hutton, James A., and E. Hubert, Fort Robinson, Nebr. Billiard-table ..	471,426	Mar. 22	2765	705	58	1662
Hutton, Milton C., Georgetown, Tex. Desk attachment for chairs ..	460,386	Aug. 9	1030	258	60	729
Huvelle, Hector, assignor of one-half to G. A. Tandy, Weatherford, Tex. Process of and apparatus for making essences ..	487,837	Dec. 13	984	248	61	1534
Huyck, Leonard W., assignor of one-half to E. Allen, Rochester, N. Y. Attachment for spinning-spindles ..	471,976	Mar. 29	3576	913	58	1824
Huyette & Smith Manufacturing Company. (See Smith, Wright D., assignor.)						
Hyatt, Charles M., Minneapolis, Minn. Horse hay-rake ..	471,239	Mar. 22	2483	630	58	1608
Hyatt, Henry A. (See Buchanan, Louis A., assignor.)						
Hyatt, John W., Newark, N. J. Playing-card ..	484,798	Oct. 25	1998	513	61	443
Hyatt, John W., Newark, N. J. Roller-box for shaft-hangers ..	485,938	Nov. 8	1196	316	61	834
Hyatt, John W., Newark, N. J. Spring-roll for roller-bearings ..	467,530	Dec. 6	488	128	61	1417
Hyde, Edward H., Lancaster, Wis. Game ..	484,432	Oct. 18	1398	357	61	307
Hyde, George H., Indianapolis, Ind. Latch and lock combined ..	472,620	Apr. 12	950	246	59	194
Hyde, Hampden, Rochester, N. Y. Magazine steam-generator ..	470,195	Mar. 8	849	209	58	1273
Hyde, J. M., et al. (See Armstrong, James P., assignor.)						
Hyde, Theophilus R., Jr., and J. Lines, assignors to Scovill Manufacturing Company, Waterbury, Conn. Forming stocking-supporters ..	469,476	Feb. 23	2453	628	58	1029
Hyde, William J., Traer, Iowa. Harrow ..	473,754	Apr. 26	2781	699	59	577
Hyer, Robert S., Georgetown, Tex. Plow ..	467,780	Jan. 26	2395	608	58	479
Hymas, Alfred, assignor of one-half to J. Brockley, Albany, N. Y. Car-wheel ..	479,366	July 19	2019	504	60	421
Hyndman, Nathan P. (See Wilson, John R., assignor.)						
Hynes, Michael J., assignor to J. M. French, Toronto, Canada. Brick-kiln ..	477,418	June 21	1891	465	59	1838
				466		
Hyser, Edward N., Boston, Mass. Gage-line holder ..	468,660	Feb. 9	1173	299	58	763
Hyslop, Charles B., Bradford, Pa. Disinfecting apparatus ..	478,697	July 12	957	238	60	206
Hyslop, John, Jr., Abington, Mass. Nailing-machine ..	467,104	Jan. 12	1309	331	58	258
				332		
Hyslop, John, Jr., Abington, Mass. Pegging-machine ..	472,638	Apr. 12	971	252	59	198
Hyslop, John, Jr., Abington, Mass. Feeding mechanism for pegging-machines ..	475,868	May 31	3168	804	59	1306
I. S. Remson Manufacturing Company. (See Remson, Isaac S., assignor.)						
Ianson, Alfred J., Waverly, Wash. Tire setter and cooler ..	486,932	Nov. 29	2841	735	61	1209
Ibach, Gideon R., and J. H. Schultz, Brooklyn, N. Y. Attachment for lathes ..	488,815	Dec. 27	2578	640	61	1883
Ibbotson, Alfred B., Sheffield, England. Fish-plate for railway-rails ..	467,812	Jan. 26	2449	622	58	489
Ichthyol-Gesellschaft Cordes, Hermann & Company. (See Helmers, Ludwig O., assignor.)						
Iddings, George S., et al. (See Facer, Wilson E., assignor.)						
Ido, Henri G. (See Travis, John J., assignor.)						
Ideal Manufacturing Company. (See Whittingham, David L., assignor.)						
Ideal Toy Company. (See Smith, Frank H., assignor.)						
Iden, Charles W., assignor to Thermo Electric Company, New York, N. Y. Thermo-electric element ..	479,596	July 26	2401	598	60	508
Iden, John H., Bourbon, Ind. Photographic kit ..	474,833	May 17	1531	390	59	957
Idle, Francis M., St. Louis, Mo. Spinning-top ..	480,817	Aug. 16	1706	426	60	937
Idstein, Joseph. (See Eichhorst and Idstein.)						
Ilhelfeldt, August, Bloomington, Ill. Gate ..	473,578	Apr. 26	2513	634	59	527
Ilanor, Carl S. von, See Villa, near Attersee, Austria-Hungary. Device for locking spikes ..	485,939	Nov. 8	1198	316	61	834
Ilbery, William, assignor of one-half to F. Bressler, St. Louis, Mo. Vise ..	486,228	Nov. 15	1671	442	61	946
Iler, Frank M., Marion, Ohio. Ore-concentrator ..	473,506	Apr. 26	2379	603	59	500
Iler, Joseph D., Kansas City, Mo. Receptacle for aerated liquids ..	473,006	Apr. 19	1533	391	59	318
Iler, Joseph D., Kansas City, Mo. Receptacle for aerated liquids ..	474,387	May 10	812	212	59	805

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Iles, George L. (See Batte, Rinaldo A., assignor.)						
Iles, Malvern W. (See Chanute and Iles.)						
Iles, Malvern W. (See Sheedy and Iles.)						
Iles, Malvern W., Denver, Colo. Apparatus for conducting and screening gases from metallurgical furnaces.	475,774	May 31	3004	762	59	1274
Iles, Malvern W., Denver, Colo. Furnace-buckstave.	476,275	June 7	70	15	59	1451
Iles, Malvern W., Denver, Colo. Fire-indicator.	477,759	June 23	2456	614	59	1967
Iles, Malvern W., Denver, Colo. Blast-furnace.	481,950	Sept. 6	46	10	60	1343
Iles, Malvern W., Denver, Colo. Dump-car.	483,152	Sept. 27	2000	506	60	1766
Iles, Malvern W., Denver, Colo. Device for catching and saving fumes from metallurgical furnaces.	484,017	Oct. 11	750	188 } 189	61	168
Iles, Malvern W., Denver, Colo. Blast-furnace top.	484,018	Oct. 11	752	189	61	168
Iles, Malvern W., Denver, Colo. Dumping-car.	484,019	Oct. 11	754	190	61	169
Iles, Malvern W., Denver, Colo. Blast-furnace.	484,020	Oct. 11	755	190	61	169
Iles, Malvern W., Denver, Colo. Recovering metals from copper alloys.	484,021	Oct. 11	756	190	61	170
Iles, Malvern W., Denver, Colo. Screen for metallic fumes.	485,797	Nov. 8	973	261	61	789
Iles, Malvern W., and D. Sheedy, Denver, Colo. Fume-arrester.	484,016	Oct. 11	749	188	61	168
Igenfritz, William D. (See Phegley, William T., assignor.)						
Iliffe, John A. (See Teague, Francis, assignor.)						
Ill, Edward J. (See Nemminger, Robert F., assignor.)						
Illing, Charles, and A. Stoppenbach, Jefferson, Wis. Shuttle-box for looms.	473,878	Apr. 26	2978	751	59	615
Illingworth, George M., et al. (See Jones, John B., assignor.)						
Illingworth, John, Newark, N. J. Ingot-mold.	473,579	Apr. 26	2515	634 } 635	59	527
Illinois Electric Lamp Company. (See Richter and Nolen, assignors.)						
Illinois Malleable Iron Company. (See Anderson, Anton G., assignor.)						
Ilsey & Co., S. A. (See Macarthy, Henry, assignor.)						
Imbach, Martin G., Jr., Brooklyn, N. Y. Coin-controlled game apparatus.	476,384	June 7	246	60	59	1484
Imbrie, Charles F. (See Hemenway, George C., assignor.)						
Imbrie, Charles F. (See King, William, assignor.)						
Imeson, Thomas, L. D. Tibbets, and C. L. F. Kellogg, Seattle, Wash. Hanger for electric wires.	473,158	Apr. 19	1784	450	59	363
Imig, Philip, Minier, Ill. Dumping apparatus.	475,565	May 24	2680	680	59	1197
Imlah, James, Barre, Vt. Unicycle.	480,585	Aug. 9	1386	333	60	849
Imlay, William L., Camden, N. J. Electric device for vibrating tables.	486,715	Nov. 22	2440	636	61	1112
Immerwahr, Natalie, et al. (See Miller, Morris V., assignor.)						
Imperial Manufacturing Company. (See Merwin and Stirckler, assignors.)						
Improved Zigzag Grate Bar Company. (See Boileau, Etienne, assignor.)						
Ince, William, Hayle, England. Dust-collector.	484,717	Oct. 18	1839	467 } 468	61	396
Inder Stroth, F. A. (See Weinedel, Charles, assignor.)						
India Rubber Comb Company. (See Schlesinger, Augustus D., assignor.)						
Indiana Bicycle Manufacturing Company. (See Goebler, John, assignor.)						
Ingal, Joseph. (See Ingal, Robert and J.)						
Ingal, Robert and J., Chicago, Ill. Carpet-stretcher.	466,418	Jan. 5	172	46	58	34
Ingal, Robert and J., Chicago, Ill. Bracket.	488,692	Dec. 27	2400	595	61	1847
Ingalls, Joseph A., Evanston, Wyo. Coal loader and distributor for box-cars.	488,564	Dec. 27	2193	541 } 542	61	1806
Ingalls, Sumner L., assignor of one-half to M. A. Austin, Milford, Me. Clapboard-machine.	468,495	Feb. 9	925	236	58	713
Ingells, James, East Jordan, Mich. Hame-fastener.	470,049	Mar. 1	606	151	58	1217
Ingersoll, Legrand. (See Donne, Leon, assignor.)						
Ingersoll, Richmond H., Biddeford, Me. Machine for drawing in warp-threads.	468,914	Feb. 16	1569	399 } 398	58	851
Ingersoll, Robert H., New York, N. Y. Type-writing machine.	478,109	July 5	47	14	60	12
Ingersoll Sergeant Drill Company. (See Saunders, William L., assignor.)						
Ingersoll Sergeant Drill Company. (See Sergeant, Henry C., assignor.)						
Ingersoll, Simon, Glenbrook, Conn. Antifiction thrust-bearing.	488,816	Dec. 27	2583	641	61	1884
Ingle, Isaac B., Saybrook, Ill. Harness-girth.	471,554	Mar. 29	2941	748	58	1704
Ingleshart, George N., Collinwood, Ohio. Pail, bucket, scuttle, &c.	471,121	Mar. 22	2303	591	58	1574
Inglesby, Thomas P., St. Louis, Mo., and T. J. Davis, Richmond, Va. Rope clamp and stopper.	475,115	May 17	1975	500	59	1044
Ingmanson, Emil N., et al. (See Ingmanson and Lorang, assignors.)						
Ingmanson, John, and R. Lorang, assignors to said Lorang, J. A. and E. N. Ingmanson, Chicago, Ill. Clamp for electric conductors.	479,216	July 19	1776	445	60	372
Ingmanson, John A., et al. (See Ingmanson and Lorang, assignors.)						
Ingraham, Arthur J. (See Grantland, John W., assignor.)						
Ingraham, Harry B., Worcester, Mass., assignor to C. C. Colby, London, England. Heel-nailing machine.	486,288	Nov. 15	1776	467	61	968
Ingraham, Thomas J., assignor of one-half to F. G. Babcock, Hornellsville, N. Y. Wire fencing.	469,062	Feb. 16	1821	465	58	900
Ingraham, Thomas J., assignor of one-half to F. G. Babcock, Hornellsville, N. Y. Wire fence.	472,639	Apr. 12	973	252	59	198
Ingraham, Thomas J., assignor of one-half to F. G. Babcock, Hornellsville, N. Y. Wire fencing.	475,116	May 17	1976	500	59	1045
Ingram, Benjamin F., Bowling Green, Mo. Wire-and-picket fence.	480,101	Aug. 2	541	137	60	686
Ingram, Frederick F., Detroit, Mich. Atomizer.	481,951	Sept. 6	46	11	60	1343
Ingram, Frederick F., Detroit, Mich. Mold.	481,952	Sept. 6	47	11	60	1343
Ingram, Frederick F., Detroit, Mich. Bottle.	481,953	Sept. 6	48	11	60	1344
Ingram, Ida M., Sedalia, Mo. Flour-sifter.	482,576	Sept. 13	1099	266	60	1563
Ingram, Joseph C., San Francisco, Cal. Copying device.	479,280	July 19	1870	468	60	392
Insinger, Alfred, assignor to B. La Rue, Philadelphia, Pa. Shuttle-box-operating mechanism for looms.	473,507	Apr. 26	2380	603	59	500
Interior Conduit and Insulation Company. (See Bergmann, Sigmund, assignor.)						
Interior Conduit and Insulation Company. (See Bergmann and Scott, assignors.)						
Interior Conduit and Insulation Company. (See Greenfield, Edwin T., assignor.)						
Interior Conduit and Insulation Company. (See Klein, Charles J., assignor.)						
International Cigarette Machine Company. (See Pollard, James B., assignor.)						
International (Giffard) Gun and Ordnance Company. (See Giffard, Paul, assignor.)						
International Identification Card Company. (See Behrendt, Barnim L., assignor.)						
International Ore Separating Company. (See Chase, Harvey S., assignor.)						
International Ore Separating Company. (See Lovett, Thomas J., assignor.)						
International Pavement Company. (See McCarter, Samuel, assignor.)						
Invisible Eyelet Company. (See Anderson, Edward C., assignor.)						
Iona Manufacturing Company. (See Quinn and Hoffmann, assignors.)						
Ireland, David M., Detroit, Mich. Bracket.	481,177	Aug. 23	2301	567	60	1064

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Ireland, Elias, Winters, Cal. Apparatus for bleaching fruit	485,940	Nov. 8	1198	317	61	834
Ireland, Lewis N., <i>et al.</i> (See Landon, William E., assignor.)						
Ireland, Lewis N., Pittsburg, Pa. Combined drilling-tool and sand-bailer	478,605	July 12	836	206	60	181
Ireland, Robert H., New York, N. Y. Punching-machine	468,200	Feb. 2	443	110	58	611
Ireland, Theodore H., Greeu county, Iowa. Currycomb	480,196	Aug. 2	697	176	60	714
Ireland, William C., Boston, Mass. Safe	483,153	Sept. 27	2001	506	60	1766
Iremonger, Thomas, Jr., Brooklyn, N. Y. Shield for curling irons	482,360	Sept. 13	746	179	60	1496
Ires, Harry C. (See Hotchkiss, Charles A., assignor.)						
Irgens, Paul H., Christiania, Norway. Shock-controlling device	478,434	July 5	575	139	60	112
Irion, John H., Pawnee City, Nebr. Whiffletree	467,601	Jan. 26	2121	538	58	426
Irish, Charles S., Jordan, N. Y. Rotary engine	467,416	Jan. 19	1799	458 459	58	358
Irish, Charles S., Jordan, N. Y. Rotary motor	469,404	Feb. 23	2340	601	58	1008
Irish, Joseph, Bridgeport, Conn. Fabric-holding frame for embroidering-machines	471,793	Mar. 29	3323	846	58	1774
Irish, William E., Chicago, Ill. Electric-arc lamp	479,121	July 19	1629	408 407	60	345
Irish, William E., Cleveland, Ohio. Electric-arc lamp	479,510	July 26	2285	571	60	486
Irish, William E., assignor to R. S. West, Cleveland, Ohio. Advertising device	482,178	Sept. 6	425	101	60	1418
Iron Car Equipment Company. (See Chapman, Thomas L., assignor.)						
Irrgang, Max, Bowmanville, Ill. Wind-wheel	469,766	Mar. 1	191	49	58	1138
Irvin, Stephen M., San Bernardino, Cal. Flume-gate	483,455	Sept. 27	2478	623	60	1858
Irvine, Henry E. (See Elkins, William H., assignor.)						
Irvine, John D., Howth, Ireland. Firing-pin lock for small-arms	471,122	Mar. 22	2304	591	58	1575
Irving, James. (See Willson, Walter V., assignor.)						
Irving, Samuel, <i>et al.</i> (See De Forest, Wyatt F., assignor.)						
Irving, Samuel S. (See Tyner and Irving.)						
Irwin, George B., Toronto Junction, Canada. Potato-harvester	473,317	Apr. 19	2049	514	59	415
Irwin, John S., Saltsburg, Pa. Label-former for glass molds	476,649	June 7	638	155	59	1563
Irwin, Samuel B., West Hebron, N. Y. Road-cart	479,944	Aug. 2	263	64	60	632
Isaacs, Augusta R., New York, N. Y. Cooking utensil	476,746	June 7	779	191	59	1592
Isaacs, George, St. Louis, Mo. Brick-machine	484,319	Oct. 11	1216	309	61	259
Isaacs, Jacob L., St. Louis, Mo. Combined work-stand, desk, game-board, and table	484,718	Oct. 18	1841	468	61	397
Isaacson, Sussill A., Boston, Mass. Trousers	479,564	July 26	2360	589	60	501
Isachson, Norman, Marion, Idaho. Hay-carrier	483,845	Oct. 4	485	120	61	100
Isard, William R. (See Gutberlet and Isard.)						
Isbell, Charles W., New York, N. Y. Refrigerating apparatus	469,477	Feb. 23	2454	629	58	1029
Isbell, Charles W., New York, N. Y. Apparatus for manufacturing gas	472,191	Apr. 5	282	74, 75	59	54
Isbell, Charles W., New York, N. Y. Apparatus for generating gas	485,009	Oct. 25	2344	604	61	511
Isbell, Willard H., New York, N. Y. Caliper-joint	483,065	Sept. 20	1860	472	60	1728
Isberg, Ernest A. (See Isberg, Hans A., assignor.)						
Isberg, Hans A., assignor to E. A. Isberg, Long Island City, N. Y. Copy-holder	469,251	Feb. 23	2098	539	58	961
Isch, Anthony, East St. Louis, Ill. Coin-tray	482,639	Sept. 13	1186	287	60	1580
Isham, Arlington D. (See Svensson, Claes A., assignor.)						
Isherwood, Alfred, New Bedford, Mass. Loom-shuttle	486,109	Nov. 15	1495	393	61	911
Iske, Albert, Lancaster, Pa. Shutter-blower	468,941	Feb. 16	1614	408	58	859
Iske, Albert, Lancaster, Pa. Door-bell handle	473,879	Apr. 26	2979	751	59	615
Iske, Albert, assignor to G. E. Fahnestock and C. G. Landis, Lancaster, Pa. Call-bell	473,880	Apr. 26	2981	751	59	615
Iske, Anthony, assignor to J. W. Miller, Lancaster, Pa. Door-bell	488,244	Dec. 20	1672	418	61	1688
Isler, John J., Elk Rapids, Mich. Fruit-canning device	477,805	June 28	2522	633	59	1979
Israel, Abraham, Paterson, N. J. Bicycle-lock	469,651	Feb. 23	2703	696	58	1080
Israel, Oscar J., Chariton, Iowa. Spool-holder	477,328	June 21	1753	429	59	1811
Israel, Robert O. (See Murrey, Thomas J., assignor.)						
Itjen, Martin, Jacksonville, Fla. Device for dispensing beer or other liquids	472,356	Apr. 5	548	142	59	103
Ivens, Edmund M., New Orleans, La. Apparatus for baling cotton	475,117	May 17	1977	501	59	1045
Ivers & Pond Piano Company. (See Ivers, William H., assignor.)						
Ivers, William H., Dedham, assignor to Ivers & Pond Piano Company, Boston, Mass. Device for stringing pianofortes	467,554	Jan. 26	2055	519	58	414
Ivers, William H., Dedham, assignor to Ivers & Pond Piano Company, Boston, Mass. Piano pedal	484,500	Oct. 18	1505	383	61	329
Iverson, Anton, Chicago, Ill. Lap-seam guide for sewing-machines	488,073	Dec. 13	1393	346	61	1617
Ives, Albert J. (See Sencebaugh and Ives.)						
Ives, Blakeslee & Williams Company. (See Booth, Richard A., assignor.)						
Ives, Blakeslee & Williams Company. (See Hotchkiss, Charles A., assignor.)						
Ives, Blakeslee & Williams Company. (See Ives, Edward R., assignor.)						
Ives, Charles, Clinton, N. Y. Nut-lock	479,511	July 26	2287	572	60	487
Ives, Edward R., Bridgeport, Conn., assignor to Ives, Blakeslee & Williams Company, of New York. Toy pistol	466,954	Jan. 12	1053	267	58	208
Ives, Frederic E., Philadelphia, Pa. Camera	475,084	May 17	1918	488	59	1034
Ives, Henry, assignor to A. W. Sanborn, San Francisco, Cal. Lubricator-cup	473,755	Apr. 26	2782	699	59	577
Ives, John F., and F. B. Colman, New York, N. Y. Valve for pneumatic tires	481,762	Aug. 30	3277	798	60	1266
Ivey, James B., Macon, Ga. Saw-setting machine	471,641	Mar. 29	3064	779	58	1726
Ivey, James B., assignor of one-half to S. A. Charpiot, Macon, Ga. Drive-chain	470,141	Mar. 1	740	184	58	1243
Ivory, James W., Philadelphia, Pa. Dental cervix-clamp	474,131	May 3	381	91	59	712
Ivory, James W., Philadelphia, Pa. Dental matrix-retainer	474,132	May 3	382	92	59	712
Iwan, Henry and L. Streator, Ill. Rotary chimney-cowl	488,074	Dec. 13	1394	346	61	1617
Iwan, Louis. (See Iwan, Henry and L.)						
J. C. Lake & Son Company of Baltimore City. (See Lake, John C. and S., assignors.)						
J. E. Caldwell & Company. (See Putnam, Ralph C., assignor.)						
J. H. Busell Manufacturing Company. (See Busell and Taylor, assignors.)						
J. H. Horne & Sons Company. (See Horne and Barrett, assignors.)						
J. I. Case Plow Works. (See Sobey, William, assignor.)						
J. I. Case Threshing Machine Company <i>et al.</i> (See Cunningham and Dingee, assignors.)						
J. L. Brown Company. (See White, John, assignor.)						
J. L. Mott Iron Works. (See Demarest, John, assignor.)						
J. L. Mott Iron Works. (See Hammann, Edward, assignor.)						
J. L. Perry Machine Company. (See Perry, James L., assignor.)						
J. R. Alsing Company. (See Abbé, Richard W. F., assignor.)						
J. W. Sefton Manufacturing Company. (See Burke, James E., assignor.)						
Jabroczky, Adolph, Burnham, assignor of one-half to F. Crane, Chicago, Ill. Vehicle-spring	477,419	June 21	1892	466	59	1838
Jack, Mary A., Braceville, Ill. Washing-machine	469,146	Feb. 16	1927	493 494	58	922
Jackson, Amariah W., Chicago, Ill., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Hose-coupling	480,197	Aug. 2	698	176 177	60	714

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Jackson and Woodin Manufacturing Company. (See Boyles, William M., assignor.)						
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Spoon	470,676	Mar. 15	1617	419	58	1498
Jackson, Byron, San Francisco, Cal. Pneumatic fuel-feeding apparatus for straw	479,644	July 26	2475	$\left\{ \begin{smallmatrix} 615 \\ 616 \end{smallmatrix} \right\}$	60	522
Jackson-Cady Electric Railway Signal Company. (See Jackson, Uriah S., assignor.)						
Jackson, Calvin, Jacksonwald, assignor to C. H. Ruhl, trustee, Reading, Pa. Method of and apparatus for coiling and inserting wire	482,965	Sept. 20	1706	$\left\{ \begin{smallmatrix} 430 \\ 431 \end{smallmatrix} \right\}$	60	1695
Jackson, Charles A., Reading, Mass. Electric motor for cars	487,329	Dec. 6	149	43	61	1350
Jackson, Charles E., Boston, Mass. Metallic-circuit cable	476,464	June 7	367	85	59	1508
Jackson & Co., William H. (See Burkhardt, John, assignor.)						
Jackson, Edmund, assignor of one-half to T. H. Whitlock, Paris, Tenn. Bread and pastry cabinet	463,623	Feb. 9	1121	285	58	752
Jackson, Fountain, Hawley's Store, N. C. Potato-cutter	481,629	Aug. 30	3050	745	60	1922
Jackson, Henry, assignor of one-half to C. T. Brown, Chicago, Ill. Disinfectant	476,276	June 7	71		59	1451
Jackson, J. M., et al. (See St. John, James E., assignor.)						
Jackson, Jacob, Fort Howard, Wis. Stool for tables, counters, &c	484,719	Oct. 18	1844	469	61	397
Jackson, James D., Chicago, Ill. Steam-engine	482,089	Sept. 6	273	66	60	1389
Jackson, John, London, England. Type-writing machine	472,481	Apr. 5	741	189	59	141
Jackson, John, Lonsdale, R. I. Bottle-filling apparatus	485,942	Nov. 8	1201	317	61	835
Jackson, John A. C., assignor of one-half to S. A. D. Eaton, Pocahontas, Ark. Brick-machine	467,813	Jan. 26	2452	$\left\{ \begin{smallmatrix} 632 \\ 633 \end{smallmatrix} \right\}$	58	489
Jackson, John B., et al. (See Smith, Samuel, assignor.)						
Jackson, John H. (See Oakes and Jackson.)						
Jackson, John P. (See Kirk, Wallace R., assignor.)						
Jackson, John P., Liverpool, England. Machine for manufacturing and dispensing aerated water	475,386	Nov. 1	367	98	61	648
Jackson, John W., Sharpsville, Pa. Oil-can	467,307	Jan. 19	1637	417	58	327
Jackson, Luther C., Wolfe City, and J. F. Reiger, Dallas, Tex.; said Reiger assignor to G. E. Wilcox; said Jackson and Wilcox assignors of five-twelfths to L. R. Wade, A. M. Kellar, J. E. Moore, A. F. Bentley, and J. B. Nunneley. Plow	475,731	May 24	2834	745	59	1246
Jackson, Manetho C., Denver, Colo. Wagon-jack	481,713	Aug. 30	3180	777	60	1247
Jackson Pipe Organ Company. (See Jackson, Richard W., assignor.)						
Jackson, Richard W., assignor to Jackson Pipe Organ Company, Chester, Ill. Pipe-organ	480,949	Aug. 16	1906	$\left\{ \begin{smallmatrix} 477 \\ 478 \end{smallmatrix} \right\}$	60	977
Jackson, Samuel G., Palestine, Tex. Trace-carrier	470,848	Mar. 15	1890	484	58	1481
Jackson, Samuel C., Haverhill, Mass. Automatic fire-kindler for steam fire-engines	476,539	June 7	472	112	59	1531
Jackson, Samuel K., Huntington Valley, Pa. Plow	485,941	Nov. 8	1200	317	61	835
Jackson, Thomas B., Shoustown, Pa. Attachment for breast-straps	484,433	Oct. 18	1402	$\left\{ \begin{smallmatrix} 357 \\ 358 \end{smallmatrix} \right\}$	61	308
Jackson, Uriah S., Ossipee, N. H., assignor to Jackson-Cady Electric Railway Signal Company, Portland, Me. Railway-signal	473,190	Apr. 19	1851	466	59	375
Jackson, Wallace E., Waterbury, Conn. Button	474,252	May 3	562	138	59	747
Jackson, Wallace E., assignor to Patent Button Company, Waterbury, Conn. Button	483,674	Oct. 4	227	57	61	47
Jackson, William H., assignor of two-thirds to J. and E. Blood, Philadelphia, Pa. Circular-knitting machine	467,874	Jan. 26	2546	645	58	507
Jackson, William J., Philadelphia, Pa. Radiator	488,764	Dec. 27	2499	621	61	1867
Jacob, Alfred P., Brooklyn, N. Y. Self-lighting gas-burner	487,744	Dec. 13	833	212	61	1504
Jacob, Frederick W., Hampton Wick, England. Coin-freed apparatus	470,758	Mar. 15	1740	448	58	1453
Jacobi, Henry, assignor to C. S. Fischer, New York, N. Y. Muffling attachment for pianos	467,132	Jan. 12	1361	347	58	267
Jacobi, John, Brooklyn, N. Y. Electric time-alarm	478,865	July 12	1924	$\left\{ \begin{smallmatrix} 303 \\ 304 \end{smallmatrix} \right\}$	60	258
Jacobi, Oscar, Montreal, assignor of one-half to H. L. Beatty, Toronto, Canada. Hub-attaching device	477,420	June 21	1893	466	59	1838
Jacobs, Charles, Hyde Park, Mass. Feed-water heater	472,671	Apr. 12	1021	$\left\{ \begin{smallmatrix} 263 \\ 264 \end{smallmatrix} \right\}$	59	206
Jacobs, Edward. (See Hav. Gilbert, assignor.)						
Jacobs, Ernest B., et al. (See Lindley, Zachary M., assignor.)						
Jacobs, George T. (See Ford and Jacobs.)						
Jacobs, George T. (See Lumley, Webb, and Jacobs.)						
Jacobs, George T., Washington, D. C. Brick-machine	482,252	Sept. 6	536	$\left\{ \begin{smallmatrix} 128 \\ 129 \end{smallmatrix} \right\}$	60	1439
Jacobs, Jacob, New York, N. Y. Illuminating and ventilating tile	467,814	Jan. 26	2453	623	58	429
Jacobs, Jacob, New York, N. Y. Illuminating-tile	479,645	July 26	2477	$\left\{ \begin{smallmatrix} 616 \\ 617 \end{smallmatrix} \right\}$	60	523
Jacobs, Jacob, New York, N. Y. Illuminating-tile	488,435	Dec. 20	1981	494	61	1748
Jacobs, Jacob, Brooklyn, N. Y. Illuminating-tile	488,132	Dec. 13	1461	368	61	1630
Jacobs, John E., Chicago, Ill. Sirup-gage	478,330	July 5	421	102	60	84
Jacobs, John M., De Witt, Iowa. Mask for firemen, &c	474,500	May 10	989	255	59	838
Jacobs, Joseph. (See Chabot and Jacobs.)						
Jacobs, Thomas H., San Antonio, Tex. Converting mesquite-beans	479,512	July 26	2288	572	60	487
Jacobs, William J., Bartersville, Ind. Fence	485,197	Nov. 1	66	20	61	586
Jacobson, Carl J., Brooklyn, and J. H. Stein, New York, N. Y. Tool-holder for grinding tools	470,106	Mar. 8	851	$\left\{ \begin{smallmatrix} 209 \\ 210 \end{smallmatrix} \right\}$	58	1273
Jacobson, John, Boston, Mass. Iridescent stone or body	467,579	Jan. 26	2087	599	58	420
Jacobson, John, Boston, Mass. Making iridescent-surfaced articles	467,661	Jan. 26	2203	560	58	442
Jacobson, John, Boston, Mass. Framed picture, mirror, and the like, and forming the same	479,004	July 19	1444	358	60	310
Jacobson, John, Boston, Mass. Iridescent stone or body. (Reissue.)	11,263	Aug. 16	2271	560	60	1044
Jacobson, John, Boston, Mass. Spectrum-colored stone or body	484,934	Oct. 25	2228	574	61	488
Jacobson, Solomon. (See Golden, Charles, assignor.)						
Jacoby, Frank C., Tulip, Mo. Windmill	467,976	Feb. 2	97	24	58	543
Jacoby, William, assignor of three-fourths to L. O. Bathen, Fulda, L. Coburn, Belfast, and H. P. Lewis, Fulda, Minn. Tack-hammer	470,156	Mar. 1	762	190	58	1247
Jacques, James, Chelmsford, Mass. Cash indicator, register, and check-printer	480,698	Aug. 9	1521	$\left\{ \begin{smallmatrix} 378 \\ 379 \end{smallmatrix} \right\}$	60	884
Jacques, William W., Newton, assignor to American Bell Telephone Company, Boston, Mass. Combined telegraphy and telephony	485,279	Nov. 1	186	54	61	611
Jadwin, Orlando H., Brooklyn, N. Y. Proportional balance	481,618	Aug. 30	3035	741	60	1219
Jaack, Emile, Brooklyn, N. Y. Embossing-machine	467,175	Jan. 19	1437	366	58	289
Jaeger, Charles L., New York, N. Y. Electric recording device for compasses	472,124	Apr. 5	180	48, 49	59	34
Jaeger, Gustav L., New York, N. Y. Pulp-drainer	483,847	Oct. 4	489	121	61	101
Jaeger, Julius, Rutherford, N. J. Toy kitchen and stove	479,597	July 26	2402	598	60	508
Jaeger, Julius, Rutherford, N. J. Toy kitchen and stove	486,672	Nov. 22	2372	620	61	1098
Jaeger, Ludwig, et al. (See Rinderknecht, Charles J., assignor.)						
Jaegermann, Rudolph, St. Louis, Mo. Stem-winding watch	466,935	Jan. 12	1022	260	58	203

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Jaehnig, Charles H., Eagle Pass, Tex. Newspaper-file	479,513	July 26	2289	572	60	487
Jaekel, Ferdinand A., Memphis, Tenn. Coin-wrapper	486,716	Nov. 22	2441	636	61	1113
Jaekel, Richard, Berlin, Germany. Sofa-bedstead	477,421	June 21	1894	466	59	183e
Jager, Simon de, Denver, Colo. Emulsion	472,925	Apr. 12	1387	59	59	278
Jaggard, Robert W., Philadelphia, Pa. Electric indicator for railway-blocks ..	472,359	Apr. 5	549	142	59	103
James, Andrew J., and J. Ferguson, Santa Cruz, Cal. Lazy-tong gate	486,531	Nov. 22	2140	565	61	1053
James, Christopher, Swansea, England. Reducing zinc or spelter from ores ..	478,110	July 5	48	60	60	12
James, Christopher, Swansea, England. Reducing zinc	482,438	Sept. 13	872	60	60	1519
James, Christopher, Swansea, England. Reducing zinc	483,652	Oct. 4	200	61	61	41
James, Christopher, Swansea, England. Smelting complex silver ores	483,962	Oct. 4	600	61	61	137
James, David. (See James, John A. and D.)						
James, David and T., assignors of one-third to O. V. Dibble, Wadsworth, Ohio. Safety-catch for inclined railways	473,842	Apr. 26	2915	732	59	603
James, David O., assignor to himself and J. Grant, Chicago, Ill. Pipe-threading machine..	480,871	Aug. 16	1785	447	60	953
James, Elmer L. (See Hickerson, Samuel C., assignor.)						
James, Frederick R., <i>et al.</i> (See Oldfield, Joseph, assignor.)						
James, George B. (See Richards, Walter S., assignor.)						
James, Harry. (See Gillespie and James.)						
James, Henry H. (See Williams, Bates, and James.)						
James, Jack W., Memphis, Tenn. Bridle-bit	478,866	July 12	1225	304	60	258
James, Jack W., Memphis, Tenn. Bridle-bit	478,867	July 12	1226	304	60	258
James, Jack W., Memphis, Tenn. Ornamental curb-bit	478,868	July 12	1227	304	60	258
James, John A. and D., Coffeyville, Kans. Register for grain-measures	473,465	Apr. 26	2315	586	59	488
James, John A. and D., Coffeyville, Kans. Grain-weigher	485,632	Nov. 8	731	191	61	738
James, John W., Newark, Ohio. Measuring-funnel	467,231	Jan. 19	1517	388	58	305
James Lefell & Company. (See Tyler, William W., assignor.)						
James, Milton. (See Mitchell, Joseph, assignor.)						
James Reynolds Manufacturing Company. (See O'Connor and McNamara, assignors.)						
James, Thomas. (See James, David and T.)						
James, Thomas, Braddock, Pa. Furnace drawing and charging apparatus	479,883	Aug. 2	164	41	60	614
James, Will S., Abilene, Tex. Steam cooking-stove	472,730	Apr. 12	1107	285	59	222
James, William. (See Barry and James.)						
James, William H., Denver, Colo. Method of and apparatus for treating the smoke and fumes of metallurgical furnaces	488,245	Dec. 20	1673	418	61	1688
James, William H., assignor to E. Howard Watch and Clock Company, Boston, Mass. De- vice for preventing accidental closing of electric circuits in signal-boxes	484,206	Oct. 11	1029	262	61	223
Jameson, Samuel B., Marathon, N. Y. Road-scraper	483,303	Sept. 27	2267	570 571	60	1816
Jamison, Alcinoas B., New York, N. Y. Sitz-bath	485,943	Nov. 8	1202	318	61	835
Jamison, James A., Russellville, Ark. Fire box and grate	471,005	Mar. 15	2124	545	58	1527
Jamison, James A., Russellville, Ark. Book or sheet-music holder and leaf-turner ..	472,125	Apr. 5	182	49	59	34
Jamison, James A., Russellville, Ark. Harness-saddle	472,360	Apr. 5	551	143	59	103
James, Henry, Waterbury, Vt. Organ	469,787	Mar. 1	192	50	58	1138
James, Henry, Waterbury, Vt. Vibrator for reed musical instruments	477,661	June 28	2236	575	59	1934
James, Malissa, <i>et al.</i> (See Nelson and Heuett, assignors.)						
Janeway, John L., Phenixville, and F. Logan, Corner Stores, Pa. Process of and appara- tus for the manufacture of gas	483,981	Oct. 4	690	172 173	61	143
Janeway, William F., Columbus, Ohio. Dinner-bucket	478,606	July 12	837	206	60	182
Janin, Alexis, San Francisco, Cal. Amalgamating silver ores	468,663	Feb. 2	233	58	58	569
Janin, Alexis, San Francisco, Cal. Amalgamating silver ores	473,395	Apr. 19	2197	551	59	413
Janin, Alexis, San Francisco, Cal. Amalgamating silver ore	481,031	Aug. 16	2033	507	60	1001
Janisch, Wenzel J., Denver, Colo. Carpet-fastener	477,370	June 21	1820	445	59	1823
Janiszewski, Wladyslaw, Cincinnati, Ohio. Vehicle-hub	476,018	May 31	3400	858	59	1352
Jankó, Paul v., Buda-Pesth, Austria-Hungary. Keyboard for musical instruments	474,016	May 3	209	49	59	678
Jannay, Harry M., <i>et al.</i> (See Lycan, William S., assignor.)						
Janssen, Henry, Brooklyn, assignor to Schloss & Sons, New York, N. Y. Feed mechanism ..	478,511	July 5	692	168	60	137
Janssen, William, Chemnitz, Germany. Knitted fabric	473,580	Apr. 26	2517	635	59	528
Janzon, August, Chicago, Ill. Wash-stand	485,040	Oct. 25	2393	615	61	520
Japhet, Charles A. (See O'Neil, Stephen A., assignor.)						
Japy, Henri, Beaumont, and O. Helmer, Paris, France. Electric-arc lamp	485,347	Nov. 1	306	81, 82	61	634
Jaque, Joseph, Deepwater, Mo. Churn	469,702	Mar. 1	49	15	58	1107
Jaqui, Frederick W., Jr., Cleveland, Ohio. Affixing manufactured asbestos	483,560	Oct. 4	66	61	61	16
Jaquish, Louis C., Chicago, Ill. Bicycle	473,931	May 3	73	14, 15	59	650
Jaquish, Louis C., Chicago, Ill. Bicycle	478,752	July 12	1047	258	60	223
Jardine, Charles K., Georgetown, British Guiana. Automatic electric time-check ..	475,566	May 24	2681	681	59	1198
Jarecki, A. H., <i>et al.</i> (See Boice, John W., assignor.)						
Jarrard, Oliver O. (See Moore and Jarrard.)						
Jarrett, Floyd, Socorro, N. Mex. Terr., and L. Peyton, Rich Hill, Mo. Heating and gas- generating stove	474,742	May 10	1374	348	59	913
Jarrett, George L., Des Moines, Iowa. Flour-bolting reel	487,838	Dec. 13	986	248	61	1535
Jarvis, George R., Chicago, Ill. Drilling for minerals	475,319	May 24	2277	586	59	1122
Jarvis, John E., London, England. Horseshoe	478,435	July 5	576	139	60	113
Janch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Central-draft lamp	473,667	Apr. 26	2650	668	59	553
Janch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Wick-raiser for central-draft lamps	474,171	May 3	445	108	59	724
Janch, Joseph, assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Lamp-burner	479,598	July 26	2403	598 599	60	509
Jay, Allen W. (See Hoover and Jay.)						
Jay, Daniel W., <i>et al.</i> (See Bartholomew, Ellis, assignor.)						
Jay, Oliver, <i>et al.</i> (See Bartholomew, Ellis, assignor.)						
Jaynes, Alfonso L., St. Louis, Mo. Workman's time-recorder	483,629	Oct. 4	165	41, 42	61	35
Jaynes, Erasmus D., and J. W. Hawkins, Curryville, Mo. Nut-lock	470,677	Mar. 15	1617	420	58	1429
Jean, George W. (See Payne, John R., assignor.)						
Jeanes, Elisha A., Lampasas, Tex. Crate	485,466	Nov. 1	488	129	61	671
Jeavons, William R. (See Lannert and Jeavons.)						
Jeavons, William R. (See Lannert, Jeavons, and Wilder.)						
Jeavons, William R. (See Wilder, Lannert, and Jeavons.)						
Jeavons, William R., assignor of one-half to J. A. Lannert, Cleveland, Ohio. Vapor-burner ..	467,466	Jan. 19	1880	479	58	374
Jeavons, William R., assignor of one-half to J. A. Lannert, Cleveland, Ohio. Oil-burner ..	475,401	May 24	2412	615	59	1147
Jedlicka, Hugo, Bibac, Austria-Hungary. Ice-creeper	477,255	June 21	1637	399	59	1789
Jefferies, Daniel P. (See Grant and Jefferies.)						
Jeffers, John F., assignor of one-half to G. Letcher, Kansas City, Mo. Stable	476,925	June 14	1080	260 261	59	1666

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Jefferson, Charles W., Schenectady, assignor to E. Munsell & Co., New York, N. Y. Mold- ing mica forms for electrical insulators	483,653	Oct. 4	201	50	61	41
Jefferson, John, Columbus, assignor of one-half to H. Hill, Marion, Ohio. Meat-tenderer ..	487,672	Dec. 6	703	179	61	1460
Jeffery, Frank M., Jersey City, N. J. Machine for making coil-springs	469,943	Mar. 1	442	110 111 112	58	1185
Jeffery, John W., assignor to himself and F. C. Gilbert, Canton, N. Y. Vehicle-pole	474,743	May 10	1376	348	59	914
Jeffery, Thomas B., Chicago, Ill. Wheel-tire	466,565	Jan. 5	412	105	58	79
Jeffery, Thomas B., Chicago, Ill. Wheel-tire	466,789	Jan. 12	777	202 203	58	157
Jeffery, Thomas B., Chicago, Ill. Tire-inflating device	477,007	June 14	1212	294	59	1692
Jeffery, Albert D., assignor of two-thirds to M. C. Kelsey and W. Krymer, Brooklyn, N. Y. Horseshoe	476,798	June 14	870	211	59	1624
Jeffreys, Lemuel A. (See Williams, Henry B., assignor.)						
Jeffries, Van O., Coshocton, Ohio. Vehicle-spring	476,385	June 7	248	60	59	1485
Jeffs, Samuel, assignor of one-half to S. C. Long, Erie, Pa. Gage for screw-cutting lathes ..	470,142	Mar. 1	741	184	58	1243
Jehle, Gottlieb, Long Island City, assignor to Manhattan Brass Company, New York, N. Y. Coin-actuated vending apparatus	475,567	May 24	2683	681	59	1198
Jelenik, Frank, Jr., et al. (See Cartwright, Edward, assignor.)						
Jellison, William H., Petrolia, Pa. Roofing-joint	484,320	Oct. 11	1217	310	61	259
Jenkins, Benjamin B., Barrie, Canada. Absorbent for fire-kindlers	472,540	Apr. 12	836	213	59	172
Jenkins, C. H. (See Piper, James S., assignor.)						
Jenkins, Charles E., et al. (See Pitts, William W., assignor.)						
Jenkins, Charles S., Lansdale, Pa. Exhibiting apparatus	473,508	Apr. 26	2383	603 604	59	501
Jenkins, David, assignor to Jenkins Machine Company, Sheboygan, Wis. Mortising-ma- chine	486,473	Nov. 22	2059	545 546	61	1037
Jenkins, Ebenezer C., Shrewsbury, Mass. Horse-rake	466,936	Jan. 12	1023	261	58	203
Jenkins, Ebenezer C., Shrewsbury, Mass. Needle-threader for sewing-machines	479,426	July 26	2131	532	60	457
Jenkins, Ebenezer C., Shrewsbury, Mass. Needle-threader for sewing-machines	479,427	July 26	2132	533	60	458
Jenkins, Ebenezer C., Shrewsbury, Mass. Sewing-machine-needle threader	479,428	July 26	2133	533	60	458
Jenkins, Edward H., Kalamazoo, Nebr. Cultivator	472,361	Apr. 5	532	143	59	104
Jenkins, Edward W., Durbin, N. D. Thrashing-machine	487,374	Dec. 6	55	18	61	1333
Jenkins, Elizabeth F., Devesee, Nebr. Barrel-fastener	474,133	May 3	353	92	59	712
Jenkins, George R., et al. (See Kirby, James A., assignor.)						
Jenkins, Henry C. (See Higgins and Jenkins.)						
Jenkins, Herbert L., et al. (See Rush, Ulysses S., assignor.)						
Jenkins, Isaac G., deceased, Oswego, N. Y.; R. C. Jenkins, administratrix. Sheathing- lath	470,759	Mar. 15	1741	448	58	1453
Jenkins, James, et al. (See Nugent, Richard C., assignor.)						
Jenkins, John J., Chicago, Ill. Puzzle	485,798	Nov. 8	973	261	61	789
Jenkins, Lancaster Z., Philadelphia, Pa. Ferrule for brushes	485,467	Nov. 1	429	130	61	672
Jenkins Machine Company. (See Jenkins, David, assignor.)						
Jenkins, Rebecca C., administratrix. (See Jenkins, Isaac G.)						
Jenkins, Thomas, assignor to J. H. Rogers, Llanelly, England. Apparatus for cleaning tin andterne plates	485,387	Nov. 1	370	99	61	648
Jenkins, Thomas L., East Liverpool, Ohio. Extension ash-pan and fender	467,988	Feb. 2	123	30	58	547
Jenkins, Thomas W., Philadelphia, Pa. Non-conducting casing for heaters, flues, pipes, &c.	474,639	May 10	1215	311	59	881
Jenkins, William R., Bellefonte, Pa. Power hammer	460,790	Jan. 12	780	203	58	158
Jenkins, Wilton F., assignor of five-sixteenths to L. Euker and W. E. Shelley, Richmond, Va. Trolley for electric railways	481,401	Aug. 23	2682	658	60	1134
Jenkins, Wilton F., assignor of five-sixteenths to L. Euker and W. E. Shelley, Richmond, Va. Trolley for electric-railway conduits	481,402	Aug. 23	2683	658 659	60	1134
Jenkins, Wilton F., assignor of five-sixteenths to L. Euker and W. E. Shelley, Richmond, Va. Conduit for electric railways	481,403	Aug. 23	2685	659	60	1134
Jenkinson, James, Brooklyn, N. Y. Child's carriage	466,687	Jan. 5	594	154	58	115
Jenkinson, Samuel, Rochester, assignor, by mesne assignments, to Vanderbilt Sash Balance Company, Canandaigua, N. Y. Sash-balance	478,160	July 5	134	34	60	29
Jenks, Charles F., assignor of two-thirds to P. B. Shaw and F. R. Sackett, Williamsport, Pa. Link cut-fastener	476,540	June 7	473	112	59	1531
Jenks, Eliwellynn H., New York, N. Y. Valve	487,673	Dec. 6	704	179	61	1461
Jenks, Samuel M., Madison, S. D. Tire-heater	470,678	Mar. 15	1618	420	58	1429
Jenks, Samuel M., Madison, S. D. Gasoline tire-heater	470,679	Mar. 15	1620	420	58	1429
Jenks, Sumner W., Dayton, Ohio. Bench-stop	486,472	Nov. 22	2057	545	61	1037
Jenks, William J. (See Stieringer, Luther, assignor.)						
Jenne, Chancy R., Fort Wayne, Ind. Cistern-cleaner	477,760	June 28	2457	614	59	1967
Jenne, Charles H., Indianapolis, Ind. Rail-joint	467,935	Feb. 2	51	12	58	535
Jenne, Karl F., et al. (See Richter, Ernst, assignor.)						
Jenne, William M., Ilion, N. Y. Type-writing machine	478,964	July 12	1371	337 338	60	286
Jenness, Charles L. (See Briggs, Orlando P., assignor.)						
Jenney, Charles D., assignor to Jenney Electric Motor Company, Indianapolis, Ind. Com- mutator brush and holder	469,806	Mar. 1	428	57	58	1145
Jenney, Charles D., assignor to Jenney Electric Motor Company, Indianapolis, Ind. Dy- namo-electric machine or motor	474,388	May 10	814	212 213	59	805
Jenney Electric Motor Company. (See Jenney, Charles D., assignor.)						
Jennings, Byron, San José, assignor of one-half to J. Brusie, Oakland, Cal. Pneumatic clutch	467,288	Jan. 19	1610	411	58	322
Jennings, Byron, San José, assignor of one-half to J. Brusie, Oakland, Cal. Railway-rail chair ..	481,032	Aug. 16	2034	507	60	1001
Jennings, Charles C., Chicago, Ill., assignor to C. H. Thompson and G. A. Sheley, Detroit, Mich. Telephone system	488,502	Dec. 20	2088	519	61	1771
Jennings, Daniel. (See Burkholder, John, assignor.)						
Jennings, Joseph J., Jefferson, Tex. Protector for trunks or shipping-cases	469,571	Feb. 23	2603	667	58	1058
Jennings Machine Company. (See Jennings, William C., assignor.)						
Jennings, Mary L. (See Fisher, Sarah M., assignor.)						
Jennings, Peter, Menasha, Wis. Valve-gear	474,452	May 10	926	238	59	826
Jennings, Sidney, and J. Morley, Lambeth, England. Water-closet	482,923	Sept. 20	1639	412	60	1681
Jennings, Simeon H., Deep River, Conn. Die for forming auger-heads	469,448	Feb. 23	2406	616	58	1021
Jennings, Stephen A., assignor to A. S. Kirk, Evanston, Ill. Car construction	485,198	Nov. 1	67	20 21 22	61	586
Jennings, William C., Camden, N. J., assignor to Jennings Machine Company, of New Jer- sey. Automatic advertising apparatus	469,652	Feb. 23	2704	696	58	1080

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Jennison, Nahum E. (See Henson, Joseph W., assignor.)						
Jenny, Caspar J., assignor to Strauss & Co., St. Gall, Switzerland. Embroidery	466,566	Jan. 5	414	{ 105 106 }	58	79
Jensen Can Filling Machine Company. (See Jensen, Mathias, assignor.)						
Jensen & Glad. (See Smidth, Gustav C. F., assignor.)						
Jensen, Heinrich, Flensburg, Germany. Nursing-bottle	467,176	Jan. 19	1438	366	58	289
Jensen, Knud G., Christiania, Norway. Grain-measuring apparatus	478,111	July 5	49	14	60	12
Jensen, Mathias, assignor of one-half to Jensen Can Filling Machine Company, Astoria, Oreg. Can capping and crimping machine	470,575	Mar. 8	1462	{ 380 381 }	58	1389
Jensen, Ole T., Weatherford, Tex. Plow	481,630	Aug. 30	3051	745	60	1222
Jensen, Peter E., Blair, Nebr. Double suspended sliding gate	483,614	Oct. 4	146	36	61	31
Jenson, James B., Sandy, Utah Ter. Folding seat	487,876	Dec. 13	1056	264	61	1547
Jepsen, Frits and H., Chicago, Ill. Basket	470,680	Mar. 15	1621	421	58	1429
Jepsen, Herman. (See Jepsen, Frits and H.)						
Jepson, Arthur A. (See Dwight and Jepson.)						
Jeppesen, Christen J., Hebron, Ind. Milk-elevator	478,161	July 5	135	34	60	29
Jerger, Henry, Norwood, South Australia. Water-engine	477,256	June 21	1638	{ 399 400 }	59	1789
Jernander, Carl, La Crosse, Wis. Automatic belt-tightener	470,134	Mar. 1	732	182	58	1242
Jernberg, Gustaf, Rockford, Ill. Harrow	466,497	Jan. 5	306	77	58	58
Jernborg, Laurence W., Worcester, Mass. Furnace-grate	469,816	Mar. 1	243	62	58	1148
Jerome, Charles C., Chicago, Ill. Piston-rod packing	467,105	Jan. 12	1314	333	58	259
Jerome, Charles C., Chicago, Ill. Lubricator-gland	470,397	Mar. 8	1205	308	58	1338
Jerome, Charles C., Chicago, Ill. Toe-weight	484,022	Oct. 11	756	191	61	170
Jerome, Edgar, Norwalk, Conn. Toilet paper	478,869	July 12	1228	305	60	258
Jervis, Oliver P., assignor of one-half to T. and C. T. Mackenzie, Baltimore, Md. Wheel-fastener and axle-box	470,409	Mar. 8	1225	313	58	1341
Jervis Spencer Company. (See Spencer, Jervis, assignor.)						
Jeschke, Wladyslaus, Brooklyn, N. Y. Paper or music file	486,875	Nov. 29	2711	707	61	1183
Jesser, Charles F., Staunton, Va. Portable pastry-rack	481,404	Aug. 23	2686	660	60	1135
Jessup, Anna V. (See Wilson, Charles C., assignor.)						
Jessup, Elizabeth W., et al. (See Jessup, Robert W., assignor.)						
Jessup, Robert W., Alameda, assignor to E. W. Jessup, Los Angeles, and E. F. Rogers, Santa Barbara, Cal. Seed-cleaner	469,252	Feb. 23	2101	540	58	961
Jetter, Gottlieb. (See Schafhaus, Jean, assignor.)						
Jewel, John R., Jewel, N. C. Tobacco-curing barn	481,954	Sept. 6	50	{ 11, 12 13 }	60	1344
Jewell, Augustus, Dowagiac, Mich. Sheaf-carrier for self-binding harvesters	472,885	Apr. 12	1325	{ 340 341 }	59	265
Jewell, Charles E., Chicago, Ill., assignor to Office Specialty Manufacturing Company, of New York. Letter-file	470,050	Mar. 1	607	151	58	1217
Jewell, Delbert W. and G., assignors of one-half to J. B. Lewis and J. Jewell, Alexander, N. Y. Car-coupling	481,906	Aug. 30	3512	860	60	1312
Jewell, George. (See Jewell, Delbert W. and G.)						
Jewell, Herbert S., Brooklyn, N. Y. Apparatus for steaming grain	484,099	Oct. 11	858	218	61	190
Jewell, Ira H. (See Jewell, Omar H., W. M., and I. H.)						
Jewell, John, et al. (See Jewell, Delbert W. and G., assignors.)						
Jewell, Major R. (See Lomb and Jewell.)						
Jewell, Major R. (See Mosher and Jewell.)						
Jewell, Omar H., Chicago, Ill. Filter	477,213	June 21	1557	383	59	1774
Jewell, Omar H., W. M., and I. H., Chicago, Ill. Filter	478,261	July 5	322	78	60	64
Jewell, Robert, London, England. Wheel	480,586	Aug. 9	1338	334	60	850
Jewell, William M. (See Jewell, Omar H., W. M., and I. H.)						
Jewell, William M., Pine, assignor of one-half to G. Robertson, Durango, Colo. Placer-machine	479,744	July 26	2658	659	60	555
Jewett & Co., Sherman S. (See Adams, Charles F., assignor.)						
Jewett & Co., Sherman S. (See Walther, Charles F., assignor.)						
Jewett, Frank, New Haven, Conn. Bicycle	481,569	Aug. 30	2957	{ 726 727 }	60	1205
Jewett, Nathan, Chicago, Ill. Machine for washing and grading gravel	468,247	Feb. 2	509	126	58	624
Jewett, Nathan, Chicago, Ill. Apparatus for washing and grading gravel, &c.	470,681	Mar. 15	1622	421	58	1430
Jewett, Nathan, Chicago, Ill. Apparatus for cleaning and grading gravel, ore, &c.	475,568	May 24	2685	681	59	1198
Jewett, Nathan, Chicago, Ill. Soap cake	488,393	Dec. 20	1915	479	61	1735
Jewett, Stanley A., Cleveland, Ohio. Piano-action	483,561	Oct. 4	68	17	61	16
Jimenez, Lino J., Baltimore, Md. Curb-bit	472,297	Apr. 5	453	117	59	85
Jincks, Melvin, Cohocton, N. Y. Saw-straining device	481,496	Aug. 23	2837	698	60	1166
Jobe, Samuel, Plain Dealing, La. Switch-stand	482,870	Sept. 20	1550	387	60	1665
Jobe, Warren, Sr., Hawkins, Tex. Plank fence	487,573	Dec. 6	547	141	61	1430
Jobling, Lance L., Houston, assignor to J. L. Deegan, Galveston, Tex. Locomotive head-light	475,242	May 17	2166	551	59	1082
Johnson, John B., Macon, Ga. Cannon-pinion	486,933	Nov. 29	2841	736	61	1209
Joerden, Henry C., St. Louis, Mo. Domestic cooker or boiler	478,331	July 5	432	103	60	85
Johannigman, Henry H., Cincinnati, Ohio. Letter-pouch	472,791	Apr. 12	1196	307	59	239
Johansen, Rudolph L., Los Angeles, Cal. Machine for utilizing ocean-power, &c.	475,451	May 24	2493	636	59	1162
Johanson, Emil, assignor of one-half to R. H. Nabring, Miami Station, Mo. Nut-lock	484,894	Oct. 25	2157	554	61	474
Johanson, Olof, New York, N. Y., assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener	468,806	Feb. 16	1403	356	58	818
Johansson, Samuel A., assignor of one-half to A. and J. Sandberg, Everett, Mass. Curry-ing and brushing machine	474,325	May 3	701	181	59	772
John A. Roebbling's Sons Company. (See Perrine, Frederic A. C., assignor.)						
John Hope & Sons Engraving and Manufacturing Company. (See Clegg, Wilfrid, assignor.)						
John Hope & Sons Engraving and Manufacturing Company. (See Hope, John, assignor.)						
John Lighton Machine Company. (See Lighton, John B., assignor.)						
John M. Waddell Manufacturing Company. (See Thompson, Ralph P., assignor.)						
John March Company. (See March, John, assignor.)						
John O'Flaherty Company. (See Pearson, Marshall H., assignor.)						
Johns, Henry W., New York, N. Y. Non-conducting material	474,834	May 17	1532	-----	59	957
Johns, John B., Findlay, Ohio. Fruit-jar cover and lock therefor	471,483	Mar. 22	2849	725	58	1678
Johns-Pratt Company. (See Hatch and Colton, assignors.)						
Johns-Pratt Company. (See Lee, Charles T., assignor.)						
Johns, Will R., assignor of two-thirds to P. F. Keegan and C. H. Little, Boston, Mass. Cash register and indicator	473,555	Apr. 26	2453	{ 621 622 623 624 }	59	513
Johns, William M., Chicago, Ill. King-post for car-brakes	470,682	Mar. 15	1623	421	58	1430

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Johnsen, Volkmar T., Chicago, Ill. Capo tasto.....	480,429	Aug. 9	1099	274	60	801
Johnson, Abijah, Montrose, Colo. Automatic measuring weir.....	472,127	Apr. 5	188	50	59	35
Johnson, Albert, assignor of one-half to F. H. Duumore, Haverhill, Mass. Horse-bitch.....	481,231	Aug. 23	2394	591	60	1083
Johnson, Albert E., Samantha, Ohio. Broom-holder.....	475,569	May 24	2686	681	59	1199
Johnson, Albert H., Tampa, Fla. Drawing apparatus.....	482,127	Sept. 6	332	79	60	1400
Johnson, Albert L., Bonnierville, Ky. Hand fertilizer-dropper.....	468,346	Feb. 9	693	172	58	668
Johnson, Andrew. (See Peterson, Swan, assignor.)						
Johnson, Andrew. (See Timm and Johnson.)						
Johnson, Andrew, Chicago, Ill. Eccentric coupling and tool and work holder.....	472,126	Apr. 5	183	49.50	59	34
Johnson, Andrew, Calliope, Iowa. Windmill.....	475,889	May 31	3170	804	59	1307
Johnson, Andrew J., Ethel, Miss. Seed-planter.....	468,178	Feb. 2	411	102	58	604
Johnson, Archibald, <i>et al.</i> (See Brand, Henry, assignor.)						
Johnson, Arthur H. (See Johnson, Henry and A. H.)						
Johnson, Axel, Oakland, assignor to Marshall Improved Window Furniture Company, San Francisco, Cal. Sash-fastener.....	472,886	Apr. 12	1327	341	59	265
Johnson, Axel, Oakland, assignor to Marshall Improved Window Furniture Company, San Francisco, Cal. Sash-balance.....	472,887	Apr. 12	1329	341	59	266
Johnson, Benjamin F., Mansfield, Ohio. Earth-excavator.....	468,393	Feb. 9	763	190	58	681
Johnson, Benjamin F., McComb, Miss. Safety-cage for cars.....	487,746	Dec. 13	837	213	61	1504
Johnson, Bernt M., Racine, Wis. Whip-socket.....	471,555	Mar. 29	2942	749	58	1705
Johnson, Bernt M., assignor to himself, F. W. Bouce, and G. Gorton, Racine, Wis. Bridle-bit.....	470,051	Mar. 1	608	151	58	1217
Johnson, Carroll H., Grain Valley, Mo. Grain-drill cleaner.....	467,417	Jan. 19	1800	460	58	358
Johnson, Charles, and O. Olson, San José, Cal. Cultivator.....	479,281	Dec. 19	1871	468	60	392
Johnson, Charles F., assignor of one-half to H. M. Soule, Boston, Mass. Vaporizer.....	488,790	Dec. 27	2542	631	61	1875
Johnson, Charles J. W., assignor of one-half to T. P. Self and M. D. Coffman, Temple, Tex. Locomotive ash-pan.....	476,147	May 31	3608	912	59	1394
Johnson, Charles R., New York, N. Y., assignor to Johnson Railroad Signal Company, Rahway, N. J. Railway-signal.....	476,926	June 14	1082	261	59	1666
Johnson, Christ, and N. Olander, Wausau, Wis. Car-coupling.....	485,042	Oct. 25	2395	615	61	521
Johnson, Clarence. (See Timms, Charles H., assignor.)						
Johnson, Claude M., Lexington, Ky. Shoe-lace fastener.....	483,764	Oct. 4	362	91	61	76
Johnson Company. (See Brown, William M., assignor.)						
Johnson Company. (See Hunter, Rudolph M., assignor.)						
Johnson Company. (See Lavelle, Patrick J., assignor.)						
Johnson Company. (See Murray, George, assignor.)						
Johnson, Dawson. (See Marsh, Harvey S., assignor.)						
Johnson, Edward E., Seneca Falls, N. Y. Paper-making machine.....	489,770	Aug. 16	1637	410	60	923
Johnson, Edward H. (See Capek, John V., assignor.)						
Johnson, Edward H. (See Lundell, Robert, assignor.)						
Johnson, Edward H. (See Olan, Johan W. T., assignor.)						
Johnson, Edward H., New York, N. Y. Power-transmitting device for electric railways.....	469,944	Mar. 1	447	112	58	1186
Johnson, Edward H., New York, N. Y. Electric switch.....	473,228	Apr. 19	1913	482	59	387
Johnson, Edward H., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Closed conduit for electric railways.....	479,809	Aug. 2	52	12	60	592
Johnson, Ellis. (See Huff and Johnson.)						
Johnson, Francis A., Black Rock, Ark. Car-coupling.....	467,375	Jan. 19	1740	444	58	346
Johnson, Frank A., assignor to Tachytype Manufacturing Company, Minneapolis, Minn. Matrix material.....	478,333	July 5	425	103	60	85
Johnson, Frank G., New York, N. Y. Rail-holding splice.....	472,168	Apr. 5	244	65	59	46
Johnson, Franklin C. (See Toncey, Ferris D., assignor.)						
Johnson, Ferdinand, New London, Pa. Hydraulic motor.....	485,412	Nov. 1	410	110	61	656
Johnson, George A. L., Lincoln, Neb. Whip-socket.....	479,811	Aug. 2	55	13	60	593
Johnson, George B., West Chester, Pa. Automatic mail-bag fastener.....	473,258	Apr. 19	1958	491	59	397
Johnson, George E., and S. H. Kirkpatrick, Utica, Ohio. Corn-planter.....	468,603	Feb. 9	1089	278	58	745
Johnson, George H., Jamaica, Iowa. End-gate.....	470,197	Mar. 8	852	210	58	1273
Johnson, George H., Jamaica, Iowa. Wagon end-gate.....	479,810	Aug. 2	54	13	60	592
Johnson, George W. (See Ford and Lockhart, assignors.)						
Johnson, George W. (See Knowles, Daniel, assignor.)						
Johnson, Gustavus J., Chicago, Ill. Mailing-case.....	466,688	Jan. 5	595	154	58	115
Johnson, Gustavus J., assignor to Chicago Mailing Case Company, Chicago, Ill. Mailing-case.....	483,287	Sept. 27	2241	564	60	1812
Johnson, Gustof F., Milan, Minn. Boiler attachment.....	480,264	Aug. 9	833	213	60	753
Johnson, Harry C., Washington, D. C. Type-writing machine.....	477,054	June 14	1287	312	59	1707
Johnson, Harry T., New York, N. Y. Galvanic battery.....	483,654	Oct. 4	202	50	61	42
Johnson, Harry T., New York, N. Y. Galvanic battery.....	487,839	Dec. 13	988	248	61	1535
Johnson, Henry, New York, N. Y. Automatically-closing can, bottle, &c.....	475,775	May 31	3006	762	59	1274
Johnson, Henry and A. H., Rahway, N. J. Interlocking apparatus for railway switches and signals.....	485,799	Nov. 8	974	262	61	789
Johnson, Hiram S., Canaan Four Corners, assignor of one-half to M. L. Bates, Canaan, N. Y. Lock-valve faucet.....	487,674	Dec. 6	704	180	61	1461
Johnson, Horace R. (See Houghton, Charles E., assignor.)						
Johnson, Ira H., assignor of one-half to R. M. Buck, Paw Paw, Mich. Vehicle.....	473,881	Apr. 26	2982	752	59	615
Johnson, Jahu W. (See Borden and Johnson.)						
Johnson, James B., Memphis, Tenn. Shirt.....	477,124	June 14	1395	339	59	1729
Johnson, James C., Concord Church, W. Va. Wrench.....	483,222	Sept. 27	2112	535	60	1788
Johnson, James G., Chicago, Ill. Railway and truck.....	478,332	July 5	423	103	60	85
Johnson, James L. (See Owen, James L., assignor.)						
Johnson, James P., Springfield, Ill. Vehicle-tongue.....	469,838	Mar. 1	276	72	58	1154
Johnson, James P., Springfield, Ill. Vehicle-pole.....	481,619	Aug. 30	3036	742	60	1219
Johnson, James T. (See Wantling and Johnson.)						
Johnson, James W., New Brunswick, N. J. Lint package.....	466,892	Jan. 12	959	245	58	192
Johnson, Jesse B. and J. R., Indianapolis, Ind. Baling-press.....	480,771	Aug. 16	1638	410	60	923
Johnson, John, <i>et al.</i> (See Bareis, Albert, assignor.)						
Johnson, John, assignor of five-sixths to A. Bareis, A. and A. Martini, St. Louis, Mo. Dental vulcanizer.....	478,871	July 12	1230	305	60	259
Johnson, John A. (See Mandt, Targe G., assignor.)						
Johnson, John C., and W. Smith, Drake's Creek, Ark. Draft-spring.....	474,910	May 17	1642	419	59	981
Johnson, John G., Chester, Pa. Reversing mechanism for rotary machines.....	483,456	Sept. 27	2479	624	60	1858
Johnson, John H., Dodgeville, Wis. Electric belt.....	487,185	Nov. 29	3232	827	61	1286
Johnson, John H., and J. Moran, Orange, Tex. Furnace.....	485,762	Nov. 8	933	250	61	781
Johnson, John I., assignor to Edward Miller & Company, Meriden, Conn. Suspending device.....	483,615	Oct. 4	148	36	61	31
Johnson, John J. and W. C., Harrison, Ark. Temporary binder.....	470,398	Mar. 8	1206	308	58	1338

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Johnson, John W. (See Grimes, James C., assignor.)						
Johnson, John W., Leavenworth, Kans. Hydraulic motor for organs	475,776	May 31	3007	763	59	1274
Johnson, Joseph H., Bradford Pa. Load-binder	467,348	Jan. 19	1703	435	58	340
Johnson, Joseph R. (See Johnson, Jesse B. and J. R.)						
Johnson, Lafayette M., assignor of one-half to R. Briggs, Seneca, Mo. Wire-tightener.	481,763	Aug. 30	3278	798	60	1267
Johnson, Louis K., Brooklyn, assignor to Alden Type Machine Company, New York, N. Y. Slug for type-containing channels	477,008	June 14	1215	294	59	1693
Johnson, Louis K., Brooklyn, assignor to Alden Type Machine Company, New York, N. Y. Type-distributing apparatus	477,009	June 14	1215	294	59	1693
Johnson, Lucius L. (See Miller, James W., assignor.)						
Johnson, Martin, Milwaukee, Wis. Manual motor.	482,180	Sept. 6	427	{ 101 102 }	60	1419
Johnson, Michael, <i>et al.</i> , executors. (See Urdahl, Thomas.)						
Johnson, Monroe E., Pittsburg, Kans., and A. M. Phillips, Nashville, Mo. Band-cutter and feeder	481,570	Aug. 30	2961	727	60	1205
Johnson, Moses C., Hartford, assignor to T. & B. Tool Company, Danbury, Conn. Boring-tool	472,541	Apr. 12	836	214	59	172
Johnson, Moses T. (See Pentz, Charles B., assignor.)						
Johnson, Nels J., Grafton, N. D. Door-knob	468,545	Feb. 9	1004	257	58	729
Johnson, Nils, St. Louis, Mo. Absorber for ammonia-refrigerating and ice-making apparatus	469,945	Mar. 1	450	113	58	1186
Johnson, Nils J., assignor to Minneapolis Plow Works, Minneapolis, Minn. Separable coupling for colter-yokes	478,796	July 12	1130	278	60	239
Johnson, Oliver W., assignor to Frey-Sheckler Company, Bucyrus, Ohio. Cutter for brick- and tile machines	478,436	July 5	577	{ 139 140 }	60	113
Johnson, Olof A. (See Brown and Johnson.)						
Johnson, Ozro P., Detroit, Mich. Chamber	487,747	Dec. 13	838	213	61	1505
Johnson, Paul J. (See Hamill and Johnson.)						
Johnson, Paul J., and J. H. Hamill, Globe, Ariz. Ter. Calendar attachment for timepieces.	481,793	Aug. 30	3330	812	60	1277
Johnson, Peter, Cambridge, Ill. Gate	482,640	Sept. 13	1188	{ 287 288 }	60	1580
Johnson Railroad Signal Company. (See Johnson, Charles R., assignor.)						
Johnson, Richard P., Boston, Mass. Apparatus for washing sugar	482,179	Sept. 6	426	101	60	1418
Johnson, Robert M., Flemington, N. J. Dumping freight-car	474,744	May 10	1377	348	59	914
Johnson, Rose A., Manchester, and E. Brewster, New Barnet, England. Composition of matter for spinning-rings, &c.	474,253	May 3	564	139	59	747
Johnson, Samuel A., London, England. Self-extinguishing hydrocarbon-lamp	485,041	Oct. 25	2393	615	61	521
Johnson, Samuel A., London, England. Lamp for burning hydrocarbon or other oils	487,147	Nov. 29	3176	814	61	1275
Johnson, Samuel H., <i>et al.</i> (See Pearce, James, assignor.)						
Johnson, Samuel W., Nottingham, and T. G. Clayton, Normanton, England. Combined cock and coupling	477,125	June 14	1396	339	59	1729
Johnson, Sauder. (See Tremain and Johnson.)						
Johnson, Sherman D. (See Gillette, Wilbur L., assignor.)						
Johnson, Sidney N., assignor to Marion Manufacturing Company, Chicago, Ill. Game apparatus	483,115	Sept. 20	1936	490	60	1742
Johnson, Thomas O. (See Baird and Johnson.)						
Johnson, Tom L., Cleveland, Ohio. Street-railway switch	482,426	Sept. 13	853	{ 204 205 }	60	1515
Johnson, W. Everett, <i>et al.</i> (See Van Wie, Byron, assignor.)						
Johnson, Warren S., Milwaukee, Wis. Automatic temperature-regulating system	477,121	June 14	1391	338	59	1728
Johnson, Warren S., Milwaukee, Wis. Bicycle	477,122	June 14	1393	339	59	1729
Johnson, Warren S., Milwaukee, Wis. Saddle-support for bicycles	477,123	June 14	1394	339	59	1729
Johnson, William, Armly, Leeds, England. Brick-machine	480,726	Aug. 16	1569	{ 392 393 }	60	909
Johnson, William, Leeds, England, assignor of one-half to Somerset and Johnsonburg Manufacturing Company, Somerset, Mass. Continuous brick-kiln	472,926	Apr. 12	1388	356	59	278
Johnson, William B., assignor of one-half to J. S. Yates, Peoria, Tex. Tongue-support	484,856	Oct. 25	2090	538	61	461
Johnson, William C. (See Johnson, John J. and W. C.)						
Johnson, William E., New York, N. Y. Centrifugal extractor	486,876	Nov. 29	2711	707	61	1183
Johnson, William H., Shreveport, La. Combined reel-carrier and wire-stretcher	483,355	Sept. 27	2337	588	60	1830
Johnson, William H., Industry, assignor to Oliver Ames & Sons Corporation, North Easton, Me. Form for holding shovel-handles	483,114	Sept. 20	1935	490	60	1742
Johnson, William H. and O. J. Smith, Farmer City, Ill. Hame	480,663	Aug. 9	1470	366	60	875
Johnson, William O. (See Warren and Johnson.)						
Johnson, William W., San Antonio, Tex. Change-maker	467,030	Jan. 12	1170	{ 296 297 }	58	231
Johnston, Abner and W. A., Jersey City, N. J., assignors of one-half to R. Parker, New York, N. Y. Car wheel and axle	478,512	July 5	693	168	60	138
Johnston, Alexander M., Homestead, Pa. Safety-valve	475,320	May 24	2279	5-6	59	1123
Johnston, Allen, Ottumwa, Iowa. Process of and machine for making emery-wheels	476,799	June 14	872	{ 214 215 }	59	1624
Johnston, Allen, Ottumwa, Iowa. Grinding cutlery or other tempered steel articles	485,697	Nov. 8	831	223	61	759
Johnston, Andrew L., Richmond, Va. Automatic disconnecter	469,253	Feb. 23	2102	540	58	962
Johnston, Edward H., Philadelphia, Pa. Car-coupling	467,739	Jan. 26	2334	592	58	466
Johnston, Frank L., and W. C. Fletcher, St. Louis, Mo. Speed-indicator	487,275	Dec. 6	58	18, 19	61	1333
Johnston, Frank N., and C. E. Egan, assignors to F. N. Johnston, H. D. Bennett, and J. R. Gobe, Columbus, Ohio. Workmen's time-recorder	471,733	Mar. 29	3222	830	58	1755
Johnston, Frederic J., Cambridge, and N. F. Hallett, assignors to American Soda Fountain Company, Boston, Mass. Machine for bottling aerated liquids	472,362	Apr. 5	553	{ 143 144 }	59	104
Johnston, Frederic J., Cambridge, and G. E. Barton, Somerville, assignors to American Soda Fountain Company, Boston, Mass. Siphon-bottle-filling machine	474,326	May 3	701	{ 181 182 }	59	772
Johnston, George. (See Johnston, James and G.)						
Johnston Harvester Company. (See Farrall, George A., assignor.)						
Johnston, Henry L. (See Carlton and Johnston.)						
Johnston, James, Peter-Cutter, and G. Johnston, Denny, Scotland. Treating fibrous material for making pulp	486,339	Nov. 15	1851	487	61	983
Johnston, James J., deceased; A. S. H. and A. Johnston, Columbiana, Ohio, and J. G. Thompson, New Brighton, Pa., administrators, (J. E. Allen, administrator, succeeding prior administrators,) assignors of one-half to D. C. Reinohl, Washington, D. C. Means for utilizing heat of lamps	479,367	July 19	2019	504	60	421
Johnston, James J., deceased; A. S. H. and A. Johnston, Columbiana, Ohio, and J. G. Thompson, New Brighton, Pa., administrators, (J. E. Allen, administrator, succeeding prior administrators,) assignors of one-half to D. C. Reinohl, Washington, D. C. Means for utilizing heat of lamps	479,368	July 19	2021	505	60	421

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Johnston, John C. (See Schrader, Lambert P., assignor.)						
Johnston, John H., assignor of one-half to G. Purves, Little Rock, Ark. Stevepipe-fastening	478,965	July 12	1378	339	60	286
Johnston, John S., Chicago, Ill. Reversible car-seat	484,434	Oct. 18	1403	358	61	308
Johnston, Micajah, assignor of one-half to L. W. Savage, Evergreen, Ala. Animal-trap	484,799	Oct. 25	1999	513	61	443
Johnston, Oliver P., and C. M. Gates, Butte City, Mont. Letter-box	487,574	Dec. 6	548	141	61	1430
Johnston, Robert. (See Peifer and Johnston.)						
Johnston, Robert T., Scotch Plains, N. J. Mechanism for feeding and cutting paper	481,497	Aug. 23	2-38	698	60	1166
Johnston, William A. (See Johnston, A. bner and W. A.)						
Johnston, William A., Jersey City, N. J. Mail-bag	469,028	Feb. 16	1775	453	58	891
Johnston, William A., and A. W. Browne, Prince's Bay, N. Y., assignors to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dentist's chair	483,807	Oct. 4	426	105	61	88
Johnston, William C., Melrose, Mass. Spring-motor	487,745	Dec. 13	835	213	61	1504
Johnston, William J. (See Murphy, John S., assignor.)						
Johnston, William K., Cordova, Ill. Capsule-filling machine	479,812	Aug. 2	56	13	60	593
Johnston, William M. (See Hershberger, Jonathan, assignor.)						
Johnston, William P. (See Stahl and Johnston.)						
Johnstone, Francis W., Mexico, Mexico. Blow-off valve	468,878	Feb. 16	1513	386	58	839
Johnstone, Francis W., Mexico, Mexico. Brick arch for locomotive fire-boxes	481,232	Aug. 23	2395	591	60	1083
Jolitz, Charles F., Caroline, assignor of one-half to A. Menting, Phlox, Wis. Insect-trap	488,394	Dec. 20	1916	479	61	1735
Jolley, Jefferson D., Warrenton, Va., assignor of one-half to W. H. Selden, Washington, D. C. Nut-lock	477,941	June 28	2750	689	59	2023
Jolly, Archibald D., Kingston, England. Device for holding and guiding the fingers in writing	471,556	Mar. 29	2943	749	58	1705
Jonas, Carl, and I. Bauch, Vienna, Austria-Hungary. Telescope table	480,368	Aug. 9	998	251	60	783
Jones, A. Sedden, <i>et al.</i> (See Willis, William H., assignor.)						
Jones, Albert F., Salem, Mass. Machine for cutting tan-bark	474,745	May 10	1378	349	59	914
Jones, Alfred. (See Ridsdale and Jones.)						
Jones, Andrew E., assignor to A. E. Jones & Co., Richmond, Ind. Vehicle-heater	471,866	Mar. 29	3424	875	58	1794
Jones, Ansel B. (See Horton, William P., Jr., assignor.)						
Jones, Augustus H., assignor to Meriden Bronze Company, Meriden, Conn. Central-draft lamp	476,541	June 7	474	113	59	1531
Jones, Charles S. (See Perkins and Jones.)						
Jones, Charles W., St. Paul, Minn. Dental instrument	485,010	Oct. 25	2346	604	61	511
Jones, Clemens, Easton, Pa. Treating ores containing hydrated sesquioxide of iron	480,405	Aug. 9	1056	-----	60	794
Jones & Co., Andrew E. (See Jones Andrew E., assignor.)						
Jones, Conrad S., assignor to M. E. Jones, Philadelphia, Pa. Coffee or tea pot	468,604	Feb. 9	1090	278	58	746
Jones, David A., assignor to J. A. Jones, Beeton, and A. N. Macdonald, Toronto, Canada. Means for clearing apartments of flies, &c.	486,044	Nov. 8	1367	363	61	869
Jones, David W., Braddock, Pa. Device for dressing railway-rails	471,977	Mar. 29	3578	913	58	1824
Jones, Ernest, <i>et al.</i> (See Fisher, James W., assignor.)						
Jones, Edmund, Cold Spring Harbor, N. Y. Draftsman's micrometer-scale	470,490	Mar. 8	1355	352	58	1366
Jones, Edmund B., Leedsdale, Pa. Draft and dust guard for cars	483,382	Sept. 27	2387	599	60	1838
Jones, Edward, <i>et al.</i> (See Miller, Morris V., assignor.)						
Jones, Edward, C. Dawson, Bellaire, and H. Stanton, Flushing, Ohio. Journal-box	477,329	June 21	1754	429	59	1811
Jones, Edward K., Fort Bragg, Cal. Plant-frame	473,756	Apr. 26	2783	699	59	577
Jones, Edward S., Providence, R. I. Device for straining zinc plates to their beds	478,607	July 12	838	206	60	182
Jones, Edwin R., Swissvale, Pa. Apparatus for coating metal plates	472,502	Apr. 5	778	199	59	147
Jones, Francis F., Comber, Canada. Leak-stopper or breach-plate	472,888	Apr. 12	1330	{ 341 342 }	{ 59 59 }	{ 266 266 }
Jones, Erastus, and R. Townsend, New York, N. Y. Extension gun-stock and cushion-plate	480,587	Aug. 9	1340	334	60	850
Jones, Evan W., Portland, Oreg. Boiler or other furnace	470,052	Mar. 1	609	{ 152 153 }	{ 58 58 }	{ 1217 1217 }
Jones, Evan W., Portland, Oreg. Boiler or other furnace	470,053	Mar. 1	613	153	58	1218
Jones, Francis W., New York, N. Y. Counter for type-writers	482,361	Sept. 13	747	180	60	1496
Jones, Francis W., New York, N. Y. Electrical circuit for telegraph apparatus	488,940	Dec. 27	2781	686	61	1925
Jones, Frank A., New York, N. Y. Envelope-machine	467,977	Feb. 2	99	{ 24 25 26 }	{ 58 58 58 }	{ 544 544 544 }
Jones, Frederick J., Bedford, assignor to Economic Gas and Coke Company, Limited, London, England. Making coke	472,621	Apr. 12	952	246	{ 59 59 }	{ 194 194 }
Jones, George, Rochester, N. Y. Photographic roller-holder	470,054	Mar. 1	615	153	58	1218
Jones, George M. (See Reynolds, Richard J., assignor.)						
Jones, George S., Philadelphia, Pa. Type-writing machine	475,085	May 17	1921	{ 488 489 }	{ 59 59 }	{ 1034 1034 }
Jones, George W., Cleveland, Ohio. Hydraulic elevator	470,936	Mar. 15	2014	516	58	1506
Jones, George W., and F. F. Green, Comanche, Tex. Vehicle-hub	467,031	Jan. 12	1172	297	58	231
Jones, Griffith W., Reading, Pa. Rolling-mill	483,926	Oct. 4	603	153	61	124
Jones, Harry, Ypsilanti, Mich. Force-feed oiler	483,690	Oct. 4	252	62, 63	61	53
Jones, Harry O. (See Arnold, John D., assignor.)						
Jones, Harry W., assignor of one-tenth to A. H. Brinkmann, Baltimore, Md. Cuff-holder	482,311	Sept. 6	649	155	60	1462
Jones, Henry A., and J. E. Marcy, New York, N. Y. Apparatus for heating and circulating water	474,961	May 17	1727	439	59	997
Jones, Henry C., Wilmington, Del. Machine for punching flange-plates	477,899	June 28	2685	{ 671 672 }	{ 59 59 }	{ 2009 2009 }
Jones, Henry C., Wilmington, Del. Bevel-shearing machine	477,900	June 28	2687	672	59	2010
Jones, Henry C., assignor to Hilles & Jones Company, Wilmington, Del. Plate-straightening machine	479,745	July 26	2660	660	60	556
Jones, Henry F., Ransom, Ill. Plow	469,147	Feb. 16	1928	494	58	922
Jones, Henry M., assignor to Jones Vestibule Sleeping Car Company, Denver, Colo. Car	479,945	Aug. 2	285	65	60	633
Jones, Henry R., <i>et al.</i> (See Trawick, Joseph E., assignor.)						
Jones, Horace D., Knapp's Creek, N. Y. Valve for oil-wells	480,265	Aug. 9	834	213	60	733
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Wood-screw	470,804	Mar. 15	1815	466	58	1467
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Method of and means for rolling screws	470,805	Mar. 15	1817	{ 466 467 }	{ 58 58 }	{ 1467 1467 }
Jones, Horace K., Hartford, assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Wood-screw	471,179	Mar. 22	2393	610	58	1591
Jones, Isaac, Knoxville, Iowa. Ditching-plow	470,491	Mar. 8	1356	353	58	1366
Jones, Isaac, Delancey, Pa. Rod joint or coupling	477,596	June 21	2174	539	59	1894
Jones, Isaac B., assignor to himself and R. E. Richardson, Xenia, Ohio. Mechanism for propelling vehicles	473,843	Apr. 26	2916	{ 732 733 }	{ 59 59 }	{ 603 603 }
Jones, J. Albert, and C. E. Myers, assignors of one-half to D. Russell and A. Taylor, Marcellus, Mich. Burial-casket	483,304	Sept. 27	2268	571	60	1817

Alphabetical list of patents—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Jones, J. Albert, and C. E. Myers, assignors of one-half to D. Russell and A. Taylor, Marcellus, Mich. Burial-casket.....	483,305	Sept. 27	2269	571	60	1817
Jones, Jackson, Jefferson, Wis. Election-booth.....	481,571	Aug. 30	2064	727	60	1206
Jones, Jacob H., <i>et al.</i> (See Phelan, John, assignor.)						
Jones, James and James, Jr., Brooklyn, N. Y. Time-call.....	474,835	May 17	1533	391	59	958
Jones, James E., Kankakee, Ill. Lawn-weeder.....	488,817	Dec. 27	2583	641	61	1884
Jones, James H. (See Mailliard and Jones.)						
Jones, James H., assignor to Emerson, Talcott & Company, Rockford, Ill. Guard-finger..	475,118	May 17	1979	502	59	1045
Jones, James W., assignor of one-half to F. A. Howard, Belfast, Me. Screw-driver.....	470,055	Mar. 1	617	154	58	1219
Jones, Jessie A., <i>et al.</i> (See Jones, David A., assignor.)						
Jones, John, Wilkes-Barré, Pa. Steam-blower.....	486,162	Nov. 15	1578	418	61	928
Jones, John, and A. Gillies, Toronto, Canada. Street-sweeper.....	471,642	Mar. 29	3066	780	58	1726
Jones, John B., assignor of one-half to G. M. Illingworth, Chicago, Ill. Spring bed-bottom.	474,911	May 17	1643	419	59	981
Jones, John B., assignor of two-thirds to G. M. Illingworth and H. L. Carroll, Chicago, Ill. Nut-lock.....	477,010	June 14	1216	295	59	1693
Jones, John C. F. (See Cogan, Pierce, and Jones.)						
Jones, John C. F., Braddock, Pa. Packing.....	475,870	May 31	3171	805	59	1307
Jones, John J., Pittsfield, Ill. Elevator for self-binders.....	469,572	Feb. 23	2604	668	58	1058
Jones, John L., Winston, N. C. Machine for making plug-tobacco.....	468,661	Feb. 9	1174	{ 300 301 302 }	{ 58 58 58 }	{ 763 763 763 }
Jones, John R., Minneapolis, Minn., assignor to Russ Jones Desk Company. Roll-top desk..	486,474	Nov. 22	2063	{ 546 547 548 }	{ 61 61 61 }	{ 1038 1038 1038 }
Jones, John T., Toronto, Canada. Car-coupling.....	483,848	Oct. 4	490	122	61	101
Jones, Joshua R., Philadelphia, Pa. Photographic album.....	471,387	Mar. 22	2707	690	58	1652
Jones, Laban E., Chicago, Ill. Cloth-cutting machine.....	486,532	Nov. 22	2140	565	61	1054
Jones & Lamson Machine Company. (See Hartness, James, assignor.)						
Jones, Lewis L., Brooklyn, N. Y. Electrode and incandescent electrical conductor.....	484,553	Oct. 18	1585	402	61	345
Jones, Lorenzo D., assignor to Kenosha Novelty Company, Kenosha, Wis. Bridle.....	473,396	Apr. 19	2200	552	59	444
Jones, Lyman M., and J. K. Wedlake, assignors to Massey-Harris Company, Limited, Toronto, Canada. Sheaf-carrier for harvester-binders.....	460,468	Aug. 9	1163	{ 292 293 }	{ 60 60 }	{ 814 814 }
Jones, Mary E. (See Jones, Conrad S., assignor.)						
Jones, Mathew T. (See Swallow and Jones.)						
Jones, Melvin L., Yorktown, Ind. Wire-fence machine.....	471,978	Mar. 29	3579	913	58	1824
Jones, Nathaniel M. (See Curtis and Jones.)						
Jones, Nelson A. (See Ferriss, Edward, assignor.)						
Jones, Oliver L., Cold Spring Harbor, N. Y. Spring conveyer.....	473,318	Apr. 19	2050	515	59	415
Jones, Otis, Senoia, and H. P. Ashley, assignors of fifteen thirty-seconds to J. P. Woodson, R. M. Farrar, R. L. Sibley, G. A. Cabannis, and W. G. Paschall, Atlanta, Ga. Steam-generator.....	488,970	Dec. 27	2830	698	61	1937
Jones, Philip R., Lyndhurst, N. J. Sporting-trap.....	472,709	Apr. 12	1083	278	59	217
Jones, Ray W. (See Farr, Freeman S., assignor.)						
Jones, Rees, Kaufman, Tex. Grapple.....	485,944	Nov. 8	1204	318	61	836
Jones, Reuben, Atlanta, Ga. Plant-fender.....	478,072	June 28	2952	738	59	2061
Jones, Richard W., Syracuse, N. Y. Clip.....	472,298	Apr. 5	454	117	59	86
Jones, Richard W., Rock Hall, Md. Vehicle for carrying grain.....	479,328	July 19	1935	484	60	405
Jones, Robert L., and A. L. Agate, Elyria, Ohio. Measuring-caddy.....	471,670	Mar. 29	3111	792	58	1735
Jones, Samuel C. (See Parker, Jones, and Coffey.)						
Jones, Samuel M., Springfield, Mass. Fruit or vegetable slicer.....	484,155	Oct. 11	949	{ 243 244 }	{ 61 61 }	{ 208 208 }
Jones, Sylvanus H., assignor of one-half to B. F. Maul, Denver, Colo. Butter-mold.....	486,043	Nov. 8	1366	363	61	869
Jones, T. M. (See Miller, Lawrence B., assignor.)						
Jones, Thomas, Netherton, England. Apparatus for galvanizing wrought or cast iron and steel.....	476,651	June 7	640	{ 155 156 }	{ 59 59 }	{ 1564 1564 }
Jones, Trevannion A., Dublin, Iowa. Rein-holder.....	470,683	Mar. 15	1625	421	58	1430
Jones Vestibule Sleeping Car Company. (See Jones, Henry M., assignor.)						
Jones, Walter, New York, N. Y. Bracelet-gage.....	470,684	Mar. 15	1626	422	58	1430
Jones, Wiley M., assignor of one-half to E. W. Smith, Webb City, Ark. Pegging-jack....	476,650	June 7	639	155	59	1563
Jones, William, assignor of one-half to M. E. Barron, St. Louis, Mo. Sleeve-holder.....	488,532	Dec. 20	2129	527	61	1778
Jones, William D., Pittsburg, Pa. Drilling-tool.....	467,670	Jan. 26	2220	565	58	445
Jones, William G., <i>et al.</i> (See Arthur, William, assignor.)						
Jones, Winfield, <i>et al.</i> (See Fisher, James W., assignor.)						
Jonson, Lars, Escanaba, Mich. Lock for firearms.....	485,043	Oct. 25	2396	616	61	521
Jonsson, Charles. (See Goodridge and Jonsson.)						
Jönsson, Johan L., assignor to Aktiebolaget Separator, Stockholm, Sweden. Journal-box.....	479,983	Aug. 2	327	80	60	644
Jönsson, Johan L., assignor to Aktiebolaget Separator, Stockholm, Sweden. Apparatus for heating and cooling milk.....	486,642	Nov. 22	2325	{ 608 609 }	{ 61 61 }	{ 1089 1089 }
Joosten, Christian H., New York, N. Y. Insect-powder distributor.....	487,122	Nov. 29	3137	804	61	1268
Jopson, George W. (See Crandall, Nathan W., assignor.)						
Jordan, Arthur C., Emporia, Va. Trunk-tray.....	486,475	Nov. 22	2064	547	61	1039
Jordan, Edmund, Brooklyn, assignor, by mesne assignments, to Pneumatic Press Company, New York, N. Y. Machine for cutting and shaping crackers or other plastic material..	475,280	May 17	2930	{ 569 570 }	{ 59 59 }	{ 1095 1095 }
Jordan, Edward B. (See Schmiedel, Anton J., assignor.)						
Jordan, Frank, New York, N. Y. Stopper-lock for bottles.....	487,748	Dec. 13	839	214	61	1505
Jordan, Frank B., Auburn, Me. Wrench.....	476,465	June 7	367	85	59	1508
Jordan, Frank B., Auburn, Me. Meat-tenderer.....	483,062	Sept. 20	1766	446	60	1707
Jordan, Franklin E., assignor to H. W. Bolton, Chicago, Ill. Vaporizer.....	471,123	Mar. 22	2306	592	58	1575
Jordan, Green H., Talbotton, Ga. Plow-line.....	475,570	May 24	2688	682	59	1199
Jordan, James G., Des Moines, Iowa. Railway-rail curve.....	477,901	June 28	2689	673	59	2010
Jordan, John, <i>et al.</i> (See Trump, John G., assignor.)						
Jordan, John R., assignor to Jordan Multiplex Table Manufacturing Company, Baltimore, Md. Table.....	484,965	Oct. 25	2270	585	61	497
Jordan, Llewellyn E., Bellevue, assignor of one-half to C. Wells, Allegheny, Pa. Shaking-grate.....	486,045	Nov. 8	1368	364	61	869
Jordan Multiplex Table Manufacturing Company. (See Jordan, John R., assignor.)						
Jordan, Robert H., Jefferson, Pa. Sled-shoe.....	488,266	Dec. 20	1709	430	61	1695
Jordan, Thomas N. (See Terry, Robert E., assignor.)						
Jordan, William, and E. Broadbridge, Jr., Brighton, England. Illuminating device for stage-scenery and for other purposes.....	482,362	Sept. 13	748	180	60	1496
Jordan, William I. (See Thompson and Cooke, assignors.)						
Jørgensen, Alfred, Copenhagen, Denmark, and A. Bergh, Stockholm, Sweden. Apparatus for the production of yeast and similar substances.....	467,993	Feb. 2	133	32	58	549
Jory, Charles. (See Moore and Jory.)						
Joseph Wagner Manufacturing Company. (See Cottrell, George, assignor.)						
Josey, Napoleon B., <i>et al.</i> (See Hollingsworth, Thomas H., assignor.)						
Joslin, Alexander D., Chicago, Ill. Device for holding and cutting tickets, checks, &c.....	467,936	Feb. 2	52	12	58	535

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Joslyn, Frank C., <i>et al.</i> (See Kates, Wilber H., assignor.)						
Joss, George N., Lancaster, Ohio. Corn-sheller	469,523	Feb. 23	2527	649	58	1043
Jost, Frederic W., Jersey City, N. J. Car-coupling	470,198	Mar. 8	853	210	58	1274
Jonbert, Jauvier, Côte St. Michel, Canada. Potato-separator	467,177	Jan. 19	1439	366 367	58	290
Joyce, Hanson B., Boston, Mass. Water-heater	472,128	Apr. 5	189	51	59	35
Joyce, John, Oswego, N. Y. Explosive engine	470,019	Aug. 2	418	105	60	661
Joyce, Thomas H., Unionville, N. Y. Side apron for vehicles	467,032	Jan. 12	1174	297	58	231
Jrannot, Joseph M. (See Collard, David, assignor.)						
Judd, Charles D., Bridgeport, Conn. Adding-pencil	488,206	Dec. 20	1609	401	61	1677
Judd, Edward A., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Padlock	483,383	Sept. 27	2388	600	60	1839
Judd, Edward A., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Padlock	484,895	Oct. 25	2158	555	61	475
Judd, Edward C., assignor to American Scale Manufacturing Company, Boston, Mass.						
Weighting-scales	480,020	Aug. 2	419	105	60	661
Judd, Fred W., assignor of one-half to Avery Stamping Company, Cleveland, Ohio. Die for manufacturing sheet-metal vessels	469,741	Mar. 1	116	31	58	1122
Judd, Fred W., assignor of one-half to Avery Stamping Company, Cleveland, Ohio. Sheet-metal tea-kettle or similar vessel	469,742	Mar. 1	117	31	58	1122
Judd, Fred W., assignor of one-half to Avery Stamping Company, Cleveland, Ohio. Sheet-metal tea-kettle	469,743	Mar. 1	119	31	58	1122
Judd, Thomas L., East Orange, N. J. Gripper for scaling-ladders, &c	473,581	Apr. 26	2518	635	59	528
Judge, Arthur J., St. Louis, Mo. Wall, floor, or roof of buildings	483,927	Oct. 4	605	153	61	125
Judge, James L., assignor of one-half to W. K. Downey, Milwaukee, Wis. Air-valve	477,597	June 21	2175	539	59	1895
Judge, Joseph, Pittston, Pa. Switch-lock	470,056	Mar. 1	619	154	58	1219
Judge, Joseph, Pittston, Pa. Detergent paste	476,870	July 12	1229		60	259
Judkins, Arthur G. (See McCart and Judkins.)						
Judkins, Edward S., East Providence, R. I. Cutter-head	487,015	Nov. 29	2969	765	61	1233
Judson, Charles N., Brooklyn, N. Y. Device for closing elevator-gates	476,386	June 7	249	60	59	1485
Judson, Charles N., Brooklyn, N. Y. Elevator	476,387	June 7	251	60, 61	59	1486
Judson, Charles N., Brooklyn, N. Y. Apparatus for closing elevator-doors	476,388	June 7	255	61	59	1487
Judson L. Thomson Manufacturing Company. (See Thomson, Judson L., assignor.)						
Judson L. Thomson Manufacturing Company. (See Unbehend, Jacob J., assignor.)						
Judson, Whitcomb L., New York, N. Y. Vacuum-pump	473,509	Apr. 26	2386	604	59	501
Juel, John, Larchwood, Iowa. Self-feeder for thrashing-machines	474,254	May 3	565	139	59	747
Jukes, Hamilton A., Winnipeg, Canada. Earth-closet	479,712	July 26	2599	647	60	544
Julian, William A., Cincinnati, Ohio. Hand-mirror	479,092	July 19	1579	395	60	336
Julius King Optical Company. (See Hinden, Mathias J., assignor.)						
June, Daniel S. and P. J., Fremont, Ohio. Smoke-bleacher	468,408	Feb. 9	788	195	58	686
June, Marcus M., assignor of two-thirds to O. Coville and T. H. Whitcomb, Syracuse, N. Y. Candy-mold	480,469	Aug. 9	1165	293	60	814
Junne, Peter J. (See Junne, Daniel S. and P. J.)						
Jungbluth, Johaon, Cologne, Germany. Pavement for stables	469,044	Feb. 16	1795	459	58	895
Jungermann Brothers. (See Christie, William R., assignor.)						
Justesen, Christen, Audubon, Iowa. Post-hole auger	474,664	May 10	1253	320	59	889
Justi, Henry D. (See Rehfuess, George, M. O., and J. G., assignors.)						
Justice, William M., Pittsburg, Pa. Cycle-stand	488,395	Dec. 20	1917	480	61	1736
Justin, Joel G., Syracuse, N. Y., assignor to Justin Projectile Company, Jersey City, N. J. Shell for high explosives	467,334	Jan. 19	1683	430	58	336
Justin Projectile Company. (See Justin, Joel G., assignor.)						
Jüterbock, Gustav, Berlin, Germany. Amalgam for dentists' use	485,280	Nov. 1	188		61	611
Kaburick, Andrew, Springfield, Ill. Disk harrow	470,760	Mar. 15	1742	449	58	1453
Kaburick, Frank, Carlinville, Ill. Disk harrow	470,761	Mar. 15	1743	449	58	1454
Kading, Charles H., Tripoli, Iowa. Harrow	472,129	Apr. 5	191	51	59	35
Kaempen, Folkert, Jr., Quincy, Ill. House-door letter-box	475,119	May 17	1980	502	59	1046
Kaestner, Charles, Chicago, Ill. Adjusting device for mashing-machines	471,613	Mar. 29	3023	769 770	58	1719
Kaestner, Charles, Chicago, Ill. Means for preventing explosions in mills	479,188	July 19	1736	435	60	365
Kaestner, Charles, Chicago, Ill. Brewer's mashing-machine	479,189	July 19	1737	435 436	60	365
Kaffenburgh, Isaac. (See Furgang, Rudolph, assignor.)						
Kafka, L. (See Griffin, Charles H., assignor.)						
Kahlke, Henry W., assignor to J. J. Tower, Brooklyn, N. C. Handcuff	470,869	Mar. 15	1915	490	58	1487
Kahn, Arthur, New York, N. Y. Massage apparatus	481,359	Aug. 23	2611	642	60	1121
Kahn & Bros., F. & L. (See Kahn and Christ, assignors.)						
Kahn, Clarence. (See Kahn, Ferdinand J., assignor.)						
Kahn, Ferdinand J., St. Paul, Minn., assignor to C. Kahn, Sioux City, Iowa. Mitten	480,852	Aug. 16	1761	441	60	948
Kahn, Herman, <i>et al.</i> (See Beethoff, Samuel J., assignor.)						
Kahn, Lazard, and R. Christ, assignors to F. & L. Kahn & Bros., Hamilton, Ohio. Ash-box for stoves	472,577	Apr. 12	881	227	59	182
Kahn, Lazard, and R. Christ, assignors to F. & L. Kahn & Bros., Hamilton, Ohio. Ash-box for stoves	478,334	July 5	425	104	60	85
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Recleaner for clover-hullers	467,978	Feb. 2	108	27	58	545
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Clover-hulling machine	472,218	Apr. 5	333	86	59	62
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Clover-hulling frame	472,792	Apr. 12	1198	308	59	239
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Feed-table for clover-hulling machines	474,134	May 3	384	92	59	712
Kailor, John N., assignor to Reeves & Co., Columbus, Ind. Blast-board for clover-hulling machines	474,604	May 10	1157	294	59	870
Kailor, John N., and E. L. Williams, assignors to Reeves & Co., Columbus, Ind. Casing for clover-hullers	473,259	Apr. 19	1960	492	59	397
Kailor, John N., and E. L. Williams, assignors to Reeves & Co., Columbus, Ind. Rake mechanism for clover-hullers	473,701	Apr. 26	2705	681	59	562
Kaiser, Andrew, Columbus, Ohio. Ceiling	480,927	Aug. 16	1872	467	60	970
Kaiser, August, assignor to Eagle Pencil Company, New York, N. Y. Lead-pencil	488,818	Dec. 27	2584	641	61	1855
Kaiser, Fredrick, Knoxville, Tenn. Ammonia-absorber	481,955	Sept. 6	51	12	60	1344
Kaiser, John X., Newport, Ky., assignor to Mosler Safe and Lock Company, Cincinnati, Ohio. Time-lock attachment	481,572	Aug. 30	2065	728	60	1206
Kaiser, Joseph A., St. Louis, Mo. Butter-cutter	484,023	Oct. 11	758	191	61	170
Kaiser, Pieter J., Leyden, Noordeinde, Netherlands. Compass	487,330	Dec. 6	151	44	61	1350
Kalamazoo Cycle Company. (See Blood, Maurice E., assignor.)						
Kalamazoo Knitting Company. (See Sedmihradsky, Adolph, assignor.)						
Kalb, John S. (See Oberer and Kalb.)						
Kales, John W., Franklinville, N. Y. Automatic safety-switch for railways	474,474	May 10	949	244 245	59	830
Kales, John W., Franklinville, N. Y. Sash-holder	480,340	Nov. 15	1852	487	61	983

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Kales, John W., Franklinville, N. Y. Physician's table	487,625	Dec. 6	624	{ 160 161 }	61	1445
Kalisch, Paul, Jetsch, near Golssen, Germany. Means for instruction in arithmetic	472,057	Apr. 5	69	18, 19	59	16
Kallbreier, Charles H., Tell City, Ind. Road-cart	465,413	Nov. 1	412	110	61	656
Kalle & Co. (See Hepp, Edward, assignor.)						
Kaltenbach, Joseph, <i>et al.</i> (See Collins, Olmstead, assignor.)						
Kämmerer, Paul, Troisdorf, Germany. Automatic calipering-machine	471,557	Mar. 29	2944	{ 749 750 }	58	1705
Kampfe, Frederick, R., and O., Brooklyn, N. Y. Razor-strop	477,902	June 28	2690	673	59	2010
Kampfe, Otto. (See Kampfe, Frederick, R., and O.)						
Kampfe, Richard. (See Kampfe, Frederick, R., and O.)						
Kane, Albert, Buffalo, N. Y. Vise	488,315	Dec. 20	1785	449	61	1709
Kane & Co., Thomas. (See Marks, Solomon, assignor.)						
Kane, Frank H., Riverside, Ohio. Barrel-head machine	488,167	D. c. 13	1542	{ 386 387 }	61	1646
Kane, James H., Kansas City, Mo. Artificial foot	469,348	Feb. 23	2248	577	58	990
Kane, John, Philadelphia, Pa. Sash-fastener	473,757	Apr. 26	2784	700	59	578
Kane, John, Philadelphia, Pa. Automatic sprinkler	484,321	Oct. 11	1218	310	61	260
Kane, Maurice, Chicago, Ill. Harvester-elevator	487,223	Nov. 29	3293	810	61	1297
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Spring- field, Ohio. Grain-harvester	466,722	Jan. 5	665	{ 170 171 }	58	126
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Spring- field, Ohio. Harvester-gearing	466,740	Jan. 5	687	177	58	131
Kane, Maurice, Chicago, Ill., assignor to Warder, Bushnell & Glessner Company, Spring- field, Ohio. Grain-binder	467,467	Jan. 19	1881	{ 479 480 }	58	374
Kane, William E., Syracuse, assignor of one-half to W. F. Morris, Baldwinsville, N. Y., Hub-boring machine	486,407	Nov. 15	1957	{ 519 520 }	61	1004
Kansas City Switch and Frog Company. (See Katzmaier, John M., assignor.)						
Kanzleiter, Gotthilf F. E., Terre Haute, Ind. Seaming-machine	481,033	Aug. 16	2035	508	60	1001
Kaplan, Hirsch, New York, N. Y. Oil-can	474,172	May 3	446	108	59	724
Kaplan, Hirsch, New York, N. Y. Safety oil-can	479,217	July 19	1777	446	60	372
Karfiol, Benzion, assignor, by mesne assignments, to Karfiol Lace Paper Company, New York, N. Y. Machine for the manufacture of lace-paper	484,966	Oct. 25	2271	586	61	497
Karfiol Lace Paper Company. (See Karfiol, Benzion, assignor.)						
Karger, Morris, <i>et al.</i> (See Carrington, Harry T., assignor.)						
Karo, King L., New York, N. Y. Hinge	470,334	Mar. 8	1099	280	58	1319
Karr, Francis, Chicago, Ill. Pillow-sham holder	476,892	June 14	1011	245	59	1632
Karr, James K., La Crosse, Wis. Grain-carrier	486,717	Nov. 22	2442	636	61	1113
Karshner, Albert L., Denver, Colo. Paper-cutter	478,935	July 12	1327	{ 329 330 }	60	278
Kasirsky, Ollie, <i>et al.</i> (See Loree, Manfred U., assignor.)						
Kass, John, Menominee, Mich. Beer-racking trough	476,652	June 7	642	156	59	1564
Kasson, William M. (See Forbush, Walter R., assignor.)						
Kastenhuber, William P., P. H. Wuagnoux, and R. I. States, Jersey City, N. J. Perforator for printing-presses	485,547	Nov. 1	602	160	61	696
Kastler, George. (See Randall, Timothy P., assignor.)						
Kastner, John, Jr., Evansville, Ind. Safety appliance for steam-boilers	474,135	May 3	385	92, 93	59	713
Kates, Wilber H., assignor of three-fourths to F. C. Joslyn, E. McAniff, Syracuse, and F. P. Adams, New York, N. Y. Coat loop or hanger	470,685	Mar. 15	1626	422	58	1430
Kato, Jesse J., and T. H. Rhodes, Los Angeles, Cal. Toll-collecting apparatus for telephones Kattentidt, August. (See Traube and Kattentidt.)	472,169	Apr. 5	245	65	59	46
Katzenberg, Jacob, New York, N. Y. Suspenders	478,335	July 5	426	104	60	85
Katzmaier, John M., assignor to Kansas City Switch and Frog Company, Kansas City, Mo. Railway head-plate	471,240	Mar. 22	2485	631	58	1608
Kaufman, Charles, New York, N. Y. Cloth-cutting machine	487,840	Dec. 13	989	{ 248 249 250 }	61	1535
Kaufman, Jake M., <i>et al.</i> (See Wilskey, Frank A., assignor.)						
Kaufmann, Frank, Jr. (See Hamilton and Kaufmann.)						
Kaul, Carl F., Madison, Nebr. Continuous brick-kiln	486,972	Nov. 29	2901	749	61	1221
Kavanagh, Edward H., and E. E. Winkley, Lynn, Mass.; said Winkley assignor to said Kavanagh. Stone-working machine	467,937	Feb. 2	54	12, 13	58	535
Kay, Henry, <i>et al.</i> (See Kellett, Rufus, assignor.)						
Kay, Joshua A. (See Topliss and Kay.)						
Kaye, Samuel, Yazoo City, Miss. Machine for packing ice	466,755	Jan. 5	714	184	58	135
Kayne, Thomas Y., assignor to H. M. Henley, Chicago, Ill. Truss	474,088	May 3	326	78	59	700
Kayser, Julius. (See Bonton, Arthur A., assignor.)						
Kayser, William J., Milwaukee, Wis. Clothes-drier	469,018	Feb. 16	1763	{ 449 450 }	58	888
Kayser, William J., Milwaukee, Wis. Hoisting apparatus	483,323	Sept. 27	2297	578	60	1822
Kayser, William J., assignor to L. Hoffmann, and W. Baur, Milwaukee, Wis. Chimney-cowl	486,830	Nov. 22	2633	687	61	1152
Kea, Zachariah R., Shongaloo, La. Plow	487,749	Dec. 13	840	214	61	1505
Keahey, William A., Garnett, Ark. Plow	466,179	Feb. 2	412	102	58	605
Kealy, James P., New Haven, Conn. Lubricator	475,690	May 24	2863	724	59	1233
Keane, John, San Francisco, Cal. Chimney-cap	483,384	Sept. 27	2389	600	60	1839
Keane Novelty Company. (See Smith, Frank H., assignor.)						
Keany, James B. (See Thurell, John, assignor.)						
Keasey, Enos A., F. S. and H. G., Ligonier, Ind. Road-cart	485,763	Nov. 8	935	250	61	781
Keasey, Fred A. (See Keasey, Enos A., F. S., and H. G.)						
Keasey, Harry G. (See Keasey, Enos A., F. S., and H. G.)						
Keating, Alphonso S., assignor of one-half to H. W. Thayer, Corry, Pa. Electric battery	474,912	May 17	1644	420	59	981
Keating, Cecil A., Dallas, Tex. Method of and apparatus for recording the location and character of business	486,192	Nov. 15	1614	428	61	935
Keating, Henry S., London, England. Electrical safety cut-out	488,123	Dec. 13	1462	369	61	1631
Keating, Robert M., Springfield, Mass. Cushion-tire and rim therefor	485,633	Nov. 8	732	191	61	738
Keatinge, John R., Brooklyn, N. Y. Type-cleaner for type-writing machines	475,777	May 31	3009	763	59	1274
Keats Maschinen Gesellschaft. (See Fischer, Benno, assignor.)						
Keck, Christian, Cincinnati, Ohio. Electroplate attachment	476,653	June 7	644	156	59	1564
Keck, James V. (See Dwiggins, John W., assignor.)						
Keck, John. (See Kimmel and Keck.)						
Kee, Charles D. (See Dickerson and Kee.)						
Keefe, Henry C. (See Clark and Keefe.)						
Keegan, Peter F., <i>et al.</i> (See Johns, Will R., assignor.)						
Keehn, Frank S. (See Richards, Ephraim, assignor.)						
Keeler, Edward A., Chicago, Ill. Mail-elevator	470,622	Mar. 8	1535	400	58	1404

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Keeler, H. F., <i>et al.</i> (See Starks, John, assignor.)						
Keeler, Howard L., Mount Holly, N. J. Moistening-pad	486,783	Nov. 22	2550	665	61	1134
Keeler, William E., assignor to himself, and C. F. Gran. Beaver Falls, Pa. Making shovels	488,503	Dec. 20	2092	519	61	1772
Keeling, Squire, assignor of one-half to J. Whearty, Springfield, Ill. Step-ladder	477,843	June 28	2596	651	59	1993
Keen, Charles J. (See Ryland, Marion W., assignor.)						
Keen, Edwin R., assignor to Western Publishing House, Chicago, Ill. Device for atomizing or spraying liquids	475,452	May 24	2496	637	59	1162
Keen & Hagerty. (See Wagandt, Charles L., assignor.)						
Keen Manufacturing Company. (See Whelpley, James A., assignor.)						
Keen, Maria L. H., Chicago, Ill. Trunk	486,254	Nov. 15	1721	{ 453 454 }	61	956
Keenan, Charles G., and W. J. Morris, Allegheny, Pa. Slate-pencil sharpener	474,136	May 3	386	93	59	713
Keenan, George J., Buffalo, N. Y. Molder's flask	485,764	Nov. 8	936	250	61	781
Keenan, James, Chicago, Ill. Furnace	487,675	Dec. 6	708	180	61	1461
Keenan, Michael, <i>et al.</i> (See McKinney, Robert, assignor.)						
Keenan, William, Korah, Canada. Machine for automatically moving coal, &c	469,478	Feb. 23	2456	629	58	1030
Keene & Co., George C. (See Symonds, Herbert, assignor.)						
Keene, George A., Lynn, assignor of one-half to E. R. Golder, Swampscott, and W. C. Stilphen, Lynn, Mass. Bath-tub seat	488,011	Dec. 13	1272	317	61	1591
Keene, George C., Cincinnati, Ohio. Machine for corrugating pipes	471,301	Mar. 22	2574	{ 653 654 }	58	1626
Keey, George E., <i>et al.</i> (See Southerton, Richard, assignor.)						
Keene, Joseph, assignor to Chicago Spring Butt Company, Chicago, Ill. Door-check	479,813	Aug. 2	58	14	60	593
Keene, Samuel D., assignor of three-fourths to H. N. Fenner, Providence, E. G. Blodgett and E. W. Orswell, Pawtucket, R. I., and Holyoke Machine Company, Holyoke, Mass. Bleaching	480,102	Aug. 2	542	137	60	686
Keep, James M., New York, N. Y. Toilet-paper holder	481,034	Aug. 16	2036	508	60	1002
Keel, Fritz, Breslau, Germany. Means for setting diamonds and other stones for cutting purposes	475,778	May 31	3010	763	59	1275
Keir, Cyrus, Lakeside, Ill. Fork for velocipedes	482,090	Sept. 6	275	66	60	1389
Keidel, Charles, Jr., assignor to Wm. Knabe & Co. Manufacturing Company, Baltimore, Md. Upright piano or organ	485,414	Nov. 1	413	111	61	656
Keifer, Frank H., and G. H. Thompson, Howard, Kans. Bill-of-fare indicator	475,871	May 31	3172	805	59	1307
Keil, Adam, McKeesport, and A. R. Westerdahl, assignors to S. S. Brown, Pittsburg, Pa. Mining-machine	472,363	Apr. 5	555	144	59	104
Keil, Adam, McKeesport, and A. R. Westerdahl, assignors to S. S. Brown, Pittsburg, Pa. Mining-machine	472,503	Apr. 5	779	199	59	148
Keil, Henry F., New York, N. Y. Pnzzle	488,819	Dec. 27	2584	{ 641 642 }	61	1885
Keil, Peter, Jr., Philadelphia, Pa. Heating-furnace	482,363	Sept. 13	749	{ 180 181 }	60	1496
Keil, Peter, Jr., Philadelphia, Pa. Apparatus for making metal tubes	482,364	Sept. 13	752	{ 181 182 }	60	1497
Keiper, Henry B., Lancaster, Pa. Screw-cutting plate	473,582	Apr. 26	2520	636	59	528
Keiper, John F., Denver, Colo. Slag separator	484,659	Oct. 18	1764	448	61	381
Keist, George A., Auburn, Me. Tool sharpening device	478,608	July 12	839	207	60	182
Keith, Harrison T., Vincennes, Ind. Holder for postmarking stamps	476,049	May 31	3447	870	59	1361
Keith, Jeremiah, North Middleborough, assignor of one-half to C. B. Gardiner and D. F. Ranney, Raynham, Mass. Machine for automatically weighing tacks	474,777	May 10	1427	363	59	924
Keith, Robert L., Brazil, Ind. Electric alarm	479,282	July 19	1872	469	60	393
Keith, Thomas K. (See Gooding and Keith.)						
Keith, Thomas K., Boston, Mass. Sewing-machine for lasting boots or shoes	488,523	Dec. 20	2130	527	61	1778
Keith, Thomas K., Boston, assignor to C. F. Brown, trustee, Reading, Mass. Sewing-machine for lasting boots or shoes	488,279	Dec. 20	1728	{ 435 436 }	61	1699
Keizer, William H. H., assignor of three-fourths to F. O. Hill and R. S. McCrea, Rathdrum, Idaho. Crosscut-saw	482,365	Sept. 13	753	182	60	1497
Kelch, Franz, Berlin, Germany. Injector	472,949	Apr. 12	1421	363	59	284
Kellam, Julius W., assignor to M. E. Kellam, Brooklyn, N. Y. Adjustable flange-wrench	487,331	Dec. 6	152	44	61	1351
Kellam, Minnie E. (See Kellam, Julius W., assignor.)						
Kellar, A. M., <i>et al.</i> (See Jackson and Reiger, assignors.)						
Kellar, David A. (See McDermott, James, assignor.)						
Kelleher, Daniel, New Bedford, Mass. Bomb-lance	472,889	Apr. 12	1333	342	59	267
Keller, Charles, Springdale, Pa. Apparatus for cutting and spreading glue	482,042	Sept. 6	192	46,47	60	1373
Keller, Constantine. (See Keller, Henry and C.)						
Keller, David K., Montgomery, Ohio. Chain-pump	478,112	July 5	51	14	60	12
Keller, Frank, Culbertson, Neb. Lubricator	474,089	May 3	327	78	59	700
Keller, Fred C. (See Russell, John R., assignor.)						
Keller, Heinrich, Zurich, Switzerland. Regulator	487,392	Dec. 6	251	67, 68	61	1370
Keller, Henry and C., New York, N. Y. Piano-action	487,483	Dec. 6	414	107	61	1403
Keller, Henry and C., New York, N. Y. Center-pin fastening for piano-actions	487,484	Dec. 6	416	107	61	1403
Keller, Henry H. (See Ross and Keller.)						
Keller, John A. (See Clawson and Keller.)						
Keller, Leo, Chicago, Ill. Can forming and soldering machine	476,927	June 14	1084	{ 261 262 }	59	1667
Keller, Moses A., Batavia, N. Y. Automatic shell-ejector for breech-loading guns	488,316	Dec. 20	1786	{ 449 450 }	61	1710
Keller, Peter S. (See Knowels, John S. and G. S., assignors.)						
Keller, T. S., <i>et al.</i> (See Terrell, Nathaniel A., assignor.)						
Keller, Theodore, Trim Belle, Wis., assignor of one-half to V. Reeves, Minneapolis, Minn. Draft-equalizer	484,371	Oct. 11	1292	330	61	275
Kellett, Rufus, Buttershaw, assignor to R. L. Hattersley and H. Kay, Keighley, England. Selvage forming mechanism for double-pile-fabric looms	468,770	Feb. 9	1343	339	58	797
Kelley, Charles, Toronto, Canada. Latch for sliding doors	466,419	Jan. 5	173	46	58	34
Kelley, Charles, Toronto, Canada. Bill-of-fare indicator for waiters	471,124	Mar. 22	2307	592	58	1575
Kelley, Charles A., Ripon, Cal. Grain-agitator for separator-shoes	466,526	Jan. 5	349	87	58	67
Kelley, Edward W., Lowell, Mass. Machine for opening cotton	470,937	Mar. 15	2016	516	58	1506
Kelley, Fred H. (See Blair and Kelley.)						
Kelley, George W., Goshen, Ind. Carpet-sweeper	469,573	Feb. 23	2604	668	58	1059
Kelley, Harry E., Niagara Falls, N. Y. Chain-link	469,449	Feb. 23	2407	617	58	1021
Kelley, Harry E., Niagara Falls, N. Y. Making harness check-hooks	488,677	Dec. 27	2377	589	61	1843
Kelley, Harry E., assignor of one-half to F. M. Woolworth, Niagara Falls, N. Y. Check-hook	468,024	Feb. 2	182	45	58	559
Kelley, Harry E., Niagara Falls, assignor to Oneida Community, Limited, Kenwood, N. Y. Cow-tie	469,254	Feb. 23	2103	540	58	962

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Kelley, Harry H., Willoughby, Ohio. Brake mechanism for street-cars	473,510	Apr. 26	2388	605	59	502
Kelley, Harry H., Willoughby, Ohio. Car-brake	486,718	Nov. 22	2443	637	61	1113
Kelley, John E., Philadelphia, Pa. Valve-gear for direct-acting steam-engines	476,148	May 31	3609	912	59	1394
Kelley, John W., St. Louis, Mo. Water-heater	484,322	Oct. 11	1219	310	61	260
Kelley, Thomas J., Avenue City, Mo. Portable hay or grain shed	487,927	Dec. 13	1138	284	61	1563
Kelliher, Alfred T., Bethel, Me. Track for log-carriers	484,436	Oct. 18	1406	358	61	309
Kelliher, Alfred T., Bethel, Me. Elevated carrier	487,485	Dec. 6	417	107	61	1403
Kelliher, Alfred T., Bethel, Me. Elevated carrier	488,765	Dec. 27	2500	622	61	1867
Kellner, Carl, Vienna, Austria-Hungary. Preparing short fibers for spinning and other purposes	480,588	Aug. 9	1342	334	60	850
Kellogg, Charles H., Allen, Nebr. Fence-machine	471,979	Mar. 29	3580	913	58	1825
Kellogg, Charles L. F. (See Imeson, Tibbets, and Kellogg.)						
Kellogg, Charles S., Chesterton, Ind. Device for keeping stalls clean	474,559	May 10	1095	278	59	859
Kellogg, Charles W. (See Hitchcock, Halbert K., assignor.)						
Kellogg, Dan. W., Anburn, N. Y. Reversible eccentric for engines	472,542	Apr. 12	837	214	59	172
Kellogg, Edwin M., Chicago, Ill. Grain-binder	485,157	Oct. 25	2564	658	61	556
Kellogg, Fortunatus G., assignor of one-half to H. Fox, Brainerd, Minn. Lubricator-gland	476,747	June 7	780	192	59	1593
Kellogg, Frank J., Battle Creek, Mich. Seam-pressing frame	480,589	Aug. 9	1343	335	60	851
Kellogg, James F., Mitchell, S. D., assignor of one-half to A. P. Gould, J. C. Skelton, and A. Hoeffer, Canton, Ohio. Neck-yoke	471,643	Mar. 29	3068	780	58	1727
Kellogg, James M., Bozeman, Mont. Hay-sling	487,575	Dec. 6	549	141	61	1430
Kellogg, Levi M., San Francisco, Cal. Safety attachment for elevators	477,371	June 21	1821	445	59	1823
Kellogg, Walter P., Syracuse, N. Y. Automatic stock-feeder	482,366	Sept. 13	754	182	60	1497
Kellom, Charles F., Delair, N. J. Electric connector for hose	482,181	Sept. 6	429	102	60	1419
Kellom, Charles F., Delair, N. J., assignor of one-half to M. W. Phillips, Philadelphia, Pa. Oiling device	477,422	June 21	1895	467	59	1839
Kelly, Christopher C., New York, N. Y., assignor to J. C. Kelly, Denver, Colo. Apparatus for training animals	478,513	July 5	694	168	60	138
Kelly, Daniel J., and W. D., assignors of one-fourth to J. W. Strong, Muskegon, Mich. Oil-tank	469,356	Feb. 23	2262	581	58	993
Kelly, Edward K., New York, N. Y. Clasp	473,629	Apr. 26	2598	653	59	542
Kelly, George A. (See Scott, Eugene C., assignor.)						
Kelly, George A., Stillwater, Minn. Steam-cylinder valve	475,321	May 24	2280	587	59	1123
Kelly, George B., Boston, Mass. Reed-organ	488,820	Dec. 27	2587	642	61	1225
Kelly, James, assignor of one-half to J. Kelly, Chicago, Ill. Wash-basin	479,429	July 26	2134	533	60	458
Kelly, James P., Louisville, Ky. Die for forming axes	479,166	July 19	1693	424	60	357
Kelly, John. (See Kelly, Daniel J., and W. D.)						
Kelly, John. (See Kelly, James, assignor.)						
Kelly, John, Troy, Ohio. Planter	470,686	Mar. 15	1628	422	58	1431
Kelly, John C. (See Kelly, Christopher C., assignor.)						
Kelly, John E., and F. R. Howell, Highland Station, Mich. Potato-digger	480,590	Aug. 9	1344	335	60	851
Kelly, John F. (See Stanley and Kelly.)						
Kelly, John F., New York, N. Y. Electrical meter	472,265	Apr. 5	407	105	59	76
Kelly, John F., New York, N. Y., and W. Stanley, Jr., Pittsfield, Mass. Electro-magnetic motor	479,746	July 26	2661	660	60	556
Kelly, Joseph, Pittsfield, Mass. Switch-operating device for railway-cars. (Reissue)	11,269	Sept. 13	1304	319	60	1604
Kelly, Joseph H., et al. (See Howard, Frank P., assignor.)						
Kelly Nail and Iron Company. (See Roth, Charles F., assignor.)						
Kelly, O. W., et al. (See Neer, Harry M., assignor.)						
Kelly, Sophia L., Clarksdale, Mo. Baking-pan	478,609	July 12	841	207	60	182
Kelly, William D. (See Kelly, Daniel J., and W. D.)						
Kelman, John H. (See Stanley and Kelman.)						
Kelsey, Charles D., Des Moines, Iowa. Sash-holder	486,476	Nov. 22	2065	547	61	1039
Kelsey, David B., St. Louis, Mo. Car-coupling	487,148	Nov. 29	3177	814	61	1275
Kelsey, Fannie E. (See Kelsey, Winfield, assignor.)						
Kelsey, Frank N., Florence, Mass. Lock-hinge	476,466	June 7	368	86	59	1508
Kelsey Furnace Company. (See Kelsey, William W., assignor.)						
Kelsey, Myron C., et al. (See Jeffrey, Albert D., assignor.)						
Kelsey, William W., Cortland, N. Y., assignor to Kelsey Furnace Company. Hot-air furnace	476,230	May 31	3759	949	59	1422
Kelsey, Winfield, assignor to F. E. Kelsey, Kasoag, N. Y. Folding bed	479,589	July 26	2404	593	60	509
Kelso, Robert G., Cleveland, Ohio. Eaves-trough fastener	488,075	Dec. 13	1395	347	61	1617
Kelso, Samuel J., Detroit, Mich. Slip-holder	475,942	June 28	2751	689	59	2023
Kelting, Ernst P. H., Oldeslohe, Germany. Heating apparatus	477,388	Nov. 1	372	100	61	649
Kemble, Edmund, East Orange, N. J. Game or puzzle	460,872	Aug. 16	1789	448	60	954
Kemmerer, John N., Loganton, Pa., assignor of three-fifths to J. K. Heckman, W. R. Goodman, and J. Kemmerer. Steam-engine	473,844	Apr. 26	2918	734	59	604
Kemmerer, Joseph, et al. (See Kemmerer, John N., assignor.)						
Kemp, Albert E. (See Kemp, William A. and A. E.)						
Kemp, George W. (See Forbes and Kemp.)						
Kemp, George W., assignor of one-half to A. G. Forbes, Montgomery, Ala. Scallop-attachment for sewing-machines	483,496	Sept. 27	2527	636	60	1868
Kemp, Horace L., Gloucester, assignor, by mesne assignments, to Philadelphia Barring Machine Company, Camden, N. J. Sewing-machine	466,607	Jan. 5	477	123	58	91
Kemp, J. A., et al. (See Hill, David J., assignor.)						
Kemp Manufacturing Company. (See Kemp, William A., assignor.)						
Kemp Manufacturing Company. (See Kemp, William A. and A. E., assignors.)						
Kemp, Solomon M., assignor of two-thirds to E. S. Stubbs and W. T. Henderson, Baltimore, Md. Heating-drum	483,116	Sept. 20	1938	490	60	1743
Kemp, William A., assignor to Kemp Manufacturing Company, Toronto, Canada. Damper	468,285	Feb. 2	582	145	58	637
Kemp, William A. and A. E., assignors to Kemp Manufacturing Company, Toronto, Canada. Damper	468,284	Feb. 2	581	145	58	636
Kempe, Arnold H., Oakland, Cal. Bicycle	484,857	Oct. 25	2091	538	61	461
Kemper, Alfred C. (See Esmond, William V., assignor.)						
Kemper, Granville G. (See Nevel, William A., assignor.)						
Kempf, Charles J., Seymour, Conn. Bench-hook	478,797	July 12	1131	279	60	239
Kempner, H., et al. (See Hill, David J., assignor.)						
Kempner, Joseph, Goerlitz, Germany. Producing opalescent glass	468,723	Feb. 9	1274	.....	58	784

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Kempshall, Eleazer, Hartford, assignor to E. Kempshall Company, New Britain, Conn. Invisible garment-fastening	466,689	Jan. 5	596	155	58	115
Kemp Smith, Frank, and T. L. Smith, Milwaukee, Wis.; said Smith assignor to said Kemp Smith. Tail-stock for milling-machines	470,245	Mar. 8	922	228	58	1287
Kemp Smith, Frank, and T. L. Smith, Milwaukee, Wis.; said Smith assignor to said Kemp Smith. Milling-machine	480,198	Aug. 2	699	177	60	714
Kempster, Daniel E., Boston, Mass. Steam-actuated valve	485,945	Nov. 8	1205	{ 318 319 }	61	836
Kempton, Ernest W. (See Rochford and Kempton.)	481,035	Aug. 16	2037	508	60	1002
Kempton, Dwight, Summerland, Cal. Musical instrument						
Kempton, George, <i>et al.</i> , trustees. (See Severy, Melvin L., assignor.)						
Kendall, Charles B. (See Schaake, Henry, assignor.)						
Kendall, Charles B., Newton, Mass. Can-head-feeding apparatus	469,388	Feb. 23	2311	595	58	1003
Kendall, Charles B., Newton, Mass. Can-cooling machinery	469,389	Feb. 23	2312	595	58	1003
Kendall, Charles B., Newton, Mass., and H. Schaake, Baltimore, Md.; said Schaake assignor to said Kendall. Can-testing machine	481,764	Aug. 30	3279	{ 799 800 }	60	1267
Kendall, Edward D., Brooklyn, N. Y. Composition of matter for the extraction of gold and silver from ores	482,577	Sept. 13	1100	.....	60	1564
Kendall, Francis B. and J. T., assignors of one-half to M. A. Giddings and C. Crosier, and said J. T. Kendall assignor of his remaining one-fourth to said Francis B. Kendall, M. A. Giddings, and C. Crosier, Monmouth, Ill. Corn-shocker	476,389	June 7	258	61	59	1488
Kendall, H. Prentice. (See Stuart, Perry G., assignor.)						
Kendall, Hiram. (See Schmelz, Charles F., assignor.)						
Kendall, Isaac N. and J. O., Vancouver, Canada. Removable saw-tooth	488,336	Dec. 20	1825	456	61	1717
Kendall, James O. (See Kendall, Isaac N. and J. O.)						
Kendall, James R., Terre Haute, Ind. Apparatus for the manufacture of gas	469,574	Feb. 23	2605	668	58	1059
Kendall, John T. (See Kendall, Francis B. and J. T.)						
Kenderdine, Theodore. (See Furnas and Kenderdine.)						
Kendrick, Hiland H., Fulton, N. Y. Pulley	473,119	Apr. 19	1718	435	59	350
Kenehan, Gilbert P., Cleveland, Ohio. Belt-stretcher	478,060	June 28	2933	732	59	2057
Kenkel, Herman H., St. Paul, Minn. Car-brake	468,409	Feb. 9	789	196	58	686
Kenna, Thomas M., New Haven, Conn., and W. O'Connor, assignors to E. O'Connor and C. Woodruff, Binghamton, N. Y. Cash indicator and recorder	467,740	Jan. 26	2335	593	58	467
Kennard, William. (See Upton and Kennard.)						
Kennedy, Alexander, Ashland, Ky. Door-fastener	470,857	Mar. 15	1899	486	58	1483
Kennedy, Charles W. (See Amies, Joseph H., assignor.)						
Kennedy, Charles W., and J. W. Grantland, Philadelphia, Pa.; said Grantland assignor to said Kennedy. Manufacture of steel ingots	473,466	Apr. 26	2317	586	59	489
Kennedy, Charles W., and J. W. Grantland, Philadelphia, Pa.; said Grantland assignor to said Kennedy. Manufacture of steel ingots						
Kennedy, De Lancy, Jr., New York, N. Y. Surgical-instrument case	478,936	July 12	1329	330	60	278
Kennedy, Henry C., Philadelphia, Pa. Lady's handkerchief-holder	468,224	Feb. 2	473	117	58	617
Kennedy, Henry J., Camden, N. J. Penholder	486,613	Nov. 22	2374	621	61	1099
Kennedy, Hugh, Sharpsburg, Pa. Coke-oven	470,938	Mar. 15	2018	517	58	1507
Kennedy, Hugh, Sharpsburg, Pa. Gas-burner	469,817	Mar. 1	245	62, 63	58	1149
Kennedy, Hugh, Sharpsburg, Pa. Gas-burner	469,824	Mar. 1	256	65	58	1151
Kennedy, Hugh, Sharpsburg, assignor to Riter & Conley, Pittsburg, Pa. Valve for hot-blast stoves	472,640	Apr. 12	974	252	59	198
Kennedy, Isaac, Elmira, N. Y. Coating with metal	470,492	Mar. 8	1357	.....	58	1367
Kennedy, John. (See Bracken, John, assignor.)						
Kennedy, Julian, Latrobe, Pa. Valve	477,372	June 21	1823	446	59	1824
Kennedy, Julian, Latrobe, Pa. Valve for hot-blast stoves	478,610	July 12	842	207	60	1-2
Kennedy, Julian, Pittsburg, Pa. Water-cooling device for furnaces	479,430	July 26	2135	533	60	458
Kennedy, Julian, Pittsburg, Pa. Crane	484,437	Oct. 18	1407	359	61	309
Kennedy, Julian, Pittsburg, Pa. Blast-furnace	466,110	Nov. 15	1496	394	61	911
Kennedy, Oliver, Brunswick, Ga. Checkrein worker and hook	477,549	June 21	2105	523	59	1881
Kennedy, Patrick, and C. J. Diss, Brooklyn, N. Y., assignors to Acme Storage Battery Company, of West Virginia. Storage-battery	482,043	Sept. 6	196	47	60	1374
Kennedy, Patrick, and C. J. Diss, Brooklyn, N. Y., assignors to Acme Storage Battery Company, of West Virginia. Storage-battery	482,044	Sept. 6	199	47	60	1374
Kennedy, Patrick, C. J. Diss, and R. Cannan, Brooklyn, N. Y. Machine for making brushes	469,479	Feb. 23	2457	{ 629 630 631 632 }	58	1030
Kennedy, Rankin, Glasgow, Scotland. Electric motor or generator	470,199	Mar. 8	854	211	58	1274
Kennedy, Rankin, Kilmarnock, Scotland. Electrical water-heater	479,814	Aug. 2	60	14	60	593
Kennedy, Richard, Highland, Wis. Jigging-machine	468,111	Feb. 2	304	74	58	583
Kennedy, Rufus L. (See Hadley, Joshua A., assignor.)						
Kennedy, Theodore A., Des Moines, Iowa. Glove for base-ball catchers	472,482	Apr. 5	743	189	59	141
Kennedy, Thomas B. (See Bartholomew, Albert W., assignor.)						
Kennedy, Thomas J., Kenfrew, Pa. Rail-joint	482,796	Sept. 20	1442	357	60	1642
Kennedy, William, Newmarket, Canada. Hot-water heater	480,406	Aug. 9	1057	265	60	794
Kennedy, William N., Battle Creek, Mich. Awning	468,277	Feb. 2	566	139	58	633
Kennelly, Arthur E. (See Ott and Kennelly.)						
Kennelly, Arthur E., Orange, N. J., assignor to Edison General Electric Company, New York, N. Y. Electrical meter	479,167	July 19	1694	424	60	358
Kennelly, Arthur E., and J. F. Ott, Orange, N. J., assignors to Edison General Electric Company, New York, N. Y. Electrical meter for three-wire systems	479,168	July 19	1695	425	60	358
Kennelly, Arthur E., and J. F. Ott, Orange, N. J., assignors to Edison General Electric Company, New York, N. Y. Electro-magnetic machine	479,169	July 19	1696	425	60	358
Kennet, John H., Huntington, W. Va. Shaft or pole support	476,390	June 7	259	62	59	1488
Kenny, Daniel B., Detroit, Mich. Cut-off valve	467,033	Jan. 12	1175	{ 297 298 }	58	232
Kenney Electrical Cash Carrier Company. (See Livermore, Charles W., assignor.)						
Kenney, George P., Watertown, N. Y. Cash-carrier	481,178	Aug. 23	2302	567	60	1065
Kenney, Lester B., Mount Morris, N. Y. Car-coupling	468,662	Feb. 9	1179	301	58	764
Kenney, Lester B., Charlotte, Mich. Window-screen	469,300	Feb. 23	2181	559	58	976
Kenney, Luke W., New York, N. Y. Ankle-support for skates	477,550	June 21	2106	523	59	1881
Kenney, Owen E., and F. D. Cable, assignors to Toledo Bicycle Company, Toledo, Ohio. Bicycle	485,583	Nov. 1	658	175	61	709
Kenney, Samuel M. (See Russell, William, assignor.)						
Kenney, Thomas M., Cambridge, Mass., assignor to C. S. and B. F. Conner, New York, N. Y. Type-finishing machine	484,915	Oct. 25	2191	{ 564 565 }	61	482
Kenny, Patrick. (See Edison and Kenny.)						
Kensha Novelty Company. (See Jones, Lorenzo D., assignor.)						
Kent, Alexander G., Solon, Iowa. House-moving truck	469,148	Feb. 16	1929	494	58	922

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Kent, Alexander W., Boston, Mass. Curling-tongs heater.....	478,437	July 5	579	140	60	114
Kent, Arthur B., <i>et al.</i> (See Besson, Hippolyte, assignor.)						
Kent, Bernard M., and J. T. Ashby, New York, N. Y. Combined candle-holder and shade-holder.....	469,189	Feb. 16	1995	509	58	934
Kent, Charles A., Beverly, Mass. Lineman's wire-grip.....	467,815	Jan. 26	2453	623	58	489
Kent, Charles J., Villa Park, Colo. Mining sluice-box.....	477,373	June 21	1824	446	59	1824
Kent, David, Manchester Centre, Vt. Device for operating cutter-bars.....	468,624	Feb. 9	1122	266	58	752
Kent, Ernest W., <i>et al.</i> (See Besson, Hippolyte, assignor.)						
Kent, George H., <i>et al.</i> (See Besson, Hippolyte, assignor.)						
Kent, George H., Cambridge, Mass. Cover for manuscripts.....	485,814	Nov. 8	993	266	61	793
Kent, George R., assignor to A. F. Ransom, Burlington, Wis. Fifth-wheel device for wagons.....	467,279	Jan. 19	1599	408	58	320
Kent, Horace L., Boston, Mass. Rock-crusher.....	482,795	Sept. 20	1411	357	60	1642
Kent, John, and C. Hargett, Osanippa, Ala. Cotton-chopper.....	469,027	Feb. 16	1774	452	58	891
Kenton Can Company. (See France, Albert L., assignor.)						
Kenway, Balston C., Tacoma, Wash. Construction of sea-walls.....	482,059	Sept. 6	224	53	60	1379
Kenworthy, Edward N., Oldham, England. Combined curtain-stretcher and clothes-horse.....	484,660	Oct. 18	1765	449	61	362
Kenyon, Louis A., Fairwater, Wis. Metallic railway-tie and fastening.....	487,016	Nov. 29	2969	765	61	1233
Kenyon, William D., Omaha, Nebr. Seal for bags.....	485,415	Nov. 1	414	111	61	657
Keogh, John M., assignor of one-half to B. G. Segog, Duluth, Minn. Car-coupling.....	485,500	Nov. 1	533	141	61	681
Keon, Thomas J. (See Edmond and Keon.)						
Keplinger, George B., Chicago, Ill. Button.....	467,662	Jan. 26	2204	561	58	443
Keplinger, George B., Chicago, Ill. Button.....	467,663	Jan. 26	2206	561	58	442
Keplinger, George B., Chicago, Ill. Button.....	467,671	Jan. 26	2232	565	58	445
Kepler, Eugene T., Helena, Mont. Shipping case or box.....	473,702	Apr. 26	276	681	59	563
Ker, Charles A., Glasgow, Scotland. Engraving-machine.....	477,257	June 21	1641	401	59	1789
Ker, Charles A., Glasgow, Scotland. Producing music or like engravings.....	482,871	Sept. 20	1551	387	60	1665
Kerekes, Peter, Buda-Pesth, Austria-Hungary. Boiler-feed alarm.....	471,311	Mar. 22	2589	657	58	1628
Kerfoot, William A., Des Moines, Iowa. Device for artificially feeding young animals.....	486,163	Nov. 15	1579	418	61	928
Kern, Albert L., York, assignor of one-half to Keystone Wagon Company, Reading, Pa. Machine for forging vehicle-clips.....	486,784	Nov. 22	2552	666	61	1134
Kern, August, St. Louis, Mo. Swivel-stand for barbers' chairs.....	473,397	Apr. 19	2200	552	59	444
Kern, Ferdinand, Linden, N. J., assignor to Kern Multiple Machine Company, of New Jersey. Sewing-machine.....	479,369	July 19	2022	505	60	422
Kern, Frank P., Missoula, Mont. Pruning implement.....	482,928	Oct. 4	605	153	61	125
Kern, Ludwig, Hamburg, Germany. Apparatus for removing vegetable matter from wool.....	469,788	Mar. 1	193	50	58	1138
Kern, Ludwig, Hamburg, Germany. Production of adhesives.....	487,928	Dec. 13	1139	284	61	1563
Kern Multiple Machine Company. (See Kern, Ferdinand, assignor.)						
Kernan, Francis, Jr., Utica, and W. H. Landers, Syracuse, assignors to Kernan Furnace Company, Utica, N. Y. Furnace.....	468,401	Feb. 9	780	194	58	685
Kernan Furnace Company. (See Kernan and Landers, assignors.)						
Kerr, Benjamin, and I. L. Berridge, Leicester, England. Circular-knitting machine.....	483,616	Oct. 4	150	37	61	31
Kerr, Benjamin S., Monroe, Wis. Washing-machine.....	474,746	May 10	1379	349	59	914
Kerr, Charles J., Reynoldsville, Pa. Weather-vane indicator.....	477,551	June 21	2107	524	59	1881
Kerr, Fred S., New York, N. Y. Attachment for feed-bags.....	479,646	July 26	2478	617	60	523
Kerr, George A., Columbus, Ind. Centrifugal starch refining and separating machine.....	471,614	Mar. 29	3025	770	58	1719
Kerr, George A., Columbus, Ind. Centrifugal machine for refining starch.....	473,511	Apr. 26	2329	605	59	502
Kerr, George W., New Haven, Conn. End-gate fastening.....	466,927	Jan. 12	834	215	58	169
Kerr, George W., New Haven, Conn. Shifting-seat vehicle.....	475,059	May 17	1881	477	59	1027
Kerr, John L., Wedowee, Ala. Cultivator or plow.....	477,552	June 21	2108	524	59	1881
Kerr-Murray Manufacturing Company. (See Crighton, William, assignor.)						
Kerr, Smith P., <i>et al.</i> (See Bromley, Daniel W., assignor.)						
Kerr, William, Caintown, Canada. Crescent-saw.....	468,150	Feb. 2	368	91	58	596
Kerr, William H., Ichester, Md. Take-up device for cloth-cutting machines.....	482,132	Sept. 6	334	80	60	1400
Kersenbrock, John H., Columbus, Nebr. Heater and cooler for fermented malt liquors.....	480,928	Aug. 16	1873	467	60	970
Kersenbrock, John H., Columbus, Nebr. Apparatus for bottling beer.....	484,024	Oct. 11	759	191	61	170
Kersenbrock, John H., Columbus, Nebr. Beer apparatus.....	484,025	Oct. 11	761	192	61	171
Kershaw, Adolphus and J. L., Cleveland, Ohio. Bevel.....	462,386	Feb. 9	752	187	58	679
Kershaw, Charles S., Rome, N. Y. Separable link.....	487,841	Dec. 13	996	251	61	1536
Kershaw, James L. (See Kershaw, Adolphus and J. L.)						
Kershaw, William, Cleveland, Ohio. Friction-clutch.....	481,794	Aug. 30	3331	813	60	1277
Kerslake, Harry A., Auburn, assignor to H. P. Clark, New York, N. Y. Vapor-burner or plumber's torch.....	473,159	Apr. 19	1784	450	59	363
Kerstein, Max, Boston, Mass. Safety cut-out.....	470,382	Mar. 8	1180	302	58	1333
Kersting, Bernhard, Ovelgönne, Germany. Necktie-fastener.....	479,884	Aug. 2	166	41	60	614
Kerwin, Patrick H. (See Foley, Frank, assignor.)						
Keseling, Joseph E., and C. Fuchs, Jr., New York, N. Y., assignors to Pyrolith Company, of New Jersey. Composition of matter for the manufacture of artificial stone.....	480,591	Aug. 9	1346		60	851
Keseling, Joseph E., and C. Fuchs, Jr., New York, N. Y., assignor to Pyrolith Company, of New Jersey. Composition of matter for the manufacture of artificial stone.....	481,279	Aug. 23	2488		60	1100
Keseling, Joseph E., and C. Fuchs, Jr., New York, N. Y., assignors to Pyrolith Company, of New Jersey. Composition of matter for artificial stone.....	482,367	Sept. 13	755		60	1498
Kesling, Perry, assignor of one-half to A. R. Shrover, Logansport, Ind. Corn-harvester.....	469,920	Mar. 1	404	101	58	1179
Kesling, Perry, assignor to King Drill Company, Logansport, Ind. Grain-drill.....	476,391	June 7	260	62	59	1428
Kessler, Charles E., Decatur, Ill. Check-row corn-planter.....	476,149	May 31	3611	912	59	1394
Kessler, Christian, Brooklyn, N. Y. Crochet-button.....	477,806	June 28	2523	633	59	1979
Kessler, John C., Milwaukee, Wis. Furnace for burning garbage.....	488,168	Dec. 13	1544	3-7	61	1646
Kessler, John C., Milwaukee, Wis. Garbage-crematory.....	488,169	Dec. 13	1546	388	61	1647
Kested, Bradley D., Johnstown, assignor of one-half to M. L. and W. S. Lefler, Saratoga, N. Y. Sleigh-runner.....	470,576	Mar. 8	1467	382	58	1390
Kester Arc Lamp and Manufacturing Company. (See Kester, Jesse F., assignor.)						
Kester, Jesse F., Torre Haute, Ind., assignor to Kester Arc Lamp and Manufacturing Company, Chicago, Ill. Electric-arc lamp.....	482,253	Sept. 6	542	129	60	1440
Ketchum, John E., and T. C. Nixon, Morrilton, Ark. Watchcase-spring.....	476,748	June 7	781	192	59	1593
Ketchum, David W., Evanston, Ill. Package for bleaching and packing rosin.....	487,091	Nov. 29	3086	792	61	1258
Ketchum, Everett H., Jamestown, N. Y. Bag-holder.....	482,641	Sept. 13	1189	288	60	1580
Ketchum, Frank S., New York, N. Y. Railway-tie.....	475,981	May 31	3352	845	59	1341
Ketchum, Frank S., New York, N. Y. Duplex syringe.....	485,698	Nov. 8	832	224	61	760
Ketchum, Joseph, Brooklyn, N. Y. Lubricant.....	467,938	Feb. 2	55		58	536
Keterlinus, Eugene, Philadelphia, Pa., assignor to Gorham Manufacturing Company, Providence, R. I. Bottle-stopper.....	471,746	Mar. 29	3241	826	58	1758

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Keuser, Emanuel, assignor to M. Kensler, Philadelphia, Pa. Rocking-horse	479,370	July 19	2023	505	60	422
Keuser, Mary. (See Keuser, Emanuel, assignor.)						
Keuthan, Frederick H., St. Louis, Mo. Animal-trap	470,577	Mar. 8	1468	382	58	1390
Keyes, Atwood B, Princeton, assignor of one-half to E. D. Blood, Sterling, Mass. Two-wheeled vehicle	475,943	May 31	3293	831	59	1330
Keyes, Nelson B., Unionville, Conn. Tack-puller	468,564	Feb. 9	1038	264	58	736
Keyless Lock Company. (See Craig, James D., assignor.)						
Keys, John, Springfield, Ill. Corn-planter	470,762	Mar. 15	1744	449	58	1454
Keys, John B., <i>et al.</i> (See Huewe, George A., assignor.)						
Keys, Lee & Huowe Company. (See Huewe, George A., assignor.)						
Keys, Thomas, Chicago, Ill. Chimney-cowl	471,388	Mar. 22	2708	690	58	1652
Keyser, Algernon S., Philadelphia, Pa. Clock attachment for bicycles	477,423	June 21	1896	467	59	1839
Keyser, Frederick, Philadelphia, Pa. Sash-holder	471,241	Mar. 22	2486	631	58	1608
Keyser, George W., Indianapolis, Ind. Flushing tank	473,882	Apr. 26	2983	752	59	616
Keyser, John H., New York, N. Y. Combined radiating and hot water or air heating furnace.	480,103	Aug. 2	545	138	60	686
Keystone Driller Company. (See Downie, Robert M., assignor.)						
Keystone Electric Company. (See Sturgeon, Carson J., assignor.)						
Keystone Manufacturing Company. (See Packer, George W., assignor.)						
Keystone Mast Arm Company. (See Kim, George M., assignor.)						
Keystone Wagon Company. (See Kern, Albert L., assignor.)						
Keystone Watch Case Company. (See Johanson, Olof, assignor.)						
Keystone Watch Case Company. (See Mink, Fritz, assignor.)						
Keyworth, William W., <i>et al.</i> (See Miller, Russell C., assignor.)						
Kheiralla, Ibrahim G., and A. F. Haddad, Cairo, Egypt. Book or envelope for theaters or other places of amusement	473,703	Apr. 26	2707	681	59	563
Kibby, Alex. S., Chicago, Ill. Combined whip-socket and lock for lap-ropes	475,982	May 31	3353	845	59	1341
Kibby, Alexander S., Chicago, Ill. Whip-socket	472,543	Apr. 12	838	214	59	173
Kibby, Alexander S., Chicago, Ill. Coin-controlled vending apparatus	481,280	Aug. 23	2488	613	60	1100
Kibele, Cuno, Bluffton, Ind. Hatch-door	486,341	Nov. 15	1853	487	61	983
Kibler, John B., Minneapolis, Minn. Toy cannon	471,558	Mar. 29	2946	750	58	1705
Kibler, John B., Minneapolis, Minn. Toy	473,556	Apr. 26	2466	624	59	517
Kidd, Edward Z., Deadwood, S. D. Lawn-mower	470,578	Mar. 8	1468	382	58	1390
Kidd, Gideon P., Roann, assignor of one-half to J. H. Barnhart, Wabash county, Ind. Wire stretcher	472,927	Apr. 12	1391	356	59	279
Kidd, W. C., <i>et al.</i> (See Goetz, Victor J., assignor.)						
Kidd, William H., Santa Rosa, Cal. Saw-handle	472,890	Apr. 12	1335	342	59	267
Kidder, Claude, Carlton, Minn. Machine for measuring and registering the measurement of lumber	485,946	Nov. 8	1210	319	61	836
Kidder, Wellington P., Boston, Mass., assignor of one-third to C. B. Smyth. Type-writing machine	471,794	Mar. 29	3324	846	58	1774
Kidder, Wellington P., Boston, Mass., assignor of one-third to C. B. Smyth. Type-writing machine	471,795	Mar. 29	3327	847	58	1775
Kiddie, Andrew W., Southport, England. Means for dividing bread and applying butter thereto	470,200	Mar. 8	857	211	58	1274
Kidwell, John H., <i>et al.</i> (See Deardorff, Benton, assignor.)						
Kieckhefer, August, and G. Cadman, Milwaukee, Wis.; said Cadman assignor to said Kieckhefer. Elevator-valve	477,055	June 14	1288	313	59	1708
Kiefer, Karl, Worms, Germany. Type-writing machine	468,663	Feb. 9	1181	301	58	764
Kiefer, Karl, Cincinnati, Ohio. Funnel	482,578	Sept. 13	1100	267	60	1564
Kiefer, Karl, Cincinnati, Ohio. Barrel-filler	487,531	Dec. 6	490	129	61	1418
Kiefer, Karl, Cincinnati, Ohio. Faucet	487,866	Dec. 13	1036	259	61	1544
Kiefer, Peter, Jr., Cincinnati, Ohio. Furnace	474,173	May 3	447	108	59	724
Kiehl, Hermann, Halle-on-the-Saale, Germany, assignor to J. Meyerfeld, San Francisco, Cal. Mannal cash-recorder	484,742	Oct. 18	1887	481	61	407
Kiehner, John T., Philadelphia, Pa. Boring-tool	469,503	Feb. 23	2495	640	58	1036
Kienardt, John A., assignor of one-half to A. E. Singer, Dayton, Ohio. Cash register and indicator	477,598	June 21	2176	539	59	1895
Kierolf, Salem E., Jackson, Tenn. Carriage-top	482,254	Sept. 6	546	130	60	1441
Kierst, John J., New York, N. Y. Building-material elevator	480,329	Aug. 9	936	237	60	772
Kies, Harry E., assignor of one-half to B. J. Walker, Erie, Pa. Car-coupling	477,258	June 21	1643	401	59	1789
Kieser, Charles, Baltimore, Md., assignor to St. Louis Improved Shear and Tool Manufacturing Company, St. Louis, Mo. Shearing-machine	472,928	Apr. 12	1392	357	59	279
Kiggins & Tooker Company. (See Rooney, John, assignor.)						
Kilbourn Knitting Machine Company. (See Gilbert, George H., assignor.)						
Kilbourn, Washington H. (See Tirrell, Jacob P., assignor.)						
Kilbourn, Washington H., Greenfield, Mass., assignor to J. A. Spalding, Hartford, Conn. Automatic valve-controller	470,143	Mar. 1	742	184	58	1243
Kilbourn, Washington H., assignor to A. J. Smart and J. E. Hubbard, Greenfield, Mass. Temperature-regulator	479,761	July 26	2683	666	60	561
Kilburn, Lucien M., Council Bluffs, Iowa, and S. Van Etten, Omaha, Nebr. Electric gas-lighter	488,012	Dec. 13	1273	317	61	1591
Kiley, Daniel, Brooklyn, N. Y. Balanced valve	466,690	Jan. 5	597	155	58	116
Kiley, John, Boston, Mass. Staircase	475,016	May 17	1821	461	59	1014
Kiley, Michael J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Kilgore, Fredrick O., assignor of one-half to F. S. Lane, Minneapolis, Minn. Gang-saw mill	471,125	Mar. 22	2308	592	58	1576
Kilgore, John S., Salida, Colo. Folding seat	488,436	Dec. 20	1982	495	61	1748
Killian, George W., assignor of one-half to G. R. Erisman, Lancaster, Pa. Vehicle-shaft holder.	468,565	Feb. 9	1039	264	58	736
Killinger, John, Wayne, Pa. Garment-book	485,389	Nov. 1	373	100	61	649
Killinger, Melross M., Battle Creek, Nebr., assignor to F. A. Grinnell, Wytheville, Va. Window-shade	482,797	Sept. 20	1442	357	60	1642
Killinger, Melross M., Battle Creek, Nebr., assignor to F. A. Grinnell, Wytheville, Va. Window shade or screen	482,798	Sept. 20	1443	358	60	1643
Kilmer, Irving A., Newburg, N. Y. Bale-tie	476,654	June 7	645	157	59	1565
Kilmer, Irving A., Newburg, N. Y. Barb wire machine	479,985	Aug. 2	329	81, 82	60	645
Kilmer, Ransom, Newburg, N. Y. Nut-lock	470,493	Mar. 8	1358	353	58	1367
Kilmer, Ransom, Newburg, N. Y. Bale-tie	479,984	Aug. 2	328	80	60	645
Kilpatrick, Charles H. (See Cline and Kilpatrick.)						
Kim, George M., assignor to Keystone Mast Arm Company, Allegheny, Pa. Electric-light support	473,229	Apr. 19	1916	482	59	388

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Kimball, Arden D., Chicago, Ill. Puzzle-box	467,816	Jan. 26	2454	623	58	490
Kimball, Charles F., Chicago, Ill. Vehicle-pole socket	485,947	Nov. 8	1213	320	61	837
Kimball, David F. (See Collett, Austin B., assignor.)						
Kimball, Eben A., Brockton, Mass. Machine for turning irregular forms	471,006	Mar. 15	2125	545	58	1527
Kimball, Elbridge E., Peabody, Mass. Thill-coupling	470,892	Mar. 15	1948	499	58	1493
Kimball, Frank A., <i>et al.</i> (See Turner, Alonzo G., assignor.)						
Kimball, Frederic N., Rochester, N. Y. Sash-balance	479,150	July 19	1671	418	60	353
Kimball, George A., Seattle, Wash. Automatic trolley-disconnector	481,956	Sept. 6	52	12	60	1344
Kimball, Jesse, New Madrid, Mo. Road-cart	482,579	Sept. 13	1102	267	60	1564
Kimball, Perley L., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Float for creaming-cans	469,149	Feb. 16	1931	494	58	922
Kimball, Perley L., assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Butter-worker	478,113	July 5	54	15	60	13
Kimball, Stephen H., Everett, Mass. Velocipede	471,358	Mar. 22	2660	675	58	1643
Kimball, Stephen H., Everett, Mass. Wheel	487,017	Nov. 29	2971	765	61	1234
Kimball, Stephen H., Everett, Mass. Bicycle	487,018	Nov. 29	2973	765 766	61	1234
Kimball, William M. (See Marston and Kimball.)						
Kimbark, S. P. (See Finn, Edwin, assignor.)						
Kimber, Arthur C., New York, N. Y. Portable vessel	482,363	Sept. 13	756	182	60	1498
Kimberlin, Milton, Nabb, Ind. Harvester	482,924	Sept. 20	1640	412	60	1681
Kimberly, Peter L., Sharon, Pa. Rolling-mill	483,929	Oct. 4	606	154	61	125
Kimble, James P., Rose Hill, Iowa. Track-clamp	477,943	June 28	2752	689	59	2023
Kimbrell, William P., Beaver City, Nebr. Windmill	487,750	Dec. 13	841	214 215	61	1506
Kimbrow, Robert L., <i>et al.</i> (See Wilson, William H., assignor.)						
Kimberly, William L., Grand Rapids, Mich. Combined folding bed and dressing-case	484,765	Oct. 18	1928	491	61	417
Kimman, Frederick G. (See Heaphy, John W., Jr., assignor.)						
Kimmol, David O., and J. Keck, Dayton, Ohio. Barrel-hoist	469,703	Mar. 1	50	16	58	1108
Kimmell, Granger G., Farmer, assignor of one-fourth to W. W. Kimmell, Bryan, Ohio. Corn harvester and shocker	481,036	Aug. 16	2039	508 509 510 511	60	1002
Kimmell, Willber W. (See Kimmell, Granger G., assignor.)						
Kincaid, Charles T., Decatur, Ill. Car-coupling	487,751	Dec. 13	844	215	61	1506
Kindermann, Oskar, Leipsic, Germany, assignor to H. Willford, Kingston, England. Manufacturing lithographic plates	469,704	Mar. 1	51		58	1108
Kindl, Frederick H., and C. V. Childs, Pittsburg, Pa. Builder's chart	472,266	Apr. 5	408	105	59	76
Kindle, Andrew H., assignor of one-half to C. H. Mason, Versailles, Mo. Chicken-coop	479,514	July 26	2290	572	60	488
Kindleberger, Jefferson, assignor to M. S. Babcock, San Diego, Cal. Car coupling	481,907	Aug. 30	3514	860	60	1312
Kindred, James, assignor to Boynton & Plummer, Worcester, Mass. Drilling-machine	480,907	Aug. 16	1845	459	60	965
King, Charles, Detroit, Mich., assignor to Farren Brothers Company, New Haven, Conn. Bed-spring	477,181	June 14	1491	365	59	1749
King, Charles A., Meriden, Conn. Ejector mechanism for breech-loading firearms	470,157	Mar. 1	765	190	58	1247
King, Charles A., Meriden, Conn. Storage-tank for liquid fuel	471,615	Mar. 29	3027	770	58	1719
King, Charles A., Jacksonville, N. J. Grubbing-machine	473,191	Apr. 19	1852	466 467	59	375
King, Charles A., Boston, Mass. Automatic nozzle	478,698	July 12	958	238	60	206
King, Charles E. (See Peirce and King.)						
King, Charles L., Montagne, Mich. Shipping-package	469,744	Mar. 1	120	32	58	1123
King, Chauncey P. (See Loggett, Walter L., assignor.)						
King, Christopher C., assignor of one-half to N. A. Hall, Syracuse, N. Y. Cooler	477,425	June 21	1898	467 468	59	1839
King, Clarence E., Washington, D. C. Saw-gage	467,010	Jan. 12	1140	249	58	225
King, Daniel, Finksburg, Md. Tramway-car	467,009	Jan. 12	1136	283 280	58	224
King, Daniel, Finksburg, Md. Steam-boiler	472,731	Apr. 12	1109	285	59	222
King, Daniel S. (See Brown and King.)						
King Drill Company. (See Kesling, Perry, assignor.)						
King, Edward A., St. Joseph, Mo. Cut-off spout	469,575	Feb. 23	2607	609	58	1059
King, Edward C. (See Smith, George W., assignor.)						
King, Edwin L., New Bedford, Mass. Sash-fastener	481,669	Aug. 30	3110	759	60	1233
King, Eustachius, and C. L. Tuch, Philadelphia, Pa. Car-coupling	486,342	Nov. 15	1854	478	61	983
King, Ferdinand, New York, N. Y. Counter and pencil-holder	482,736	Dec. 27	2460	611	61	1859
King, Frank. (See King, James, assignor.)						
King, Frederick J., London, England. Apparatus for making metal boxes	487,186	Nov. 29	3233	828	61	1286
King, George W., Helena, Mont. Fracture apparatus	488,631	Dec. 27	2298	568 569	61	1827
King, Henry C. (See Hitt, Addison W., assignor.)						
King, James, London, England. Lamp-burner attachment	483,253	Sept. 27	2185	550	60	1802
King, James, assignor of one-half to F. King, Gaines Station, Mich. Buggy-top attachment	473,758	Apr. 26	2785	700	59	578
King, James L. O., Fair Play, S. C. Plow-handle clamp	472,657	Apr. 12	996	257	59	202
King, James M., Rochester, Minn. Grain-separator	475,779	May 31	3010	763	59	1275
King, Joe W. (See Carvell, John V., assignor.)						
King, John H., Cincinnati, Ohio, assignor of one-half to R. W. Dugan, Covington, Ky. Sand-strainer for deep wells	472,061	June 28	2933	732	59	2058
King, John O., Altamont, Kans. Broom-head	472,365	Apr. 5	559	145	59	105
King, Joseph F., Montalvo, Cal., and S. B. Stokely, Kansas City, Mo., assignors to Eagle Manufacturing Company, Davenport, Iowa. Bean-harvester	479,600	July 26	2406	599	60	509
King, Justus W., Helena, Mont. Lace-fastener	484,661	Oct. 18	1767	449	61	382
King, Lincoln, New York, N. Y. Safety-hook	486,181	Nov. 15	1601	425	61	932
King, Lincoln, New York, N. Y. Indicator-lock	487,276	Dec. 6	61	19	61	1334
King, Phineas F. (See Beaudry and King.)						
King, Phineas F., Malden, Mass. Elastic overdraw head-check for bridles	469,653	Feb. 23	2707	696	58	1081
King, Richard E. (See Diamond, James, assignor.)						
King, Richard T., Anpleton City, Mo. Washing-machine	485,765	Nov. 8	937	251	61	781
King, Richard W., Wichita, Kans. Railway construction	470,641	Mar. 8	1561	406	58	1409
King, Robert W., Montreal, Canada. Knitting-machine	479,986	Aug. 2	334	82 83 84 85 86 87	60	645
King, Samuel R., Cambridge, Mass. Bottle-washer	487,842	Dec. 13	997	251	61	1537

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
King, Sidney D., Pittston, Pa. Car-truck	471,644	Mar. 29	3068	{ 780 781 }	58	1727
King, Thomas J., Hester Mills, Tenn. Egg-crate	466,691	Jan. 5	599	155	58	116
King, Thomas S., Cincinnati, Ohio. Vehicle-spring	467,376	Jan. 19	1741	445	58	347
King, Warren M. (See Park, Francis, assignor.)						
King, William, Brooklyn, assignor to C. F. Imbrie, New York, N. Y. Fishing-reel	467,482	Jan. 19	1904	487	58	379
King, William E. (See Christy, Charles, Jr., assignor.)						
King, William E., Newark, N. J. Hame-tug	486,379	Nov. 15	1910	505	61	995
King, William E., and W. R. Walpole, Chicago, Ill. Combination-tool for bicyclists	475,780	May 31	3011	764	59	1275
King, William H., New Haven, Conn. Sash-fastener	476,050	May 31	3448	870	59	1361
Kings, Andrew J. (See Summers, Kings, and Hardesty.)						
Kingsbury, Charles, Yonkers, N. Y. Device for repairing tape-measures	475,944	May 31	3294	831	59	1330
Kingsbury, Edward D. (See Dalbey, William H., assignor.)						
Kingsbury, William G., et al. (See Vogt, August G., assignor.)						
Kingsford, Thomson. (See Gunston, Byron M., assignor.)						
Kingsland, Philip S., Chicago, Ill. Elastic scraper for flue-cleaners	475,506	May 24	2587	653	59	1180
Kingsley, Elisha L., assignor of one-half to E. I. Rice, Syracuse, N. Y. Device for damp- ening envelopes	474,174	May 3	448	103	59	724
Kingsley, Henry E., Sweet Home, Ark. Shingle-edging machine	471,180	Mar. 22	2394	610	58	1591
Kingzett, Charles T., London, England. Inhaler	468,347	Feb. 9	695	172	58	668
Kinipple, Walter R., London, England. Overland ship conveyance	481,405	Aug. 23	2688	660	60	1135
Kinipple, Walter R., London, England. Apparatus for carrying ships, &c., upon railways	485,044	Oct. 25	2399	{ 616 617 }	61	522
Kioley, Edward A., Breesport, N. Y. Car-brake	473,319	Apr. 19	2051	515	59	416
Kinnear, William R., Columbus, Ohio. Sheet-metal-bending machine	468,462	Feb. 9	862	{ 218 219 }	58	701
Kinnear, William R., Columbus, Ohio. Railway-tie	483,154	Sept. 27	2002	{ 506 507 }	60	1767
Kinney, Amos P., assignor to American Steam Gauge Company, Boston, Mass. Safety-valve	485,699	Nov. 8	833	224	61	760
Kinney, Jesse, Detroit, Mich. Disinfecting and deodorizing cover for commodos, water- closets, &c.	482,966	Sept. 20	1708	431	60	1695
Kinney, William A. (See Shaffer, John D., assignor.)						
Kinsey, Joseph W. (See Wright, Parvin, assignor.)						
Kinsey, Oliver, trustee. (See Patterson and Kirby, assignors.)						
Kinsley, Frank. (See Frisbie, Henry R., assignor.)						
Kinsley, William B., Melrose, Mass. Gore-marker	481,305	Aug. 23	2531	621	60	1106
Kinsman, Frank E., Plainfield, N. J. Railway circuit-closer	470,806	Mar. 15	1818	467	58	1468
Kinsman, Frank E., Plainfield, N. J. Means for automatically operating throttle-valves for steam-engines	470,825	Mar. 15	1857	476	58	1475
Kinsman, Frank E., Plainfield, N. J. Insulating-chair for rails	486,477	Nov. 22	2065	547	61	1039
Kinsman, Frank E., Plainfield, N. J. Contact-rail	487,752	Dec. 13	845	215	61	1506
Kinsman, James W., San Francisco, Cal. Hoisting apparatus	475,963	May 31	3325	839	59	1335
Kinsman, James W., San Francisco, Cal. Swinging crane	488,076	Dec. 13	1396	347	61	1617
Kinsman, Thomas H., Omaha, Nebr. Bread-board	488,712	Dec. 27	2426	601	61	1852
Kint, Daniel, assignor of one eighth to G. H. Arne, Alpena, S. D. Car-coupling	476,749	June 7	782	192	59	1593
Kintner, Alcuin E., Painesville, Ohio. Magnetic lock	468,807	Feb. 16	1404	356	58	818
Kintner, Alcuin E., Painesville, Ohio. Wire-tension device	476,655	June 7	646	157	59	1565
Kintner, Charles J., New York, N. Y. System of electrical conductors	473,912	May 3	76	15, 16	59	651
Kintzing, Ralston C., Brooklyn, N. Y. Dynamo or motor	470,057	Mar. 1	620	154	58	1219
Kinzel, John C., Knoxville, Tenn. Brick-kiln	471,769	Mar. 29	3371	835	58	1765
Kinzel, John C., Knoxville, Tenn. Drying and burning brick	485,199	Nov. 1	71	22	61	587
Kinzel, Armand F., San Francisco, Cal. Table	477,424	June 21	1897	467	59	1839
Kipp, A. B. (See Morris, George W., assignor.)						
Kipp, Abraham, Jr., Sing Sing, N. Y. Clutch	488,821	Dec. 27	2589	642	61	1885
Kipp, John, Sr., Piqua, Kans. Corn cutter or harvester	479,815	Aug. 2	61	14	60	594
Kirby, James A., assignor of two-thirds to G. R. Jenkins and C. F. Burns, Chicago, Ill. Thill-coupling	480,772	Aug. 16	1639	410	60	924
Kirby, John, Marengo, Iowa. Cultivator	469,807	Mar. 1	229	58	58	1145
Kirby, John, Jr. (See Kittredge and Kirby.)						
Kirby, John, Jr. (See Patterson and Kirby.)						
Kirby, John, Jr., Dayton, Ohio. Duplicating-register	469,665	Feb. 23	2730	{ 702 703 }	58	1086
Kirby, John, Jr., Dayton, Ohio. Autographic register	469,666	Feb. 23	2732	703	58	1087
Kirby, John, Jr., Dayton, Ohio. Autographic register	469,667	Feb. 23	2737	704	58	1088
Kirby, John, Jr., assignor to Dayton Manufacturing Company, Dayton, Ohio. Lamp	483,155	Sept. 27	2003	507	60	1767
Kirby, John, Jr., assignor to Dayton Manufacturing Company, Dayton, Ohio. Lamp	484,323	Oct. 11	1220	{ 311 312 }	61	260
Kirby, Remembrance L., Pomeroy, Wash. Riding-harrow	473,933	May 3	81	16	59	652
Kirby, Remembrance L., Pomeroy, Wash. Clevis	474,747	May 10	1381	349	59	915
Kirby, William A., Auburn, N. Y. Sheaf-carrier	481,144	Aug. 16	2243	{ 552 553 }	60	1039
Kircher, Frederick, assignor of one-half to L. Gloeckner, New York, N. Y. Rotary-blade cutting-machine	480,387	Aug. 9	1032	250	60	790
Kirelhoof, Adolf, Long Island City, N. Y. Flexible ladder	487,393	Dec. 6	252	68	61	1371
Kirchner, Henry W., Denver, Colo. Elevated railway	485,700	Nov. 8	834	224	61	760
Kirchner, Louis Poughkeepsie, N. Y. Funnel	477,011	June 14	1217	245	59	1694
Kirk, Alva H., Fergus Falls, Minn. Wheat-separator	479,816	Aug. 2	62	14, 15	60	594
Kirk, Arthur S. (See Jennings, Stephen A., assignor.)						
Kirk & Co., James S. (See Domeier and Hagemann, assignors.)						
Kirk, Edward, Jr., Chicago, Ill. Deflector for radiators	484,638	Oct. 18	1718	435	61	371
Kirk, Franklin P., Hcboken, N. J. Awning	468,942	Feb. 16	1615	409	58	859
Kirk, John, and B. Lee, Leeds, England. Apparatus for finishing cloth	473,398	Apr. 19	2202	552	59	444
Kirk, Joseph S. (See Rice and Kirk.)						
Kirk, Wallace R., Kansas City, Mo. Railway-siding	474,665	May 10	1254	{ 320 321 }	59	890
Kirk, Wallace R., Kansas City, assignor of one-half to J. P. Jackson, Independence, Mo. Car wheel and axle	474,836	May 17	1535	391	59	958
Kirk, William F. (See McLanahan and Kirk.)						
Kirkgaard, Georg, Brooklyn, N. Y. Electric arc lamp	485,744	Nov. 8	910	244	61	776
Kirker, James M., and F. M. Bender, Louisville, Ky. Fire appliance	487,418	Dec. 6	310	80	61	1383
Kirkham, John J., Terre Haute, Ind. Gas-generator	479,647	July 26	2480	617	60	523
Kirkham, Thomas C., Highland Creek, Canada. Vending-machine	488,610	Dec. 27	2263	561	61	1821
Kirkpatrick, Edgar T., assignor of one-half to J. Scudder, Adrian, Mo. Billet-loop	477,056	June 14	1291	313	59	1708
Kirkpatrick, George W., Macedon, N. Y. Seeding-machine	473,891	Apr. 12	1336	342	59	267

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Kirkpatrick, George W., Macedon, N. Y. Grain-drill	486,343	Nov. 15	1856	488	61	983
Kirkpatrick, George W., Macedon, N. Y., and J. B. Ralston, Vernon, Tex.; said Ralston assignor to H. M. Kirkpatrick, Macedon, N. Y. Seeding-machine	485,948	Nov. 8	1214	320	61	837
Kirkpatrick, Helen M. (See Kirkpatrick and Ralston, assignors.)						
Kirkpatrick, Robert S., assignor of two-thirds to A. P. Chamberlin and E. Chavannes, Des Moines, Iowa. Car-coupling	482,010	Sept. 6	139	34	60	1363
Kirkpatrick, Samuel H. (See Johnson and Kirkpatrick.)						
Kirkpatrick, Samuel P. (See Haffner and Kirkpatrick.)						
Kirksey, Cicero L., and F. P. Bowden, Dover, Ark. Drag-sawing machine	4-3,630	Oct. 4	168	42	61	35
Kirkwood, Jay W., <i>et al.</i> (See Kirkwood, John D., assignor.)						
Kirkwood, John D., Pullman, Wash., assignor to E. Bartsch, San Francisco, Cal., and J. W. Kirkwood, Ham's Fork, Wyo. Vaginal syringe	478,872	July 12	1231	305	60	259
Kirsch, Francis, East St. Louis, Ill. Roll-paper printer and cutter	485,701	Nov. 8	835	224	61	761
Kirshner, Michael, Philadelphia, Pa. Knitting-machine	479,601	July 26	2408	600 601	60	510
Kirst, William P., <i>et al.</i> (See Wall, Charles W., assignor.)						
Kirsten, Oscar. (See Doelger and Kirsten.)						
Kirwan, James E., Jr. (See Kirwan, John P. and J. E., Jr.)						
Kirwan, John P. and J. E., Jr., Pittsfield, Mass. Car-coupling	470,579	Mar. 8	1470	383	58	1390
Kirwin, Eliza, Indianapolis, Ind. Pessary	475,453	May 24	2499	637	59	1163
Kiser, Alvie V., West Liberty, Ohio. Corn-harvester	486,255	Nov. 15	1723	454 455	61	956
Kiser, Charles F., Shippensburg, Pa. Combined stop-cock and check-valve	470,058	Mar. 1	621	154	58	1220
Kussling, Otto, Stuttgart, Germany. Writing-desk	478,336	July 5	427	104	60	86
Kitchell, Joseph F. (See Bannach, John, assignor.)						
Kitsmiller, Joel, Chicago, Ill. Tool for upsetting ends of metal tubes	472,504	Apr. 5	782	200	59	148
Kitson, John, St. Louis, Mo. Furnace for melting glass	485,390	Nov. 1	374	101	61	649
Kitson Machine Company. (See Morton, Albert H., assignor.)						
Kittel, Julius, Cranford, N. J. Felting-machine	480,592	Aug. 9	1347	335	60	851
Kitten, Florens, Ferdinand, Ind. Gearing for traction-engines	477,057	June 14	1291	313	59	1708
Kittleson, Even E., Albany, Wis. Reel-carrier	481,328	Aug. 23	2569	630 631	60	1114
Kittredge, Arthur M., and J. Kirby, Jr., Dayton, Ohio. Vestibule connection for cars	474,796	May 10	1464	372	59	932
Kjellström, Mary S., New York, N. Y. Street-sweeper	472,366	Apr. 5	561	145	59	105
Kjorstad, Ole, Eau Claire, Wis. Electric belt	488,013	Dec. 13	1275	317	61	1591
Klahn, Emil, Jersey City, N. J., assignor to Waterbury Watch Company, Waterbury, Conn. Watch-regulator	470,298	Mar. 8	1027	263	58	1307
Klahr, Joseph, Hamburg, Pa. Wood-bending machine	485,800	Nov. 8	976	262	61	790
Klank, Albert L., Champaign, Ill. Device for holding open grain and other sacks for filling same	481,957	Sept. 6	53	12	60	1345
Klapperich, John W., assignor of one-half to J. H. Thomas, Chicago, Ill. Chalk-holder	469,150	Feb. 16	1932	495	58	923
Klapperich, John W., assignor of one-half to J. H. Thomas, Chicago, Ill. Sash-fastener	472,364	Apr. 5	559	144	59	105
Klar, Joseph, and F. H. Hall, Anna, Ill. Animal-trap	477,126	June 14	1397	340	59	1729
Kleb, Fred W. (See Kleb, Johann H., assignor.)						
Kleb, Johann H., assignor of one-half to F. W. Kleb, Newark, N. J. Artificial stone	476,542	June 7	475	113	59	1531
Klebba, Alexander R., <i>et al.</i> (See Burton, Clarence A., assignor.)						
Kleber, Harry, <i>et al.</i> (See Ellis, Josiah W., assignor.)						
Kleber, Oscar, <i>et al.</i> (See Ellis, Josiah W., assignor.)						
Klee, Jacob. (See Taylor and Falk, assignors.)						
Klein, Anthony N., San Francisco, Cal. Letter-box	476,657	June 7	648	157	59	1565
Klein, Charles J., New York, N. Y. Electric switch	467,540	Jan. 26	2024	512	58	409
Klein, Charles J., New York, N. Y. Support for electric lamps	471,645	Mar. 29	3070	781	58	1727
Klein, Charles J., assignor to Interior Conduit and Insulation Company, New York, N. Y. Electrical switch	477,374	June 21	1826	447	59	1824
Klein, Charles J., assignor to Bergmann & Company, New York, N. Y. Incandescent-electric-lamp socket	484,207	Oct. 11	1031	262	61	923
Klein, Henry C., Muncie, Ind. Cannon-pinion for timepieces	476,656	June 7	647	157	59	1565
Klein, Jacob, New York, N. Y. Match-heading composition	485,103	Oct. 25	2483		61	540
Klein, Jacob B. (See Callahan, Frank C., assignor.)						
Klein, John M., Chicago, Ill. Wire stretcher or clamp	481,179	Aug. 23	2303	568	60	1065
Klein, John S., Oil City, Pa. Atomizer	473,759	Apr. 26	2786	700 701	59	578
Kleinberger, Isaak, New Haven, Conn. Safety-pocket	484,435	Oct. 18	1406	358	61	309
Kleineick, Hugo, Newark, N. J. Valve for violin-cases	467,724	Jan. 26	2313	587	58	462
Kleinert, Robert, assignor to Körner & Schults, Breslau, Germany. Car-coupling	482,904	Sept. 20	1614	404	60	1676
Kleinfeldt, Arthur. (See Waeber and Kleinfeldt.)						
Kleinfeldt, Arthur, New York, and F. P. McColl, Brooklyn, N. Y. Sheet-metal can	466,991	Jan. 12	1111	281	58	220
Kleinfeldt, Arthur, New York, and F. P. McColl, Brooklyn, N. Y. Sheet-metal can	466,992	Jan. 12	1112	281	58	220
Kleinsorge, August, Ballwin, Mo. Brake for wagons	476,658	June 7	650	158	59	1566
Kleinstihr, Abel, assignor of one-half to B. S. Van Tuyl, Petrolea, Canada. Separator	467,133	Jan. 12	1362	347 348	58	267
Kleitz, Alois and C. L. Sigourney, Iowa. Rope take-up	488,565	Dec. 27	2195	542	61	1807
Kleitz, Carl L. (See Kleitz, Alois and C. L.)						
Klem, Carl R. P., Riga, Russia. Straightening-belt	470,839	Mar. 15	1880	481	58	1479
Klenha, Václav, assignor of two-thirds to M. Brennan and J. Leno, Chicago, Ill. Under-taker's convertible stand	485,801	Nov. 8	978	262 263 225	61	790
Kletzker, Albert J., and J. G. Goessel, St. Louis, Mo. Matrix-making machine	485,702	Nov. 8	836	226 227	61	761
Kliemetschek, Adolph. (See Sobotka and Kliemetschek.)						
Kliemetschek, Adolph, assignor to Fleischmann & Co., New York, N. Y. Washing yeast	470,361	Mar. 8	1146	293	58	1327
Kline, David, assignor of two-thirds to A. D. Power and E. A. Stouffer, Akron, Ohio. Oil-burner for boilers, furnaces, &c	469,211	Feb. 16	2042	521 522	58	941
Kline, David F. (See Daily, Hiram, assignor.)						
Kline, Frank W., North Germantown, N. Y. Throttle-valve lever	470,494	Mar. 8	1358	353	58	1367
Kline, Frank W., and G. G. Thomas, Edison, Ohio. Neck-yoke	487,277	Dec. 6	62	19	61	1334
Kline, Henry R., Ashtabula, Ohio. Dental plugger	487,643	Dec. 13	998	251	61	1537
Kline, John E., assignor of one-half to W. F. and J. W. Redman, Casey, Ill. Car-coupling	468,348	Feb. 9	696	173	58	668
Kline, John R., assignor of one-half to G. Wogaman, Salem, Ohio. Wire fence	484,554	Oct. 18	1597	403	61	345
Kline, Winfield S., Bolivar, Ohio. Fence	472,578	Apr. 12	882	227	59	182
Kline, Winfield S., and J. C. Parks, Bolivar, Ohio. Dough-raiser and fruit-drier	488,014	Dec. 13	1276	317	61	1592
Kling, Edgar, assignor to I. Kling, Louisville, Ky. Car-coupling	479,371	July 19	2025	506	60	422
Kling, Henry W., Syracuse, N. Y. Composition of matter for fire-kindling	469,086	Feb. 16	1853		58	906

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Kling, Isaac. (See Kling, Edgar, assignor.)						
Kling, Isaac, Louisville, Ky. Car-coupling	467,418	Jan. 19	1801	460	58	358
Kling, Peter M. (See Horstmannshoff, Friedrich W., assignor.)						
Kling, Peter M. (See Verstraete, Edmond, assignor.)						
Kling, Peter M., St. Louis, Mo. Ratchet-brake for cars	485,548	Nov. 1	603	161	61	696
Kling, Peter M., assignor of one-half to E. Verstraete, St. Louis, Mo. Car-truck for electric-railway cars	466,539	Jan. 5	367	91, 92	58	70
Klingenberg, Ernest J., Eau Claire, Wis. Stand or rack for hand-stamps	475,120	May 17	1981	502	59	1046
Klinger, Richard, Vienna, Austria-Hungary. Water-gage	470,858	Mar. 15	1900	466	58	1483
Klingler, Joseph W., Beaver Springs, Pa. Car-coupling	469,576	Feb. 23	2698	669	58	1059
Klingler, Joseph W., Beaver Springs, Pa. Car-coupling	487,532	Dec. 6	492	129	61	1418
Klipfel, Thomas W., Chicago, Ill. Coiled-wire bed-bottom	477,662	June 28	2297	575	59	1934
Klock, Frank B., Little Falls, N. Y. Stop-motion for knitting-machines	484,594	Oct. 18	1640	416	61	356
Klockan, William, Rock Island, Ill. Vehicle sand-band	481,795	Aug. 30	3333	813	60	1277
Klose, Charles, Doniphan, Nebr. Brick-kiln	469,151	Feb. 16	1933	495	58	923
Kling, Paul, Crimmitschau, Germany. Apparatus for smoothing and hardening threads	488,267	Dec. 20	1710	430	61	1696
Klumpp, Louis R. (See Rose, James E., assignor.)						
Knabe, Carl, Osterwieck, Germany. Machine for coloring leather, skins, &c	477,761	June 28	2458	{ 614 615 }	59	1968
Knapp, William H., Indianapolis, Ind. Vaginal syringe	468,151	Feb. 2	368	91	58	596
Knapp, Adam, Jr., Strykersville, N. Y. Combined hand corn-planter and fertilizer-distributor	473,760	Apr. 26	2787	701	59	579
Knapp, Benjamin F., Madison, N. J. Machine for pulverizing sods, manure, &c	473,421	Apr. 19	2236	562	59	451
Knapp, Charles H., et al. (See Wright, Napoleon B., assignor.)						
Knapp, Edgar, Middleport, N. Y. Bean picker and sorter	472,299	Apr. 5	455	{ 117 118 }	59	86
Knapp, Edmond B., assignor of one-half to H. B. White, Riverside, Cal. Trace	473,420	Apr. 19	2235	561	59	451
Knapp, Gardner, Somerville, and C. H. Little, Chelsea, Mass., assignors, by mesne assignments, to Boston Cash Register Company, Portland, Me. Cash indicator and register	481,037	Aug. 16	2047	511	60	1004
Knapp, George S., Chicago, Ill. Crushing and grinding mill	472,367	Apr. 5	563	145	59	106
Knapp, George W., Baltimore, Md. Sheet-metal pipe	466,955	Jan. 12	1954	267	58	209
Knapp, George W., Baltimore, Md. Attaching spouts and lips to sheet-metal vessels	487,032	Nov. 29	2992	770	61	1238
Knapp, Gilbert P., New York, N. Y. Display-package	476,765	June 7	805	198	59	1598
Knapp, Isaac N. (See Collins and Knapp.)						
Knapp, Myron A. (See Greene, Grant P., assignor.)						
Knapp, Oscar, Brooklyn, N. Y. Speed-measure	483,846	Oct. 4	486	121	61	100
Knapp, Shepard, et al. (See Saxton, Harry J., assignor.)						
Knapp, William H., Kalamazoo, Mich. Grain-carrier	483,617	Oct. 4	152	37	61	32
Knappe, Paul, et al. (See Perkins, Duane T., assignor.)						
Knapper, Joseph. (See Nelson, Knapper, and Taylor.)						
Knaub, William R. (See Brown and Knaub.)						
Knauss, Frank V., assignor to Portsmouth Stove and Range Company, Portsmouth, Ohio. Oven-door for cooking stoves or ranges	483,117	Sept. 20	1939	491	60	1743
Knecht, Charles W. (See Knecht, Edwin R. and C. W.)						
Knecht, Edwin R. and C. W., Shelbyville, Ill. Animal-trap	480,593	Aug. 9	1348	336	60	851
Kneeland, Charles L., Lansing, Mich. Butter-package	485,011	Oct. 25	2347	604	61	511
Kneefelkamp, Charles H. (See Stoeppelwerth and Knefelkamp.)						
Kneip, William F., Ypsilanti, Mich. Undershirt	472,672	Apr. 12	1022	264	59	206
Knell, James W., (by judicial change of name now Neilson Burgess,) Highlands, N. J. Apparatus for producing illusory dramatic effects	471,126	Mar. 22	2310	593	58	1576
Knell, James W., (by judicial change of name now Neilson Burgess,) Highlands, N. J. Apparatus for producing illusory dramatic effects	471,127	Mar. 22	2311	593	58	1576
Kneuper, Frederick J. (See Huber and Kneuper.)						
Knickerbocker, John. (See Bootman, William H., assignor.)						
Knickerbocker, John. (See Hughes, Robert, assignor.)						
Knickerbocker, Thomas A., Troy, and R. Hughes, Waterford, N. Y. Fire hydrant or plug	488,015	Dec. 13	1277	318	61	1592
Knickerbocker Company. (See Morse, Orville M., assignor.)						
Knickerbocker, James B., Indianapolis, Ind. Pressure-regulator	468,007	Feb. 2	153	37	58	553
Knickerbocker, James B., assignor to Knickerbocker Meter Company, Indianapolis, Ind. Gas-meter	468,008	Feb. 2	155	37, 38	58	554
Knickerbocker, James B., assignor to Knickerbocker Meter Company, Indianapolis, Ind. Diaphragm meter	488,504	Dec. 20	2093	520	61	1772
Knickerbocker Meter Company. (See Knickerbocker, James B., assignor.)						
Kniffen, Le Grand, Chicago, Ill. Tower or observatory	467,639	Jan. 26	2170	552	58	436
Knight, Abram C., Philadelphia, Pa. Hammock-stretcher	483,930	Oct. 4	609	154	61	126
Knight, Charles A., Brooklyn, assignor to New York Condensed Milk Company, New York, N. Y. Bottle-basket	476,150	May 31	3615	913	59	1395
Knight, Ebenezer R., St. Johns, Canada. Seed-planter	483,066	Sept. 20	1861	472	60	1728
Knight, Edward M., San Francisco, Cal. Filter	468,664	Feb. 9	1185	302	58	765
Knight, Francis E., New York, N. Y. Game apparatus	483,324	Sept. 27	2299	578	60	1822
Knight, George E., Boston, Mass. Canister	472,892	Apr. 12	1337	343	59	263
Knight, George F., Canton, Ohio. Sawmill-dog	483,223	Sept. 27	2113	536	60	1789
Knight, George F., Canton, Ohio. Sawmill-dog	483,224	Sept. 27	2115	536	60	1789
Knight, Moses G., Oak Cliff, Tex. Railway-crossing	484,100	Oct. 11	860	{ 218 219 }	61	190
Knight, Nute B., Dallas, Tex. Coin-operated boot or shoe blacking machine	484,324	Oct. 11	1223	{ 312 313 }	61	261
Knight, Thaddeus W., Taylor, Tex. Combined corn and cotton planter	486,478	Nov. 22	2067	548	61	1039
Knight, Thomas L., and E. Beckley, London, England. Check issuing and recording apparatus	486,344	Nov. 15	1857	{ 488 489 490 }	61	984
Knight, Webster, Natick, R. I. Loom-temple	468,349	Feb. 9	697	173	58	608
Knight, William R., and W. R. Ownby, assignors of one-third to D. W. McPherson, Rector, Ark. Car-coupling	485,200	Nov. 1	72	22	61	587
Knipke, Henry, Poland, Ind. Scaffold	474,255	May 3	566	139	59	748
Knisley, James H., Bainbridge, Ohio. Hame	470,939	Mar. 15	2019	517	58	1507
Knitter, John, assignor of one-half to G. T. Kollas, St. Louis, Mo. Drnm	478,611	July 12	842	207	60	183
Knoel, Tomas, Auburn, Ind. Toe-weight	477,663	June 28	2297	576	59	1934
Knoeller, Charles E., assignor to J. A. Sutherland, Jersey City, N. J. Clothes-drier	487,533	Dec. 6	494	129	61	1418
Knost, Hermann. (See Eickershoff and Knost.)						
Knost, Julius. (See Eickershoff and Knost.)						
Knott, Charles G., Hamilton, Canada. Inkstand	488,822	Dec. 27	2590	642	61	1886

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Knowels, George S. (See Knowels, John S. and G. S.)						
Knowels, John S. and G. S., assignors of one-fourth to P. S. Keller, Buffalo, Mo. Music-leaf turner.....	475,322	May 24	2281	587	59	1123
Knowles, Daniel, assignor of one-fourth to G. W. Johnson, Norfolk, Va. Fire-escape.....	472,950	Apr. 12	1422	³⁶³ 364	59	284
Knowles, Edward R., Brooklyn, N. Y. Secondary-battery plate.....	480,266	Aug. 9	836	213	60	754
Knowles, Edward R., Brooklyn, N. Y. Battery-connector.....	482,012	Sept. 6	143	35	60	1363
Knowles, Edward R., Brooklyn, N. Y. Storage-battery.....	482,979	Sept. 20	1726	⁴³⁶ 437	60	1699
Knowles, Edward R., Brooklyn, N. Y. Storage-battery.....	483,562	Oct. 4	68	17	61	16
Knowles, Edward R., Brooklyn, N. Y. Storage-battery.....	483,563	Oct. 4	70	17	61	16
Knowles, Edward R., Middletown, Conn. Electric-arc lamp.....	485,327	Nov. 1	270	73, 74	61	627
Knowles, George, Jr. (See Fortier, Charles L., assignor.)						
Knowles, George, Jr. (See Young, George W., assignor.)						
Knowles, George, Jr., Milwaukee, Wis. Electric controlling apparatus for fire-alarms.....	477,214	June 21	1558	³⁸³ 384	59	1775
Knowles, Justus E., Lynn, Mass. Combination-lock.....	474,017	May 3	210	50	59	678
Knowles Loom Works. (See Hollingworth, Edward, assignor.)						
Knowles Loom Works. (See Hutchins, George F., assignor.)						
Knowles, Louis T., assignor of one-half to J. M. Pullman and G. Taylor, Minneapolis, Minn. Car-brake adjuster.....	488,359	Dec. 20	1861	466	61	1728
Knowles, Otis F. (See Beebe, Charles F., assignor.)						
Knowlton, Ephraim H. B., assignor of two-thirds to J. Gunn and P. McGuire, West Superior, Wis. Car-coupling.....	473,761	Apr. 26	2789	701	59	579
Knowlton, George K., Hamilton, Mass. Draining-bucket for washboilers.....	475,571	May 24	2689	682	59	1199
Knowlton, George W., Boston, Mass. Rod-packing.....	487,019	Nov. 29	2974	766	61	1234
Knox, Adam. (See Bryce and Knox.)						
Knox, George A., Lynn, Mass. Sole-edge-burnishing machine.....	480,021	Aug. 2	420	¹⁰⁵ 106 107	60	661
Knox, George A., Lynn, Mass. Heel-burnishing machine.....	486,229	Nov. 15	1673	⁴⁴² 443	61	946
Knox, George F., Chicago, Ill. Gas-compressor.....	466,791	Jan. 12	782	203	58	158
Knox, Orrin A., Bradford, Pa. Oil-well pumping mechanism.....	482,011	Sept. 6	142	34	60	1363
Knox, Orville M., Oneida, N. Y. Railway-tie.....	473,934	May 3	82	17	59	652
Knox, Orville M., Oneida, N. Y. Metallic post or base for fences.....	486,973	Nov. 29	2904	749	61	1221
Knox, Orville M., Oneida, N. Y. Telegraph-pole.....	486,974	Nov. 29	2905	750	61	1221
Knudsen, Andrew, Tucson, Ariz. Ter. Bit-brace.....	487,123	Nov. 29	3139	805	61	1268
Knudsen, Jacob B., Fernwood, Ill. Air-brake.....	468,387	Feb. 9	753	187	58	679
Knudson-Cuttriss Wire Company. (See Cuttriss, Charles, assignor.)						
Knudson, Thurston L., and J. Uhri, Chicago, Ill. Staple forming and driving machine.....	483,254	Sept. 27	2186	⁵⁵⁰ 551	60	1802
Knutson, Ole, Herman, Minn. Harvester-reel.....	473,072	Apr. 19	1637	417	59	337
Knüttel, Friedrich, Charlottenburg, Germany. Pneumatic malting apparatus.....	470,580	Mar. 8	1471	383	58	1390
Koch, Christoph F. (See Faulhaber and Koch.)						
Koch, Ernst H. (See Gutbier and Koch.)						
Koch, John C., Berlin, Germany. Paper box for chess, checkers, &c.....	476,019	May 31	3402	858	59	1352
Koch, John C., Berlin, Germany. Workman's time-recorder.....	478,244	July 5	354	86	60	71
Koch, John C., Berlin, Germany. Watch-chain attachment.....	480,430	Aug. 9	1099	275	60	801
Koch, John C., Berlin, Germany. Album-clasp.....	480,950	Aug. 16	1915	⁴⁷⁸ 479	60	977
Koch, Julius J., St. Louis, Mo. Hydraulic brick-press.....	480,818	Aug. 16	1707	⁴²⁶ 427 428	60	937
Koch, Louis C. (See Woessner, Charles F., assignor.)						
Koch, Nicholas, Chicago, Ill. Sample-trunk tray.....	468,566	Feb. 9	1040	265	58	736
Koch Sons & Company. (See Hafely, Alfred C., assignor.)						
Koch, William. (See Hadley, Charles E., assignor.)						
Koch, William, New York, N. Y. Quilting-machine.....	467,134	Jan. 12	1364	³⁴⁸ 349	58	268
Kochendarfer, Sims E., Hollidaysburg, Pa. Watch-regulator.....	473,422	Apr. 19	2236	562	59	451
Kochler, William H., Bellefonte, Pa. Napkin-supporter.....	488,924	Dec. 27	2755	680	61	1920
Kochner, Martin F. W., Brooklyn, N. Y. Ventilator for hats.....	477,553	June 21	2110	524	59	1882
Koecher, Edmund, assignor to L. Nelke, New York, N. Y. Insect-trap.....	485,815	Nov. 8	994	267	61	793
Koedding, William, assignor of one-half to E. Verstraete, St. Louis, Mo. Dynamo-electric machine.....	476,151	May 31	3616	914	59	1395
Koefoed, Charles J., assignor to Vulcan Iron Works, San Francisco, Cal. Band-saw mill.....	468,303	Feb. 2	619	154	58	643
Koegel, Charles, Holyoke, Mass. Grinder.....	468,350	Feb. 9	697	173	58	669
Koehler, Jean, Freiburg, Germany. Combustible pocket-spittoon.....	478,873	July 12	1232	306	60	259
Koehler, Martin, Toledo, Ohio. Hot-air furnace.....	472,219	Apr. 5	334	86	59	63
Koehler, Henry W., et al. (See Weis, William C. and F. N., assignors.)						
Koeller, Herman A., New York, N. Y. Folding stand.....	479,073	July 19	1549	387	60	330
Koeller, Hermann H., Quincy, Ill. Cash-register.....	480,594	Aug. 9	1350	³³⁶ 337	60	852
Koellhoffer, Julius F., Newark, N. J. Excavating-chisel.....	470,940	Mar. 15	2020	517	58	1507
Koelzer, John, Minneapolis, Minn. Screw-driver.....	470,687	Mar. 15	1631	423	58	1431
Koenen, William, Cleveland, Ohio. Sash-fastener.....	475,572	May 24	2690	682	59	1200
Koenig, Christian, Stockton, Cal. Tricycle.....	487,753	Dec. 13	847	²¹⁵ 216	61	1506
Koenig, Ernst, Moulton, Tex. Plow-stock.....	484,520	Oct. 18	1537	390	61	334
Koenig, Michael, Brooklyn, assignor to S. Zinn, New York, N. Y. Purse-frame.....	468,248	Feb. 2	510	126	58	625
Keopp & Co., Randolph. (See Wachendorff, Carl, assignor.)						
Koerner, Alfred C., Paris, France, assignor to Hotchkiss Ordnance Company, Limited, London, England. Breech-loading gun.....	466,567	Jan. 5	415	¹⁰⁶ 107	58	80
Koerper, Michael B., Little Rock, Ark., assignor to F. S. Strong and F. C. Mann, East Bridgewater, Mass. Friction-pulley.....	469,640	Feb. 23	2687	691	58	1076
Koffelt, Samuel. (See Cook, Thomas W. G., assignor.)						
Kohler & Co., F. E. (See Fager, Anthony, assignor.)						
Kohler, Edward, London, England. Sewing-machine.....	466,906	Jan. 12	978	²⁴⁹ 250	58	195
Kohler, Joseph, Boston, Mass. Hot-air furnace.....	468,424	Feb. 9	808	203	58	691
Kohler, Richard, Brooklyn, N. Y. Slate-muffler.....	485,802	Nov. 8	980	263	61	790
Köhler, Rudolph, Lipine, Germany. Revolving roaster.....	475,060	May 17	1883	⁴⁷⁷ 478	59	1027

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Kohlstedt, Wilhelm, St. Paul, Minn. Combined invalid and center table.....	468,112	Feb. 2	307	74	58	583
Kohn, Jacob, <i>et al.</i> (See Dimpfi, Anton, assignor.)						
Kohn, Jacob W., Newark, N. J. Envelope.....	484,372	Oct. 11	1293	330	61	276
Kohn, Moritz. (See Schubert, Max, assignor.)						
Kohne, John F. (See Young, William F., assignor.)						
Kolb, August R., New York, N. Y. Window-cleaner.....	487,888	Dec. 13	1071	269	61	1551
Kolb, Bernard W., Detroit, Mich. Refrigerator.....	477,944	June 28	2753	690	59	2024
Kolb, Joseph, Belfast, Pa. Snow-plow.....	476,800	June 14	874	215	59	1624
Kolbe, Henry, <i>et al.</i> (See Otto, Peter, assignor.)						
Kolben, Emil, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Armature-conductor and means for insulating the same.....	480,727	Aug. 16	1570	393	60	909
Kolben, Emil, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Ring-armature.....	480,728	Aug. 16	1572	393	60	909
Kolesch, Adolph, Brooklyn, N. Y. Compasses.....	479,329	July 19	1936	484	60	405
Kollas, Frederick, <i>et al.</i> (See Saxton, Harry J., assignor.)						
Kollas, George T. (See Knittel, John, assignor.)						
Kolts, William J., Rondont, N. Y. Bottle-stopper.....	472,761	Apr. 12	1156	296	59	231
Kompst, Friedrich, St. Louis, Mo. Adjustable device for holding receptacles firmly on supports.....	467,419	Jan. 19	1802	460	58	358
Kondakoff, Wladimir, Gatchina, near St. Petersburg, Russia. Horseshoe.....	482,845	Sept. 20	1507	375	60	1656
Koneman, William A., Chicago, Ill. Brick-kiln.....	484,595	Oct. 18	1642	416 417	61	357
Koneman, William A., Chicago, Ill. Gas-producer.....	484,596	Oct. 18	1646	417 418	61	358
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Method of and apparatus for heating with fluid fuel.....	469,857	Mar. 1	307	79	58	1161
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Manufacturing fuel-gas.....	469,858	Mar. 1	309	79	58	1161
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Burning coal-slack.....	469,859	Mar. 1	311	80	58	1161
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Apparatus for utilizing waste heat.....	469,860	Mar. 1	312	80	58	1162
Koneman, William A., assignor to Chicago Heat Storage Company, Chicago, Ill. Gas-producer.....	485,391	Nov. 1	376	101	61	649
Koneman, William A., assignor of one-half to C. G. Singer, Chicago, Ill. Method of and apparatus for recarburizing metals.....	485,392	Nov. 1	378	102	61	650
Konz, Sebastian, Louisville, Ky. Spring chair-bottom.....	486,046	Nov. 8	1369	364	61	869
Konz, Sebastian, assignor of one-half to S. F. Harlan, Louisville, Ky. Machine for making wire springs and couplings.....	482,427	Sept. 13	855	205	60	1516
Koon, Charles, assignor of one-half to W. A. Koon, Whiting, Iowa. Door-spring.....	486,975	Nov. 29	2906	750	61	1922
Koon, Washington A. (See Koon, Charles, assignor.)						
Koonce, John W., Kinston, N. C. assignor of one-half to Oettinger Brothers. Combined rake and broom.....	484,156	Oct. 11	950	244	61	208
Koons, John W., Lehigh, Pa. Lock and latch.....	475,121	May 17	1982	502	59	1046
Koontz, A. F. (See Alexander, James, assignor.)						
Koontz, Ezra P., Ligonier, Ind. Rocking-chair.....	476,152	May 31	3619	915	59	1396
Koontz, John P., assignor of one-half to E. H. Smith and R. M. Davidson, Newark, Ohio. Nut-lock.....	474,837	May 17	1538	391	59	958
Koopman, Elias B., New York, N. Y. Toy.....	488,566	Dec. 27	2196	542	61	1807
Koplin, James L., Rockford, Ill. Dumping-car.....	470,299	Mar. 8	1028	263	58	1308
Koplin, Lebbeus A., Akron, Ohio. Bottle-washing machine.....	472,368	Apr. 5	564	146	59	106
Kopp, Albert, <i>et al.</i> (See Kinderrecht, Charles J., assignor.)						
Koppenhöfer, Philipp, Speyer, Germany. Fastening for shoes, gloves, &c., and lace therefor.....	479,218	July 19	1778	446	60	373
Körber, Johann W. (See Steuth and Körber.)						
Kords, Louis M., Munich, Germany. Camera-shutter.....	477,012	June 14	1218	295	59	1694
Korell, Henry, Hamilton, Ohio. Folding shelf.....	475,323	May 24	2282	583	59	1124
Korman, Bernard. (See Bohlen, Herman H., assignor.)						
Korn, George W. (See Heitricus, Hermann, assignor.)						
Korn, Louis, New York, N. Y. Builder's scaffold.....	488,437	Dec. 20	1983	495	61	1749
Körner & Schulte. (See Kleinert, Robert, assignor.)						
Korsmeyer, Ernst H., Kansas City, Mo. Electro-magnetic mechanism for operating printing-presses.....	483,564	Oct. 4	71	17, 18	61	16
Körting, Ernst, Hanover, Germany. Water or steam boiler.....	469,152	Feb. 16	1936	495	58	923
Korupkat, Frederick, Glenwood Springs, Colo. Horseshoe.....	487,368	Dec. 6	215	59	61	1363
Koskul, Frederick, Williamsport, Pa. Transfer-sheet.....	482,451	Sept. 13	894	217	60	1522
Koss, Louis, Indianapolis, Ind. Machine for making ornamental wire.....	488,941	Dec. 27	2784	686 687	61	1926
Koster, Charles C., New York, N. Y. Damper-regulator.....	486,345	Nov. 15	1862	490	61	984
Koster, Daniel. (See Schilling, Joseph, assignor.)						
Köster, Ernst J. (See Mehrtens, John H., assignor.)						
Kosnie, Thomas H., Farmersville, Tex. Bridge.....	478,438	July 5	580	140 141	60	114
Kovsky, Louisa E. A., Denver, Colo. Spring-scale.....	478,699	July 12	959	238	60	206
Kownslar, C., <i>et al.</i> (See Fitzwater, William M., assignor.)						
Kraetzer, Edwin J., Cambridge, Mass. Buckle.....	483,356	Sept. 27	2339	588	60	1830
Kraetzer, Edwin J., Gloversville, N. Y. assignor to Consolidated Fastener Company, Portland, Me. Glove-fastener.....	470,642	Mar. 8	1562	406	58	1409
Kraft, Ernst F., St. Blasien, Germany. Spindle for spinning machinery.....	482,091	Sept. 6	276	67	60	1390
Kraft, Benjamin F., Reading, Pa. Burglar-alarm.....	476,945	June 14	1120	269	59	1673
Kraft, John U., assignor of one-half to H. Rave, Milwaukee, Wis. Machine for extracting bungs.....	477,599	June 21	2178	540	59	1895
Kraiss, Gustav, Stuttgart, Germany. Pressure-regulating valve.....	468,915	Feb. 16	1574	399	58	851
Krämer, Franz, assignor to L. Merklein, New York, N. Y. Apparatus for sterilizing milk.....	475,122	May 17	1984	503	59	1046
Kramer, George W. (See Weary and Kramer.)						
Kramer, William, assignor of one-half to C. Opitz, Chicago, Ill. Wire-fence stretcher.....	479,817	Aug. 2	63	15	60	504
Kramer, William H., Allegheny, Pa. Pattern for casting brake-shoes.....	485,940	Nov. 8	1216	321	61	838
Krans, Edward L., Slatington, Pa. Slate-muffler.....	473,120	Apr. 19	1720	435	59	350
Krantz, Hubert, assignor to himself and Schaum & Uhlinger, Philadelphia, Pa. Sheet-metal bobbin.....	468,567	Feb. 9	1041	265	58	736
Kraske, Victor, and T. Naernp, Jr., Chicago, Ill. Shutter-worker.....	471,128	Mar. 22	2312	594	58	1576
Krause, Frank B., Cleveland, Ohio. Erasing attachment for penholders.....	473,423	Apr. 19	2237	562	59	451
Krause, Gustave A., assignor of one-fourth to G. C. H. Guettler and G. Kransslach, Milwaukee, Wis. Malting apparatus.....	481,958	Sept. 6	54	13	60	1345

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Krausslach, George, <i>et al.</i> (See Kranske, Gustave A., assignor.)						
Krebs, Paul, Berlin, Germany. Receptacle for bread	467,672	Jan. 26	2223	{ 565 566 }	58	445
Krehbiel, John, Cleveland, Ohio. Car-seat	474,666	May 10	1257	321	59	890
Krehbiel, John, Cleveland, Ohio. Car-coupling	475,573	May 24	2691	682	59	1200
Krehbiel, John, Cleveland, Ohio. Vestibule-car	482,744	Sept. 20	1361	337	60	1626
Krekel, Edward G., <i>et al.</i> (See Bauer, Robert A., assignor.)						
Krekel, Henry G., <i>et al.</i> (See Bauer, Robert A., assignor.)						
Kremelberg, Gertrude J., New York, N. Y. Water-closet	481,498	Aug. 23	2839	698	60	1166
Kremer, Franklin W., Cleveland, Ohio. Coin-controlled striking and strength tester	487,033	Nov. 29	2994	771	61	1238
Kremer, Michel D., New Marion, Ind. Machine for making spring-wire broom-holders	469,911	Mar. 1	392	98	53	1177
Krempelhuber, Fritz von, and J. von Schmaedel, Munich, Germany. Blowpipe soldering device	485,766	Nov. 8	938	251	61	781
Krepps, Virgil A., Kensico, N. Y. Coin receiver and register	486,111	Nov. 15	1497	{ 394 395 }	61	911
Krepps, Virgil A., Kensico, N. Y., assignor, by mesne assignments, to D. I. Caldwell, Lynn, and R. Mills, trustees, and H. W. Mason, Newton, Mass. Vending-machine	479,005	July 19	1445	359	60	311
Kress, John, New York, N. Y. Hoof-pad	483,691	Oct. 4	253	63	61	53
Kretschmar, Carl, Leipsic, Germany. Mechanical musical instrument	471,559	Mar. 29	2947	{ 750 751 }	58	1705
Kietschmer, Emil A., Horicon, Wis. Bow for stringed musical instruments	482,255	Sept. 6	547	130	60	1441
Kreusler, Arnold, Kreischerville, assignor to himself, and A. Zinsser, New York, N. Y. Treating beer	485,012	Oct. 25	2348	605	61	512
Kreuter, Adam. (See Nelson and Kreuter.)						
Kriebs, John. (See Piffner and Kriebs.)						
Kriechhaus, Louis, <i>et al.</i> (See Heidel, Gustavos, assignor.)						
Krieg, Eugene J., Marquette, Mich. Life-preserver	476,277	June 7	71	15	59	1451
Krieg, Theodor, Brunswick, Germany. Apparatus for transmitting power	470,201	Mar. 8	858	212	58	1275
Kringel, Frank W., Los Angeles, Cal. Touch-regulating device for pianos	476,766	June 7	806	198	59	1598
Kriz, Francis C., Milwaukee, Wis. Rein-support	473,583	Apr. 26	2522	636	59	529
Krnka, Karl, assignor to Krnka Repeating Rifle Company, Limited, London, England. Magazine-gun	475,061	May 17	1884	{ 478 479 }	59	1027
Krnka Repeating Rifle Company. (See Krnka, Karl, assignor.)						
Kroemke, Charles. (See Smith, Andrew J., assignor.)						
Kroencke, Jacob E. (See Fiene and Kroencke.)						
Krogh, Emil C. C., assignor of one-half to S. D. and T. B. McGovern, Monmouth, Ill. Thermostatic indicator and adjuster	488,611	Dec. 27	2264	562	61	1821
Krogestad, Hans, and A. Svanson, Minneapolis, Minn. Try-square	466,871	Jan. 12	918	235	58	184
Krom, John H., Creagerstown, and W. H. Biggs, Rocky Ridge, Md. Milking-machine	469,577	Feb. 23	2610	669	58	1060
Krone, Adolph M., Louisville, Ky. Safety nut-lock	471,796	Mar. 29	3329	848	58	1775
Kronenberg, Edward, Philadelphia, Pa. Pocket-lamp or lighting device	480,267	Aug. 9	836	{ 213 214 }	60	754
Kronenberg, Edward, Philadelphia, Pa. Lighting device	480,500	Aug. 9	1209	303	60	823
Kropacek, Joseph J., Irving, Kans. Riveter	478,114	July 5	56	15	60	13
Krolz, Alvaro S., assignor to H. J. Smith, Defiance, Ohio. Valve-gearing	475,691	May 24	2866	725	59	1234
Krotz, Alvaro S., assignor of one-half to A. Sauer, Defiance, Ohio. Electric-current regulator	479,886	Aug. 2	169	42	60	615
Krouse, Charles C., H. E. Myers, and C. L. Girard, Williamsport, Pa. Suspender-end	478,337	July 5	428	104	60	86
Krouse, Charles C., H. E. Myers, and C. L. Girard, Williamsport, Pa. Suspenders	478,338	July 5	429	105	60	86
Krouse, Charles C., H. E. Myers, and C. L. Girard, Williamsport, Pa. Suspender-end clasp	478,339	July 5	430	105	60	86
Krouse, Charles C., H. E. Myers, and C. L. Girard, Williamsport, Pa.; said Myers and Girard assignors to said Krouse. Suspenders	487,149	Nov. 29	3179	814	61	1276
Kruck, Ernest R., Sioux City, Iowa. Pointing mechanism for masonry	482,369	Sept. 13	757	183	60	1498
Krueger, Adele S., Hannahfield Lenzie, near Glasgow, Scotland. Preparation for beverages	482,067	Sept. 20	1863		60	1728
Krueger, John M., and F. Wunderlich, Shiner, Tex. Poison-distributor	477,127	June 14	1400	340	59	1730
Krueger, Theodore F., New York, N. Y. Button-hook	487,054	Nov. 29	3024	777	61	1245
Krulis, Zdenko, Chicago, Ill. Signaling device for railways	487,904	Dec. 13	1098	275	61	1556
Krumscheid, Jacob, Boston, Mass. Service-pipe water-heater	473,762	Apr. 26	2790	701	59	579
Kruse Cash Register Company. (See Weiss, Carl W., assignor.)						
Kruse, Charles. (See Weiss, Moritz, assignor.)						
Kruse, John H., and M. K. Shipley, Oswego, Oreg. Feeder for haling-presses	485,045	Oct. 25	2402	617	61	522
Krymer, William, <i>et al.</i> (See Jeffrey, Albert D., assignor.)						
Kubach, Charles D., assignor of two-thirds to J. O'Ferrall, Baltimore, Md. Mechanism for forming and sizing cylindrical sheet-metal vessels	466,692	Jan. 5	599	156	58	116
Kubitzki, Johann, La Crosse, Wis. Shovel	487,534	Dec. 6	495	129	61	1418
Kubler, Edmond G., Akron, Ohio. Poison-cabinet	469,349	Feb. 23	2250	{ 577 578 }	58	991
Küch, Richard, assignor to W. C. W., and H. Heraeus, Hanau-on-the-Main, Germany. Sulphuric-acid pan and making the same	474,527	May 10	1035	265	59	847
Kuchler, George W., Yonkers, and H. C. Fischer, New York, N. Y. Clasp	469,705	Mar. 1	52	16	58	1108
Kuechle, Eduard, assignor to Otis Brothers & Company, New York, N. Y. Machine for twisting metal strips	483,357	Sept. 27	2339	588	60	1830
Kuechle, Eduard, assignor to Otis Brothers & Company, New York, N. Y. Metal lattice-work	483,358	Sept. 27	2342	589	60	1831
Kuechler, Charles F., assignor of one-half to F. Rahn, Chicago, Ill. Lamp-post sign	479,006	July 19	1446	359	60	311
Kuehn, Lucas M., Wabasha, Minn. Elevator	487,576	Dec. 6	551	142	61	1430
Kuehn, Michael. (See Snitzer and Kuehn.)						
Kuehne, Albert, <i>et al.</i> (See Beehler, Charles W., assignor.)						
Kuehne, John, assignor of three-tenths to E. Martyn, Detroit, Mich. Trolley for electric railways	466,981	Jan. 12	1095	{ 277 278 }	58	217
Kuen, Charles W., Chicago, Ill. Ticket-punch	472,793	Apr. 12	1199	308	59	239
Kues, Victor J., Paris, assignor to C. H. J. Donnadieu, Bordeaux, France. Alembic	468,766	Dec. 27	2502	622	61	1867
Knett, George F., and C. Shingland, Paterson, N. J. Warping-machine	478,162	July 5	138	35, 36	60	30
Kufs, Richard, New York, N. Y. Labeling-machine	476,392	June 7	261	62	59	1458
Kuhbacher, Paul J., Ashland, Ky. Automatic electric scale	485,950	Nov. 8	1217	321	61	838
Kuhl, Henry W., Gallien, Mich. Land-roller	468,996	Feb. 16	1723	438	58	880
Kuhlmann, John P. F., Seattle, Wash. Railway system	486,719	Nov. 22	2445	637	61	1114
Kuhn, Michael G., New York, N. Y. Spool-holder	476,833	June 14	1013	246	59	1652
Kuhner, Louis, Decatur, Ill. Incubator	484,325	Oct. 11	1227	313	61	262
Kuhns, Arthur E., Chicago, Ill. Can for oil, &c	481,233	Aug. 23	2396	591	60	1083
Kuhns, George F., <i>et al.</i> (See Miller, Allen T., assignor.)						
Kuhns, Harry B., <i>et al.</i> (See Miller, Allen T., assignor.)						
Kuhns, William N., <i>et al.</i> (See Miller, Allen T., assignor.)						
Kulage, Joseph J., St. Louis, Mo. Brick-press	484,896	Oct. 25	2159	{ 555 556 }	61	475

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Kulage, Joseph J., St. Louis, Mo. Brick and tile machine	484,897	Oct. 25	2161	556	61	475
Kulage, Joseph J., St. Louis, Mo. Brick-press	485,549	Nov. 1	604	161	61	696
Kunath, Hermann O., Evansville, Ind. Rope-reel	477,554	June 21	2111	524	59	1882
Kune, Julian. (See McElwain, George, assignor.)						
Kunkle, Erastus B., assignor to himself and W. D. Bostick, Fort Wayne, Ind. Safety valve and muffler	477,945	June 28	2754	690	59	2024
Kuns, Nathaniel, Fairbury, Nebr. Rubber-dam clamp	484,800	Oct. 25	2000	513	61	443
Kuns, Nathaniel, Fairbury, Nebr. Dental spacer	486,112	Nov. 15	1500	395	61	912
Kunstman, Robert, Awenkamp, New South Wales. Machine for polishing boots or shoes	469,087	Feb. 16	1853	474	58	906
Kuntze, Paul, Aschersleben, Germany. Process of and apparatus for making ammonia	488,207	Dec. 20	1610	402	61	1677
Künzel, Charles A., Camden, N. J., assignor of one-half to C. F. Elser, Philadelphia, Pa. Fishing device	467,120	Jan. 12	1346	343	58	264
Künzel, Charles A., Camden, N. J., assignor of one-half to C. F. Elser, Philadelphia, Pa. Fishing device	467,121	Jan. 12	1347	343	58	264
Künzel, Charles A., Camden, N. J., assignor of one-half to C. F. Elser, Philadelphia, Pa. Fishing device	467,122	Jan. 12	1347	343	58	264
Künzel, Charles A., Camden, N. J., assignor of one-half to C. F. Elser, Philadelphia, Pa. Fishing device	467,123	Jan. 12	1348	344	58	265
Kunzelman, John K., Stillwater, Minn. Vehicle running gear	471,007	Nov. 15	2126	546	58	1522
Kunzer, Emil, Chicago, Ill. Smoke-consuming device	486,582	Nov. 22	2225	584	61	1069
Kuoni, John H., Marysville, Kans. Dredge	468,201	Feb. 2	444	110	58	611
Kupfer, Arthur A. and H. C., Providence, R. I. Bicycle-tire	481,038	Aug. 16	2048	511	60	1004
Kupfer, Herman C. (See Kupfer, Arthur A. and H. C.)						
Kurth, Max, New York, N. Y. Musical instrument	469,331	Feb. 23	2227	571	58	985
Kurtz, Charles M., Allegheny, Pa. Machine for forming shapes of candy	481,234	Aug. 23	2397	592	60	1084
Kurtz, Ephraim. (See Kurtz, Henry and E.)						
Kurtz, Henry and E., Bangor, Pa. Slate-shaving machine	484,802	Oct. 25	2002	514	61	444
Kurtz, Stewart S., Canton, Ohio. Harness-saddle	484,801	Oct. 25	2001	514	61	443
Kurz, William D., and H. Amnndson, La Crosse, Wis. Electric-lamp socket	474,667	May 10	1257	321	59	890
Kussmaul, Christopher, and C. F. Reichert, Philadelphia, Pa. Planing-cutler	469,845	Mar. 1	289	75	58	1157
Kutsche, Oswald, et al. (See Raymond, Albert, assignor.)						
Küzel, Hans, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Azo dye. (Reissue)	11,231	Apr. 5	796		59	151
Küzel, Hans, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Making naphthosulphondisulphonic acid	473,467	Apr. 26	2319		59	489
Küzel, Hans, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst, Germany. Yellow dye-stuff	484,521	Oct. 18	1538		61	335
Kyle, John, Omaha, Nebr. Sack-holder	469,255	Feb. 23	2104	540 541	58	962
Kyle, William F., et al. (See Barber, Edwin J., assignor.)						
Kynett, William H., Battle Creek, Mich. Warp or line measuring machine	478,115	July 5	57	15	60	13
Kyser, Oren A., Lisbon, Ill. Fire-grate	472,058	Apr. 5	71	19	59	16
L. B. Gatcomb Company. (See Shattuck, Burt E., assignor.)						
L. L. F. Fixture Company. (See Wythe, William W., assignor.)						
L. Wolf Manufacturing Company. (See Clifford and Gavin, assignors.)						
L. Wolf Manufacturing Company. (See Hoelscher, Herman M., assignor.)						
L. Wolf Manufacturing Company. (See Sievert, Henry H., assignor.)						
L'Éplattenier, Arnold, Brooklyn, N. Y. Magazine-camera	472,432	Apr. 5	674	173	59	127
La Baume, Marie J. D. A. de. (See Rousseau, Chanterac, and La Baume.)						
La Boiteaux, Frank M., Cincinnati, Ohio. Beer apparatus	479,190	July 19	1739	436 437	60	365
La Burt, John, New York, assignor of one-half to W. H. Agricola, Brooklyn, N. Y. Car-coupling	475,219	May 17	2125	537	59	1075
La Casse, Henry. (See Wile and La Casse.)						
La Chapelle, George. (See Devine and La Chapelle.)						
La Chapelle, George, assignor of one-half to C. E. Devine, Williamsport, Pa. Buckle	485,104	Oct. 25	2484	638	61	540
La Chapelle, Israel. (See Paquette and La Chapelle.)						
La Chapelle, Israel, Haverhill, Mass., assignor to Goodyear Shoe Machinery Company, Hartford, Conn. Tension device for sewing-machines	488,505	Dec. 20	2095	520	61	1773
La Croix, John A., Chicago, Ill. Car wheel and brake	470,202	Mar. 8	860	213	58	1275
La Dow, Charles, Albany, N. Y. Harrow	488,942	Dec. 27	2787	687 688	61	1927
La Dow, Charles, Albany, N. Y. Harrow	488,943	Dec. 27	2790	688	61	1927
La Due, Charles H., New York, N. Y. Street-sweeper	487,754	Dec. 13	849	216	61	1507
La Due, Maryette D. (See Edwards, Daniel R., assignor.)						
La Fontaine, William H., Cleveland, Ohio. Carpet-cleaning apparatus	468,521	Feb. 9	967	246	58	722
La Fontaine, William H., Cleveland, Ohio. Carpet-cleaning machine	468,522	Feb. 9	967	246	58	722
La France, Truckson S., Elmira, N. Y. Fire-engine pump	478,439	July 5	581	141	60	114
La France, Truckson S., Elmira, N. Y. Upright tubular steam-boiler	487,124	Nov. 29	3142	805	61	1268
La Pierre, F. H. (See Dixon, Maynard L., assignor.)						
La Pierre, Frank H., East Orange, N. J. Buckle	478,285	July 5	356	86	60	72
La Point, Stephen, Derrick City, Pa. Washing-machine	478,440	July 5	553	141	60	115
La Purl, Traffey, Medford, Mass. Folding bedstead	485,502	Nov. 1	535	142	61	681
La Roche, Fredrick A., Philadelphia, Pa. Volt-ammeter	481,573	Aug. 30	2966	728	60	1207
La Rue, Baker. (See Iusinger, Alfred, assignor.)						
La Société Dagry & Arnault. (See Dagry, Alphonse, assignor.)						
La Société des Générateurs à Vaporisation Instantanée, (Système Serpollet.) (See Serpollet, Leon, assignor.)						
La Subérine. (See Vasson, Raphael G. de, assignor.)						
Labady, Louis C., Tacoma, Wash. Separable carpenter's square	468,665	Feb. 9	1187	302	58	765
Labelle, Israel, Holyoke, Mass. Horse-checking device	483,306	Sept. 27	2270	571	60	1817
Labois, Léon, Paris, France. Apparatus for extracting sulphur	485,634	Nov. 8	734	191 192 193	61	739
Labram, George. (See Allen, Charles M., assignor.)						
Labrecque, Anselme, et al. (See Désy, Louis A., assignor.)						
Labrie, Anatole F., Redfield, S. D. Clothes-line holder	467,178	Jan. 19	1440	367	58	290
Lacey, Fred, Adams, Mass. Shedding mechanism for looms	484,326	Oct. 11	1228	313 314	61	262
Lacey, Samuel P., Cranford, N. J. Spirometer	471,389	Mar. 22	2709	691	58	1652
Lachapelle, George, and C. E. Devine, Williamsport, Pa. Tool for cutting and dressing stone	470,788	Mar. 15	1784	459	58	1461
Lachenmeyer, August, Narrowsburg, N. Y. Pencil-sharpener	471,747	Mar. 29	3243	826	58	1759
Lachmann, Emil, Berlin, Germany. Alarm apparatus	486,380	Nov. 15	1911	505	61	995

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lachmann, Emil, Berlin, Germany. Boat.....	486,381	Nov. 15	1913	506	61	995
Lackner, John, New York, N. Y. Machine for making plaited paper caps, capsules, &c....	470,335	Mar. 8	1100	280	58	1319
Lactoserine Company. (See Rehnström, Albert W., assignor.)						
Lacy, Henry. (See Annable, George G., assignor.)						
Lacy, William, Jr., Los Angeles, Cal. Coated metal pipe and manufacturing the same....	475,454	May 24	2500	637	59	1163
Ladd, Daniel E., deceased; E. Z. Carpenter, Glenville, executor, assignor to C. H. C. Morris, J. and E. G. Wheeler, Amsterdam, N. Y. Tie for bags, bales, and bundles.....	473,822	Apr. 26	2880	722	59	597
Ladd, James B. (See Schutte and Ladd.)						
Ladenburg, Adolph, et al. (See Pauthonier, Casimir, assignor.)						
Laesecke, Friedrich A., Leipsic, assignor of two-thirds to E. Schmahl and F. Feller, Berlin, Germany. Producing patterns or drawings on oil-paint.....	469,045	Feb. 16	1797	.....	58	895
Lafan, Daniel F., and F. X. Devlin, York, Pa. Box-covering machine.....	475,324	May 24	2283	587	59	1124
Laffaw, Moses. (See Baker and Laffaw.)						
Lafferty, Hugh W., Wilmington, Del. Centrifugal machine.....	474,389	May 10	816	213	59	805
Lafferty, William J. (See Byrue and Lafferty.)						
Lage, Nicholas, assignor of one-half to I. L. Sears, Rock Island, Ill. Collar-fastener.....	478,116	July 5	60	16	60	14
Lagerman, Alexander, Jönköping, Sweden. Type-justifying apparatus.....	478,340	July 5	431	{ 105 106 107 }	{ 60	86
Lagerman Typotheter Company. (See Hastings and Foster, assignors.)						
Lahn, John P., Reeseville, Wis. Pump.....	484,898	Oct. 25	2162	556	61	476
Lahman, Edgar R., et al. (See Pleukharp, Ezra, assignor.)						
Lahman, Joshua E., et al. (See Pleukharp, Ezra, assignor.)						
Lahola, Vinzenz, Vienna, assignor to B. Steiner, Buda-Pesth, Austria-Hungary. Phonograph.....	479,431	July 26	2136	534	60	459
Laidlaw, James, et al. (See Ecker, James S., assignor.)						
Laidlaw, John, Glasgow, Scotland. Centrifugal machine.....	473,322	Apr. 19	2058	{ 517 518 }	{ 59	417
Laidlaw, John S., et al. (See Ecker, James S., assignor.)						
Laidlaw, William A., Cherokee, Kans. Baling-press.....	473,320	Apr. 19	2052	515	59	416
Laidlaw, William A., Cherokee, Kans. Machine for making bale-ties.....	473,321	Apr. 19	2054	{ 516 517 518 }	{ 59	416
Lain, David E., Yonkers, N. Y. Trolley-wire hanger.....	486,583	Nov. 22	2226	585	61	1069
Laing, John, Edinburgh, Scotland. Apparatus for destructive distillation of mineral oils.....	471,291	Mar. 22	2559	649	58	1623
Laing, John, Edinburgh, Scotland. Destructive distillation of mineral oils.....	488,767	Dec. 27	2503	623	61	1866
Laird, John M., Huntingdon, Pa. Snow-iron for roofs.....	473,512	Apr. 26	2392	606	59	502
Laird, Robert W. (See Sweeney and Laird.)						
Laird, William H. (See Watson, George A., assignor.)						
Lajoie, Misaël, Montreal, Canada. Lamp-extinguisher.....	480,773	Aug. 16	1640	410	60	924
Lake, Benjamin, Concordia, Kans. Hame-tug attachment.....	475,325	May 24	2285	588	59	1124
Lake, John C. and S., assignors to J. C. Lake & Son Company of Baltimore City, Baltimore, Md. Oyster-dredge windlass.....	485,635	Nov. 8	735	193	61	739
Lake, Judson N., assignor to T. C. Northcott, Elmira, N. Y. Sheet-metal air-duct.....	481,620	Aug. 30	3037	742	60	1220
Lake, Sidney A., Lake View, Wash. Nut-lock.....	488,337	Dec. 20	1826	456	61	1717
Lake, Simon. (See Lake, John C. and S.)						
Lake, Wilnot, Charlton Heights, Md. Ventilated vault-cover.....	482,013	Sept. 6	144	35	60	1364
Lalaude, Felix de, Paris, France. Galvanic battery.....	479,887	Aug. 2	171	42, 43	60	615
Laliberte, Albina, Albany, N. Y. Cushion for bed-slats.....	474,018	May 3	211	50	59	678
Lamar, Charles P., Lyndon, Kans. Tension device for fence-machines.....	474,137	May 3	386	93	59	713
Lamarre, Charles B. de, Biloxi, Miss., assignor of one-half to A. B. French, New Orleans, La. Process of and apparatus for the manufacture of illuminating-gas.....	468,747	Feb. 9	1307	332	58	790
Lamb, Charles E. (See Harrison, George, assignor.)						
Lamb, Charles M., Adrian, Mich. Gate-latch.....	482,482	Sept. 13	939	229	60	1531
Lamb, George B. and A. C. Campbell, assignors to Waterbury Machine Company, Waterbury, Conn. Wire-drawing machine.....	487,844	Dec. 13	999	{ 251 252 }	{ 61	1537
Lamb, George M., and H. R., Hillsdale, Mich. Device for joining intersecting wires.....	472,059	Apr. 5	72	20	59	16
Lamb, Hiram R. (See Lamb, George M. and H. R.)						
Lamb, Horace K., Washington, D. C. Type-writing machine.....	466,947	Jan. 12	1040	265	58	207
Lamb, James, San José, Cal. Horseshoeing apparatus.....	488,077	Dec. 13	1397	347	61	1617
Lamb, John A., Euclid, Ohio. Sulky-hoe for vineyards.....	473,513	Apr. 26	2393	606	59	502
Lamb, Julia C. (See Lamb, William, assignor.)						
Lamb Knitting Machine Manufacturing Company et al. (See Perkins, Albert, assignor.)						
Lamb, William, assignor to J. C. Lamb, Covington, Ind. Tax-calculator.....	469,654	Feb. 23	2708	697	58	1081
Lamb, Wilmer S., Freeport, Ill. Windmill.....	475,872	May 31	3172	805	59	1307
Lamberger, Simon, Buda-Pesth, Austria-Hungary. Combined lamp and cane or umbrella.....	473,763	Apr. 26	2791	702	59	579
Lambert, Frank. (See Thomson and Lambert.)						
Lambert, George A., assignor of one-half to A. A. Young, Orrington, Me. Plow-colter.....	483,457	Sept. 27	2479	624	60	1858
Lambert, George E., et al. (See Ward, William H., assignor.)						
Lambert, John W., Ohio City, Ohio. Carburetor.....	474,838	May 17	1539	391	59	958
Lambert, Richard C. (See Crawford and Lambert.)						
Lambert, Robert, Fayette Springs, Pa. Hame-fastener.....	484,327	Oct. 11	1232	314	61	262
Lambert & Son, G. (See Wheatley, Harry D., assignor.)						
Lambing, Isaac P., Golden, Colo. Excavating apparatus.....	476,750	June 7	783	{ 192 193 }	{ 59	1593
Lamborn, John E., and R. Rickards, Dixon, Cal. Wheel-plow.....	470,495	Mar. 8	1359	353	58	1367
Lambur, Edward C., and G. Burdett, Waukesha, Wis. Fire-kindler.....	475,123	May 17	1985	503	59	1047
Lame, Charles R. (See Grimes and Lame.)						
Lame, John M., Morehead, and I. N. Phipps, Mount Sterling, Ky. Nut-lock.....	477,555	June 21	2112	525	59	1882
Lamme, Benjamin G., assignor to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Armature for electric machines.....	488,016	Dec. 13	1279	{ 318 319 320 }	{ 61	1592
Lammedi, August, South Bend, Ind. Straw-stacking machine.....	486,346	Nov. 15	1864	491	61	985
Lamont, Robert, Kilmarnock, Scotland. Cash register, indicator, and check-printer.....	485,951	Nov. 8	1920	322	61	838
Lamoreaux, Sullivan B., et al. (See Huston, John B., assignor.)						
Lamp, Robert M., Madison, Wis. Crutch.....	467,468	Jan. 19	1883	480	58	375
Lamp, Robert M., Madison, Wis. Crutch.....	483,118	Sept. 20	1940	491	60	1743
Lamphear, Edson, New Almelo, Kans. Windmill.....	474,839	May 17	1540	392	59	958
Lampitt, Charles, Southgate, England. Grading-machine.....	483,225	Sept. 27	2116	{ 536 537 }	{ 60	1790
Lamplough, Arthur, assignor to P. Wood, London, England. Sash-fastener.....	488,360	Dec. 20	1863	466	61	1725
Lamport, Abraham N., New York, N. Y. Safety-car.....	473,323	Apr. 19	2060	{ 518 519 }	{ 59	418
Lamprey, Rufus W., Manchester, N. H. Fireproof paint.....	483,307	Sept. 27	2272	.....	60	1817

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Lamson Consolidated Store Service Company. (See Cole, William R., assignor.)						
Lamson Consolidated Store Service Company. (See Crowley, James T., assignor.)						
Lamson Consolidated Store Service Company. (See Goodfellow, John H., assignor.)						
Lamson Consolidated Store Service Company. (See Gornall, Richard, assignor.)						
Lamson, David, Elmira, N. Y. Wool-carding machine	468,202	Feb. 2	445	111	58	612
Lanuth, John, Irvington, Iowa. Draft-equalizer	482,370	Sept. 13	758	183	60	1498
Lanoux, Charles, and M. E. Rendon, Merida, Mexico. Machine for decorticating fibrous plants	468,249	Feb. 2	511	126	58	625
Lancashire, Herbert F. (See Ward and Lancashire.)						
Lancaster, Charles, <i>et al.</i> (See Lancaster and Sturgeon, assignors.)						
Lancaster, Charles, and J. Sturgeon, assignors to J. Hughes and C. Lancaster, Chester, England. Motor-car	467,741	Jan. 26	2337	{ 593 594 }	58	467
Lancaster, Morris, assignor of one-half to Globe Furniture Company, Northville, Mich. Making built-up work for pew-backs, &c.	486,479	Nov. 22	2069	548	61	1040
Lance, De Haven, New Cumberland, W. Va. Paving-brick	478,612	July 12	844	208	60	183
Land, Martin R., Norfolk, Va. Match-safe	482,371	Sept. 13	759	{ 183 184 }	60	1499
Land Title and Trust Company, administrator. (See Offermann and Ziegler.)						
Landauer, Sigmund. (See Haiman, Elias, assignor.)						
Landauer, Sigmund, Atlanta, Ga. Cultivator	476,659	June 7	651	158	59	1566
Lander, John O. (See Olson, Holcom, assignor.)						
Landers, William H. (See Kernan and Landers.)						
Landfear, William R. (See Butler and Landfear.)						
Landfear, William R., Brooklyn, N. Y., assignor of two-thirds to T. Merrick and G. N. Tyner, Holyoke, Mass. Mail-canceling and postmarking machine	487,278	Dec. 6	63	19, 20	61	1334
Landfear, William R., Brooklyn, N. Y., assignor of two-thirds to T. Merrick and G. N. Tyner, Holyoke, Mass. Stamp-canceling machine	487,626	Dec. 6	626	161	61	1446
Landgraver, Conrad L. (See Cline, George J., assignor.)						
Landin, John, Stockholm, Sweden. Incandescent lighting	485,281	Nov. 1	188	54	61	612
Landin, Peter J., Minneapolis, Minn. Cash indicator, register, and recorder	482,014	Sept. 6	145	35, 36	60	1364
Landin, Peter J., assignor to T. B. Walker and S. E. Wilson, Minneapolis, Minn. Computing-machine	482,312	Sept. 6	650	155	60	1462
Landis, Abraham B., Waynesborough, Pa. Grinding-machine	483,288	Sept. 27	2242	{ 564 565 566 }	60	1812
Landis, Clayton G., <i>et al.</i> (See Iske, Albert, assignor.)						
Landis, Ezra F., Lancaster, Pa. Shelf-bracket	466,608	Jan. 5	480	123	58	92
Landis, Frank F., Waynesborough, Pa. Fan and regulator for thrashing-machines	482,846	Sept. 20	1508	375	60	1657
Landis, Frank F., Waynesborough, Pa. Plow	482,847	Sept. 20	1509	375	60	1657
Landis, Frank F., Waynesborough, Pa. Steam-boiler attachment	482,848	Sept. 20	1510	375	60	1657
Landis, Johann H., Oerlikon, near Zurich, Switzerland. Band-saw machine	473,468	Apr. 26	2320	{ 586 587 }	59	489
Landon, Albert, and L. Martel, Rutland, Vt. Tool-handle	482,256	Sept. 6	548	130	60	1441
Landon, William E., Philipsburg, assignor to J. E. Hughes, Pittsburg, and L. N. Ireland, Allegheny, Pa. Radiator	486,480	Nov. 22	2071	548	61	1040
Landreth, John F., assignor of one-half to S. A. Sellers, Ellaville, Ga. Spark-arrester	479,283	July 19	1873	469	60	393
Landwehr, John, Long Island City, assignor of one-half to G. Daniel, New York, N. Y. Pipe-wrench	471,078	Mar. 15	2232	573	58	1548
Lane, Almeron M., Meriden, Conn. Calendar-clock	473,424	Apr. 19	2238	{ 562 563 }	59	451
Lane, Bradford, assignor to W. A. Howe, Carlton, Oreg. Earth-auger	470,050	Mar. 1	622	155	58	1220
Lane, Charles F., Tulare, Cal. Washing-machine	477,013	June 14	1220	296	59	1694
Lane, Dennis, assignor of two-thirds to H. Nelson, Kirkwood, Mo. Cartridge-holder	470,840	Mar. 15	1881	482	58	1479
Lane, Edward. (See Agee, Lane, and Agee.)						
Lane, Frank S. (See Kilgore, Fredrick O., assignor.)						
Lane, Fred H., Wallingford, Conn. Gas-washer	487,279	Dec. 6	65	20	61	1334
Lane, Frederic A., New Haven, Conn. Turret-lathe	476,205	May 31	3707	937	59	1412
Lane, Frederic A., assignor of one-half to F. E. Morgan, New Haven, Conn. Clock-movement	467,354	Jan. 19	1710	437	58	341
Lane, George H., Worcester, Mass. Apparatus for fishing through ice	479,219	July 19	1779	446	60	373
Lane, Howard, Birmingham, England, assignor of one-half to J. W. Culmer, New Brighton, Pa. Air or gas meter	470,826	Mar. 15	1859	{ 476 477 }	58	1476
Lane, John G., and W. J. and J. Deuel, Poughkeepsie, N. Y.; said Deuel assignor to said John G. and W. J. Lane. Door-hanger track	471,867	Mar. 29	3426	875	58	1794
Lane, John H., Esmont, Va. Horse-detacher	477,664	June 28	2229	576	59	1935
Lane, John H., assignor to F. L. Raymond, Cleveland, Ohio. Reed-organ	479,565	July 26	2361	589	60	501
Lane, Louis, Newark, Ohio. Calendar	487,929	Dec. 13	1140	284	61	1564
Lane Manufacturing Company. (See Anderson, John B., assignor.)						
Lane, Rufus A., New York, N. Y. Saddle-girth	481,180	Aug. 23	2305	568	60	1065
Lane, Spencer B., Waterbury, Conn., assignor to E. P. Haff, New York, N. Y. Tape-measure	467,280	Jan. 19	1600	408	58	320
Lane, Spencer B., Waterbury, Conn., assignor to E. P. Haff, New York, N. Y. Pen and pencil clasp	473,230	Apr. 19	1919	483	59	389
Lane, Thomas W. (See Nourse and Lane.)						
Lane, Thomas W., Boston, Mass., assignor to Electric Gas Lighting Company, of Maine. Electrical annunciator	473,121	Apr. 19	1720	435	59	351
Lane, Thomas W., Boston, Mass., assignor to Electric Gas Lighting Company, Portland, Me. Electrical drop-annunciator	480,729	Aug. 16	1573	394	60	910
Lane, William J. (See Lane and Deuel.)						
Lane, William J., Poughkeepsie, N. Y. Support for moving bodies	477,556	June 21	2112	525	59	1882
Lane, William J., Poughkeepsie, N. Y. Support for moving bodies	477,557	June 21	2113	525	59	1882
Lane, William J., Poughkeepsie, N. Y. Support for moving bodies	477,558	June 21	2114	525	59	1882
Lanergan, Henry, North Cambridge, Mass. Crutch-foot	483,931	Oct. 4	609	154	61	126
Laney, Thomas G., Lima, Ohio. Steam-actuated valve	483,046	Oct. 25	2042	618	61	523
Lanfair, Herbert D., assignor to Miller's Falls Company, Miller's Falls, Mass. Hack-saw machine	466,929	Jan. 12	1014	259	58	202
Lang, Albert S. (See Bush, Martin L., assignor.)						
Lang, Alois, Macon, Ga. Cotton-seed planter	483,655	Oct. 4	203	50	61	42
Lang, Anton, New Brunswick, N. J. Sash-balance	477,807	June 28	2524	633	59	1979
Lang, Frederick P. (See Shepard and Lang.)						
Lang, George. (See Gallacher and Lang.)						
Lang, John F., Emerson, and J. W. Roper, Cartersville, Ga., assignors to themselves, W. Latham and E. J. Rector, Chattanooga, Tenn. Spring-motor	481,714	Aug. 30	3182	{ 777 778 }	60	1248
Lang, Jules, D. W. Evans, and J. A. Devore, Chicago, Ill. Clasp	488,017	Dec. 13	1282	320	61	1593

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Lang, Julius, Griesheim, near Frankfort-on-the-Main, assignor to Chemische Fabrik Greisheim, Frankfort-on-the-Main, Germany. Making nitric acid	477,375	June 21	1829	447	59	1825
Lang, Matthew, East Akron, Ohio. Machine for molding marbles or other articles from clay, &c	485,282	Nov. 1	191	55	61	612
Lang, William, Brooklyn, N. Y. Eye for lacing strings of shoes	477,903	June 28	2691	673	59	2011
Lang, William, Brooklyn, N. Y. Pocket-lighter	487,845	Dec. 13	1002	252	61	1538
Langberg, Oscar, Brooklyn, N. Y., assignor to American Light and Fuel Company, of New Jersey. Apparatus for generating gas	488,208	Dec. 20	1614	{ 403 404 }	61	1677
Langdon-Davies, Charles, assignor to Phonopore Syndicate, Limited, London, England. Phonoporic telegraphy	477,835	June 28	2581	646	59	1989
Langdon, George W., assignor of one-half to R. K. Atwater, Greene, N. Y. Clothes-drier	475,213	May 17	2167	551	59	1083
Lange, Charles J., Milwaukee, Wis. Caster	470,870	Mar. 15	1917	490	58	1487
Lange, Emil, <i>et al.</i> (See Ward, William H., assignor.)						
Lange, Frederick L., Oxford, England. Cover for velocipede wheel-tires	467,742	Jan. 26	2345	594	58	469
Lange, Herman O. (See Weir, Robert, assignor.)						
Lange, Robert, Columbus, Ohio. Vapor-bathing apparatus	473,935	May 3	83	17	59	652
Lange, Theodor, Brieg, Germany. Obtaining metallic zinc from sulphite of zinc by electrolysis	475,402	May 24	2414	616	59	1147
Langer, Edward W., and R. Peterson, Diamond Bluff, Wis., said Peterson assignor to said Langer. Holdback for vehicles	485,550	Nov. 1	606	162	61	697
Lange, François P., Paris, France. Beading attachment for embroidering machines	473,936	May 3	84	17, 18	59	652
Langfeld, Solomon C., New York, N. Y., assignor, by mesne assignments, to A. Goertz, Paris	484,101	Oct. 11	862	219	61	191
Langford, Ernest A., Gass Valley, Cal. Ore-feeder	485,501	Nov. 1	534	142	61	681
Langford, Thomas B., Fort Meade, Fla. Orange-clipper	472,459	Apr. 5	705	180	59	133
Langguth, Werner, Deadwood, S. D. Refining gold and silver matte	486,013	Nov. 22	2220	594	61	1079
Langhammer, John F. (See McClintock, Langhammer, and Lowell.)						
Langlés, Justin J., New Orleans, La., assignor to American Biscuit and Manufacturing Company, of Illinois. Cake-machine	485,201	Nov. 1	73	23	61	587
Langley, Thomas F., East Kingston, N. H., assignor of one-fourth to J. P. Busfield, Haverhill, Mass. Ice-cutting machine	474,962	May 17	1729	439	59	998
Langschmidt, John H., Chicago, Ill. Car-coupling	472,505	Apr. 5	783	200	59	148
Langsdorf, John. (See Abrams and Langsdorf.)						
Langstroth, John A., San Francisco, Cal. Combined card ledger and index	475,043	May 17	1855	471	59	1021
Langville, Louis S. (See Frank, Jerome W., assignor.)						
Langville, Louis S., Troy, N. Y. Carbon product	475,062	May 17	1888	.....	59	1027
Lanier, Ward C. (See Horzberg, Whitaker, and Lanier.)						
Lannert, John A. (See Jeavons, William R., assignor.)						
Lannert, John A. (See Wilder, Lannert, and Jeavons.)						
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Hydrocarbon-burner	466,498	Jan. 5	307	78	58	58
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Vapor-burner	474,175	May 3	449	109	59	725
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Vapor-burner	476,543	June 7	476	113	59	1531
Lannert, John A., and W. R. Jeavons, Cleveland, Ohio. Vapor-burner	479,220	July 19	1780	446	60	373
Lannert, John A., W. R. Jeavons, Cleveland, Ohio, and W. H. Wilder, Florence, Mass. Oil and vapor burner	479,747	July 26	2662	661	60	556
Lanphere, Alvin W., Indian Lake, N. Y. Sickle-bar movement for mowers and reapers	480,104	Aug. 2	546	138	60	686
Lansing, John C., Shelbourne, Canada. Turbine wheel	480,929	Aug. 16	1874	{ 467 468 }	60	971
Lanterman, Daniel. (See Durkee and Lanterman.)						
Lantz, Franklin W., Washington, D. C. Magazine-gun	477,128	June 14	1401	{ 340 341 }	59	1730
Lantz, Harvey E., and S. L. Neely, Vera, Ill. Nut-lock	486,565	Nov. 22	2192	577	61	1063
Lanway, J. H. (See Sweet, James C., assignor.)						
Lanyon, Dick N., Chicago, Ill. Tile-work	466,741	Jan. 5	690	178	58	131
Lanyon, Dick N., Chicago, Ill. Tile-work	466,742	Jan. 5	692	178	58	131
Lanyon, Robert H., Nevada, Mo., and W. Lanyon, Pittsburg, Kans. Apparatus for roasting and smelting	474,019	May 3	213	50, 51	59	679
Lanyon, William. (See Lanyon Robert H., and W.)						
Lape, Willard E. (See Frisbie, William L., assignor.)						
Lapham, Charles, <i>et al.</i> (See Weaver, William, assignor.)						
Lapham, Frank A., Waterford, Wis. Washing-machine	480,105	Aug. 2	547	138	60	687
Lapham, Joseph H. (See Lapham, Owen T. and J. H.)						
Lapham, Owen T. and J. H., Cleveland, Ohio. Breast-rest for washboards	483,786	Oct. 4	400	99	61	84
Lapham, Owen T. and J. H., Cleveland, Ohio. Washboard	488,209	Dec. 20	1621	404	61	1679
Lapin, Jean. (See Croes, Rodenbach-Mergaert, and Lapin.)						
Larcher, Pierre H., Paris, France. Blind-stile-mortising machine	482,849	Sept. 20	1511	376	60	1657
Lardner, Charles. (See Smith and Lardner.)						
Larimer, Joseph M., Chicago, Ill. Architectural column	484,026	Oct. 11	762	{ 192 193 }	61	171
Larimer, Joseph M., Chicago, Ill. Metal framework for buildings	485,870	Nov. 8	1083	{ 287 288 }	61	810
Larimer, Joseph M., Chicago, Ill. Structural work for buildings	485,871	Nov. 8	1084	288	61	811
Larish, Wilbur F., Oshkosh, Wis. Mortising-machine	481,039	Aug. 16	2049	{ 511 512 }	60	1004
Larish, Wilbur F., Oshkosh, Wis. Jointing and sanding machine	484,639	Oct. 18	1719	{ 436 437 }	61	371
Larkin, John T., Halifax Canada. Spiral hair or other pin	482,257	Sept. 6	549	130	60	1441
Larman, William H., Sligo, Md., assignor to J. W. Penfield & Son, Willoughby, Ohio. Disintegrating-roller	485,283	Nov. 1	192	55	61	612
Larrabee, Charles S., trustee. (See Smith, William J., assignor.)						
Larsen, August, Syracuse, assignor of one-half to H. C. Nye, Whitehall, N. Y. Coin-operated machine	480,431	Aug. 9	1101	275	60	801
Larsen, James T., <i>et al.</i> (See Deines, George, assignor.)						
Larsen, Peter C., <i>et al.</i> (See Deines, George, assignor.)						
Larson, August L. (See Winlund and Larson.)						
Larson, Charles A., Kewanee, Ill. Padlock	473,192	Apr. 19	1854	467	59	375
Larson, Gust., Alexandria, assignor to W. C. Smith and T. F. Moore, Wadena, Minn. Brace	468,771	Feb. 9	1345	340	58	798
Larson, William, and O. Gunderson, Lake Mills, Iowa. Power-transmitter	485,952	Nov. 8	1224	322	61	839
Larsson, Gustaf, Boston, Mass. Desk tool-table	477,762	June 28	2460	615	59	1968
Larter, Frederick H., Newark, N. J. Button	479,191	July 19	1740	437	60	365
Lascar, Ferdinand, assignor to F. Spiegelberg, New York, N. Y. Filtering material	488,317	Dec. 20	1789	.....	61	1710
Lasher, Frank, assignor to Lasher Stocking Company, Bennington, Vt. Device for transferring stocking-ribs	478,613	July 12	845	208	60	183

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Lasher, Frank, assignor to Lasher Stocking Company, Bennington, Vt. Stitch-holding mechanism for knitting-machines.	481,631	Aug. 30	3052	745	60	1222
Lasher Stocking Company. (See Lasher, Frank, assignor.)						
Lasker, M., et al. (See Hill, David J., assignor.)						
Lässig, Theodor, and A. Pfretzschner, Markneukirchen, Germany. Clarinet	488,656	Dec. 27	2337	578	61	1835
Lassor, Zabby, assignor of two-thirds to C. C. Dunn and F. Moore, Stinesville, Ind. Channeling-machine	471,797	Mar. 29	3330	848	58	1775
Laster, Harry W., Chicago, Ill. Steam road-roller	486,481	Nov. 22	2072	549	61	1040
Latham, Woodville, et al. (See Lang and Roper, assignor.)						
Lathrop, Francis. (See Cohen, Joseph B., assignor.)						
Lathrop, Frank L., Brooklyn, N. Y. Pocket bagatelle-board	479,432	July 26	2140	534	60	459
Latimer Cash Register Company. (See Latimer, William G., assignor.)						
Latimer, William, Wilmington, N. C. Railway	484,027	Oct. 11	763	193	61	171
Latimer, William G., assignor to Latimer Cash Register Company, Detroit, Mich. Cash register and indicator	474,993	May 17	1784	451	59	1007
Latimer, William G., assignor to National Match Selling Machine Company, Detroit, Mich. Vending-machine	475,281	May 17	2223	570	59	1095
Latouche, Jacques A. C. de, Paris, France. Cartridge	487,125	Nov. 29	3143	805	61	1269
Latta, Emmitt G., Friendship, N. Y. Velocipede-saddle	467,725	Jan. 26	2314	588	58	462
Latta, Emmitt G., Friendship, N. Y. Velocipede	471,798	Mar. 29	3332	848 849	58	1775
Latta, Emmitt G., Friendship, N. Y. Velocipede-saddle	472,732	Apr. 12	1112	985 286	59	223
Latta, Emmitt G., Friendship, N. Y. Vehicle-wheel	479,566	July 26	2362	589	60	501
Latta, Emmitt G., Friendship, N. Y. Vehicle-wheel	479,946	Aug. 2	266	65, 66	60	633
Latta, Joshua W., Sherman, Wyo. Car-coupling	475,326	May 24	2286	588	59	1125
Lattig, Jacob W., Easton, Pa. Railway signal apparatus and system	486,047	Nov. 8	1370	364 365	61	869
Latulip, Frederick, Syracuse, N. Y. Rawhide ferrule	467,979	Feb. 2	109	27	58	545
Latulip, Frederick, Syracuse, N. Y. Bushing for journal-bearings	475,983	May 31	3356	846	59	1342
Latzko, Rudolf. (See Scharf, Paul, assignor.)						
Lauback, Isaac S., New York, assignor of one-half to A. H. Fancher, Brooklyn, N. Y. Grater	470,807	Mar. 15	1821	468	58	1468
Lauback, Isaac S., New York, assignor of one-half to A. H. Fancher, Brooklyn, N. Y. Grater	470,808	Mar. 15	1823	468	58	1468
Laubensdorfer, George, and F. Lipp, assignors to W. Hagershoff, New York, N. Y. Atomizer	474,605	May 10	1157	294	59	870
Laubheimer, William, and H. Salzer, Baltimore, Md.; said Laubheimer assignor to said Salzer. Preservation of meat	477,844	June 28	2597	-----	59	1993
Laubin, Charles W., Meridian, Miss. Finger-nail cleaner	488,657	Dec. 27	2338	578	61	1835
Laubin, Charles W., Thomaston, Conn., assignor to N. Laubin, Meridian, Miss. Garment-hanger	478,062	June 28	2935	733	59	2058
Laubin, Nellie. (See Laubin, Charles W., assignor.)						
Lauch, Richard. (See Ulrich and Lauch.)						
Lauch, Richard, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Dye-stuff	476,393	June 7	263	-----	59	1489
Lauch, Richard, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany, Olive dye	479,515	July 26	2291	-----	60	488
Laude, Joseph, Monticello, Ark. Seed-planter and fertilizer-distributor	474,256	May 3	567	140	59	748
Laude, Joseph, Monticello, Ark. Seed-planter and fertilizer-distributor	474,748	May 10	1382	349	59	915
Landerman, Oliver S., Boyd, Ky. Signal-lantern	467,011	Jan. 12	1140	289	58	225
Laur & Hagaman. (See Cross, Jerome A., assignor.)						
Lanenburg, Michael N., Stockton, Cal. Finger-bar	475,964	May 31	3327	839	59	1336
Lanfert, David A., New York, N. Y. Purse, card-case, and bill-holder	476,278	June 7	72	15	59	1452
Laughton, George L., Reno, Nev. Derrick	477,129	June 14	1406	341	59	1731
Laughton, George L., Reno, Nev. Derrick-fork	483,765	Oct. 4	364	91	61	76
Laumann, Josef, Vienna, Austria-Hungary, assignor to Ludw. Loewe & Company Commandit-Gesellschaft auf Aktien, Berlin, Germany. Repeating firearm	479,284	July 19	1874	469	60	393
Laun, Henry W., Chicago, Ill. House-door letter-box	468,605	Feb. 9	1091	278	58	746
Laun, Henry W., Englewood, Ill. Combined badge and bouquet-holder	471,181	Mar. 22	2396	611	58	1591
Laurence, Henry J. (See Vance and Laurence.)						
Lanth, Bernard C., Philadelphia, Pa. Rolling thin sheet steel or iron	478,193	July 5	189	48	60	40
Lauth, John N., assignor to Lauth Patent Furnace Company, St. Louis, Mo. Furnace for metallurgical purposes	484,328	Oct. 11	1233	314	61	263
Lauth, John N., assignor to Lauth Patent Furnace Company, St. Louis, Mo. Furnace for metallurgical operations	484,329	Oct. 11	1234	314	61	263
Laval, Carl G. F. de, assignor to Aktiebolaget Separator, Stockholm, Sweden. Separating butter from milk	484,916	Oct. 25	2195	565 566	61	482
Laval, Charles, Rheims, France. Cloth-stretching machine	469,256	Feb. 23	2105	541	58	962
Lavelle, Patrick J., assignor to Johnson Company, Johnstown, Pa. Method of and die for making rail-chairs	482,092	Sept. 6	277	67	60	1390
Lavallet, Joseph G., assignor of one-half to J. M. Cloud and W. O. MacMahon, agent, Mobile, Ala. Sieve-attachment for eaves-troughs	471,427	Mar. 22	2766	705	58	1662
Lavender, Charles F. (See Fane and Lavender.)						
Laves, Eduard E. A., Hamburg, Germany. Cash drawer and recorder	469,789	Mar. 1	194	50, 51	58	1138
Lavigne, Hector, New York, N. Y. Combined table, price and confessionnal	476,394	June 7	264	63	59	1489
Lavigne, Joseph P., New Haven, Conn. Micrometer-gage	488,280	Dec. 20	1730	436	61	1699
Lavigne, Joseph P., New Haven, Conn. Micrometer-gage	488,281	Dec. 20	1732	436	61	1700
Lavinia, Mary B., administratrix. (See Lavinia, William H.)						
Lavinia, William H., deceased, Chicago, Ill.; M. B. Lavinia, administratrix. Secondary valve	475,455	May 24	2501	637 638	59	1163
Law, John, Madelia, Minn. Hay-carrier	486,164	Nov. 15	1581	419	61	928
Law, William H. (See Martin, Thomas M., assignor.)						
Law, William H., Peterborough, Canada. Power-hammer	477,559	June 21	2116	526	59	1883
Lawbaugh, George W., Geneseo, Ill. Ironing-table	486,482	Nov. 22	2073	549	61	1040
Lawing, Samuel N., assignor of one-half to A. P. Smith and C. L. Walsh, Chattanooga, Tenn. Door-fastener	473,668	Apr. 26	2651	668	59	553
Lawles, Joseph H., Brooklyn, N. Y. Button-making machine	466,693	Jan. 5	602	156	58	116
Lawles, Joseph H., New York, N. Y. Machine for turning patterns on pearl, ivory, or other substances	477,130	June 14	1407	341	59	1731
Lawless, John H., Jersey City, N. J. Plumber's force-pump	477,808	June 28	2526	634	59	1980
Lawless, Richard M., Omaha, Nebr. Car-axle dust-guard	483,385	Sept. 27	2390	600	60	1839
Lawrence, Alfred C., Toronto, assignor of one-half to E. J. Wheeler, Port Perry, Canada. Combination-lock	476,751	June 7	785	193	59	1594

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lawrence, Alfred E., Danville Junction, Mo. Dumping-wagon.....	467,939	Feb. 2	56	13	58	536
Lawrence, Charles D., assignor of one-half to V. M. Mayo, Fairfield, Me. Door-hanger.....	484,157	Oct. 11	951	244	61	208
Lawrence, Charles P., Mechanic Falls, Me., assignor to J. F. Harris, Jr., Boston, Mass. Lasting-machine.....	476,206	May 31	3713	{ 938 939	{ 59 61	1413
Lawrence, Charles W., New York, N. Y. Combined socket and bracket for curtain-rods.....	484,028	Oct. 11	765	193	61	171
Lawrence, Edwin F. (See Lawrence, John H., assignor.)						
Lawrence, Frank, San Francisco, Cal. Safety-lock for gas-cocks.....	488,737	Dec. 27	2460	612	61	1859
Lawrence, Frank W., assignor of one-half to H. H. Lawrence, Saratoga, N. Y. Bag.....	482,428	Sept. 13	857	205	60	1516
Lawrence, George A., assignor of three-tenths to C. S. Clark and H. D. Treadwell, Salem, Mass. Air-tight vessel.....	472,460	Apr. 5	705	180	59	134
Lawrence, George R. (See Stockdale and Lawrence.)						
Lawrence, Harry W., assignor of one-half to H. H. Metcalf, Denver, Colo. Rheostat.....	482,093	Sept. 6	278	67	60	1390
Lawrence, Henry H. (See Lawrence, Frank W., assignor.)						
Lawrence, J., et al. (See Day and Moore, assignors.)						
Lawrence, James, Paulsborough, N. J. Recovering nitro-glycerine from waste acids.....	482,372	Sept. 13	760	.....	60	1499
Lawrence, John H., assignor of one-half to E. F. Lawrence, Sterling, Ill. Track for barn-doors.....	480,501	Aug. 9	1212	303	60	824
Lawrence, Lester G., assignor of two-thirds to A. O. Cooper and E. L. Bradbury, Chicago, Ill. Harmonica.....	478,514	July 5	696	168	60	138
Lawrence, Meltiah W., Gardiner, Me. Carriage for carrying and operating sewing-machines.....	482,829	Sept. 20	1483	369	60	1652
Lawrence, Millard B., et al. (See Sand, John Q. A., assignor.)						
Lawrence, Millard B., D. M. Patterson, and J. Q. A. Sand, Baltimore, Md. Employé's time-recorder.....	467,179	Jan. 19	1441	{ 367 368	{ 58 61	290
Lawrence, Orville H., Waverly, N. Y. Pipe-elbow.....	485,124	Oct. 25	2510	644	61	546
Lawrence, Patrick J., and M. F. Garrettson, Wellston, Mo. Car-brake.....	486,785	Nov. 22	2553	666	61	1135
Lawrence, Reuben, St. Joseph, Mo. Conduit system for electric railways.....	481,959	Sept. 6	56	13, 14	60	1345
Lawrence, Sebern T. (See Ratcliff and Lawrence.)						
Lawrence, Walter B., Traer, and F. W. Reisinger, La Porte, Iowa; said Lawrence assignor to said Reisinger. Draft-equalizer.....	466,694	Jan. 5	603	156	58	116
Lawrence, Wilber E. (See Hove, John J., assignor.)						
Lawrence, William B., Columbus, Ohio. Printing-press.....	475,327	May 24	2289	589	59	1125
Lawrence, William H., Newburyport, Mass. Engine-governor.....	487,224	Nov. 20	3295	840	61	1297
Lawshe, Jacob R., Newark, N. J. Book-rest.....	479,888	Aug. 2	173	43	60	616
Lawson, Eugene, Wilkes-Barré, Pa. Toy.....	477,904	June 28	2692	674	59	2011
Lawson, Joseph B., assignor of one-half to A. Hemsley, Philadelphia, Pa. Flash-light apparatus.....	486,831	Nov. 22	2634	687	61	1153
Lawson, William, assignor of one-half to E. Smith, Hartford, Conn. Tool-holder.....	488,361	Dec. 20	1864	467	61	1725
Lawton, Albert L. (See Lawton, Charles F., A. W., and A. L.)						
Lawton, Arthur W. (See Lawton, Charles F., A. W., and A. L.)						
Lawton, Charles F., Rochester, N. Y. Facing compound.....	472,369	Apr. 5	565	.....	59	106
Lawton, Charles F., assignor to R. H. Salmons, Rochester, N. Y. Brewing.....	468,808	Feb. 16	1405	356	58	818
Lawton, Charles F., assignor to R. H. Salmons, Rochester, N. Y. Method of and apparatus for the manufacture of beer.....	468,809	Feb. 16	1407	357	58	819
Lawton, Charles F., A. L., and A. W., Rochester, N. Y. Apparatus for the manufacture of salt.....	475,575	May 24	2693	683	59	1200
Lawton, Charles F., A. W., and A. L., Rochester, N. Y. Apparatus for manufacturing salt.....	475,574	May 24	2692	683	59	1200
Lawton, Charles F., A. W., and A. L., Rochester, N. Y. Manufacturing salt.....	475,576	May 24	2694	683	59	1201
Lawton, Charles F., A. W., and A. L., Rochester, N. Y. Salt.....	475,577	May 24	2697	683	59	1201
Lawton, James M., Jr., et al. (See Ashley, William A. G., assignor.)						
Lawton, Lyman T. (See Cody and Lawton.)						
Laycock, Adam C., Kingston, Pa. Thill-coupling.....	488,396	Dec. 20	1918	480	61	1736
Laycock, Ed. L. (See Leach, Charles, assignor.)						
Laycock, William, Chicago, Ill., assignor to Chandler & Taylor Company, Indianapolis, Ind. Cross-head.....	479,818	Aug. 2	64	15	60	594
Laycock, William S., Sheffield, England. Ventilator.....	468,933	Feb. 16	1604	406	58	857
Layer, William C., Milwaukee, and E. U. Taylor, Fond du Lac, Wis. Carving-machine.....	484,102	Oct. 11	863	219	61	191
Layman, Hiram D., Little Rock, Ark. Railway pump or water-elevator.....	488,362	Dec. 20	1865	467	61	1726
Layman, James H., Cincinnati, Ohio. Cartridge-loading machine.....	478,614	July 12	847	208	60	183
Le Boeuf, Zepherin, et al. (See Smith, William D. C., assignor.)						
Le Count, Charles J., Henry, S. D. Animal-poke.....	486,483	Nov. 22	2074	549	61	1041
Le Count, Thomas J., New York, N. Y. Folding chair.....	473,704	Apr. 26	2709	681	59	563
Le Favour, Joseph. (See Huffman and Le Favour.)						
Le Grand, Pierre, Paris, France. Machine for making felt.....	470,496	Mar. 8	1360	354	58	1367
Le Grande, William W., deceased, Louisville, Ky.; T. W. Moran, administrator. Railway-switch stand and distant signal.....	487,877	Dec. 13	1057	{ 264 265	{ 61 61	1547
Le Gros, Alfred P., Louisville, Ky. Fence.....	488,823	Dec. 27	2591	643	61	1886
Le Mout, Adolph. (See Spiegel, William G., assignor.)						
Le Neve, Sanford W. (See Parker and Le Neve.)						
Le Sneur, Ernest A., Ottawa, Canada. Electrolytic cell.....	468,880	Feb. 16	1515	387	58	839
Le Vesconte, George, Minneapolis, Minn. Gas-burner attachment.....	482,580	Sept. 13	1103	267	60	1564
Le Vesconte, George L., Minneapolis, Minn. Die-stock oiler.....	487,847	Dec. 13	1005	253	61	1538
Lea, Frank D. (See Golling and Lea.)						
Lea, Thomas. (See Higgins and Lea.)						
Leach, Charles, assignor of one-half to E. L. Laycock, McCook, Nebr. Wrench.....	473,007	Apr. 19	1534	391	59	318
Leach, Esom O., Fairmount, Ind. Brick-mold sander.....	468,810	Feb. 16	1409	357	58	819
Leach, Mark, J. Heaton, and J. Bentley, Bradford, England, assignors to J. and J. Dohson, Philadelphia, Pa. Let-off mechanism for double-pile-fabric looms.....	479,372	July 19	2026	506	60	422
Leach, Roaster & Baker Company. (See Hudson, Charlie A., assignor.)						
Leach, Smith S., Cambridge, Mass. Rail crossing.....	467,817	Jan. 26	2455	624	58	490
Leach, Walter O., Coldwater, Canada. Press for honey-sections.....	470,893	Mar. 15	1949	499	58	1493
Leach, William H., Chenoa, assignor, by mesne assignments, of one-half to K. D. Harger, Elgin, Ill., and L. A. Harger, Pontiac, Mich. Machine for labeling cans.....	488,791	Dec. 27	2543	631	61	1876
Leach, William W., Springtown, Ark. Tree-cultivator.....	475,124	May 17	1986	503	59	1047
Leadbeater, Frederick, Detroit, Mich. Steam and air injector for locomotives.....	486,924	Nov. 29	2843	736	61	1209
Leahy, Matthew, New Haven, Conn., assignor to E. O'Connor and C. Woodruff, Binghamton, N. Y. Cash indicator and recorder.....	478,798	July 12	1132	279	60	239
Leak Advertising Company. (See Leak, Mondula, assignor.)						
Leak, Mondula, assignor to Leak Advertising Company, San Francisco, Cal. Exhibition-car.....	472,300	Apr. 5	459	118	59	86
Leake, Charles F. (See Godfrey, Leake, and Lucas.)						
Leamy, Edward, Syracuse, N. Y. Exercising-machine.....	485,047	Oct. 25	2405	618	61	523
Lean, George R., Boston, and C. B. Burleigh, Chelsea, Mass., assignors to Bernstein Electric Company, of Maine. Casing for bases of incandescent lamps.....	487,846	Dec. 13	1003	252	61	1538

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Learoyd, Lewis E., Danvers, Mass. Leather dressing or finishing machine.	484,029	Oct. 11	765	193 194	61	171
Leary, William A., Norfolk, Va. Lumber-drying truck.	476,801	June 14	875	215	59	1624
Lease, G. M. (See Chamberlain, Edgar, assignor.)						
Leatherwood, Calvin N., Hutto, Tex. Listing-plow.	479,987	Aug. 2	356	88	60	649
Leavitt, Francis A., Portland, Me. Awning.	470,894	Mar. 15	1951	499	58	1494
Leavitt, Frank M., Brooklyn, N. Y., assignor to Vulcan Company, Philadelphia, Pa. Cor- nice-press.	476,946	June 14	1121	269 270	59	1674
Leavitt, Harry W., and J. A. Bryson, Hammond, Ill. End-gate.	477,131	June 14	1408	342	59	1732
Leavitt, John L., assignor of one-half to R. L. Baca, Grant, N. Mex. Ter. Advertising-puz- zle.	469,839	Mar. 1	277	72	58	1154
Léhédéff, Nicolas, St. Petersburg, Russia. Extracting iron or steel or other metals from ores.	468,546	Feb. 9	1005		58	730
Leber, Luther H., assignor to D. J. Richardson, Pittsburg, Pa. Speed-regulator for dyna- mos or motors.	469,257	Feb. 23	2106	541	58	963
Leber, Luther H., assignor to E. W. Porter and D. J. Richardson, Pittsburg, Pa. Store- service apparatus.	468,980	Feb. 16	1697	433	58	875
Leber, Victor, assignor of one-half to F. J. Weichert, Danbury, Conn. Fire-escape.	484,536	Oct. 18	1562	397	61	340
Lebkicher, Colin B., Helena, Mont. Book or portfolio.	483,068	Sept. 20	1863	472	60	1728
Lechner, Frank C., Timmons ville, S. C. Smoke arrester and conductor.	487,949	Dec. 13	1169	292	61	1570
Lechner, Jefferson L., Pittsburg, Pa. Mining-machine.	483,156	Sept. 27	2006	508	60	1768
Ledbetter, John W., assignor of one-half to H. H. Thorpe, Liberty Hill, Tex. Milk-cooler.	470,849	Mar. 15	1891	484	58	1481
Ledig, Reinhold G., Philadelphia, Pa. Lamp-shade support.	466,861	Jan. 12	897	230	58	180
Lee, A. A. (See Terry, William T., assignor.)						
Lee, Benjamin. (See Kirk and Lee.)						
Lee, Charles, San Antonio, Tex. Car-coupling.	487,420	Dec. 6	313	86, 81	61	1383
Lee, Charles A., Herkimer, N. Y. Foot-rest.	470,688	Mar. 15	1632	423	58	1431
Lee, Charles E., assignor of one-half to A. Meinberg, Omaha, Nebr. Coin-slot envelope- delivery box.	484,502	Oct. 18	1508	383	61	329
Lee, Charles T., assignor to Gould & Watson Company, Boston, Mass. Trolley-wire hanger.	467,940	Feb. 2	58	13	58	536
Lee, Charles T., assignor to Gould & Watson Company, Boston, Mass. Insulator.	467,941	Feb. 2	59	14	58	536
Lee, Charles T., assignor to Gould & Watson Company, Boston, Mass. Insulator.	467,942	Feb. 2	60	14	58	537
Lee, Charles T., Boston, Mass., assignor to Johns-Pratt Company, Hartford, Conn. Insu- lator.	482,872	Sept. 20	1553	388	60	1665
Lee, Charles T., Boston, Mass., assignor to Johns-Pratt Company, Hartford, Conn. Insu- lator for electric-railway conductors.	485,105	Oct. 25	2485	638	61	541
Lee, Charles T., Boston, Mass., assignor to Johns-Pratt Company, Hartford, Conn. Insu- lator.	485,106	Oct. 25	2486	639	61	541
Lee, Edward P., et al. (See Coleman, John, assignor.)						
Lee, Edward R., et al. (See Huewe, George A., assignor.)						
Lee, Francis W., Woodend, Victoria. Potato-harvester.	472,370	Apr. 5	567	146	59	106
Lee, Frank A., Des Moines, Iowa. Rein-support.	473,584	Apr. 26	2523	636	59	529
Lee, Frank R., Lead Hill, Ark. Resawing-machine.	483,226	Sept. 27	2121	537	60	1790
Lee, George B., assignor of two-thirds to G. W. Stafford and T. E. Nudd, Providence, R. I. Window or door sash.	479,433	July 26	2140	535	60	459
Lee, George H., assignor to himself and D. Welch, Worcester, Mass. Folding safety fire- escape.	470,689	Mar. 15	1633	423	58	1431
Lee, Henry A., Plainfield, N. J. Salt-holder.	485,328	Nov. 1	272	74	61	627
Lee, Henry N., London, England. India-rubber tire.	487,419	Dec. 6	312	80	61	1383
Lee, Homer, New York, N. Y. Plate-printing machine.	479,516	July 26	2293	573	60	488
Lee, John E., Conshohocken, Pa. Spool-carrier for braiding-machines.	478,341	July 5	436	107	60	87
Lee, Joseph G., assignor of one-half to G. T. Macen, Dallas, Tex. Well-drilling machin- ery.	476,467	June 7	370	86	59	1509
Lee, Joseph W., Cambridge, assignor of one-half to S. Burlingham, Hitchin, England. Ve- hicle-starter.	485,125	Oct. 25	2511	645	61	546
Lee, Leighton, Wilmington, Del. Paper-making machine.	476,153	May 31	3620	915	59	1396
Lee, Mike. (See Mellott, Benjamin F., assignor.)						
Lee, Patrick, assignor to himself and G. W. Dillie, Boise City, Idaho. Cooking-utensil at- tachment.	473,399	Apr. 19	2202	553	59	445
Lee, Preston B., Philadelphia, Pa. Glove.	479,285	July 19	1877	470	60	393
Lee, Theodore G., Cutler, Ohio. Hay-rake.	488,713	Dec. 27	2427	602	61	1852
Lee, Thomas B., et al. (See Hupp, George N., assignor.)						
Lee, Thomas F., Rexville, N. Y. Type-writing machine.	468,934	Feb. 16	1605	406 407	58	857
Lee, Thomas H., Greenup, Ill. Trace-protector.	477,560	June 21	2120	526	59	1884
Lee, William A. (See Fuller and Lee.)						
Lee, William A., Winfield, Kans. Car-coupling.	479,885	Aug. 2	167	42	60	615
Lee, William R., Nelsonville, Tex. Plow.	476,802	June 14	876	216	59	1625
Leech, William, New Haven, Conn. Removable folding frame for wagon-tops.	474,390	May 10	817	213	59	806
Leech, William A., Lamar, Mo. Feed-trough.	471,868	Mar. 29	3428	875	58	1795
Leech, William H. (See Weiman, Frederick C., assignor.)						
Leede, Julius, Minneapolis, Minn. Treating refractory ores.	471,616	Mar. 29	3029		58	1720
Leede, Julius, Minneapolis, Minn. Apparatus for treating refractory ores.	471,617	Mar. 29	3030	771	58	1720
Leede, Julius, Minneapolis, Minn. Apparatus for desulphurizing ores.	471,618	Mar. 29	3031	771 772	58	1720
Leede, Julius, Minneapolis, Minn. Process of and apparatus for making gas.	471,671	Mar. 29	3113	792 793	58	1735
Leede, Julius, Minneapolis, Minn. Apparatus for treating refractory ores.	471,672	Mar. 29	3115	793 794	58	1735
Leede, Julius, Minneapolis, Minn. Boiler-furnace.	471,673	Mar. 29	3117	794	58	1736
Leadham, Russel C., Trinidad, Colo. Mechanical movement.	467,012	Jan. 12	1142	290	58	225
Leadle, George D., assignor to G. S. Foos Company, Springfield, Ohio. Lawn-mower clutch.	479,192	July 19	1741	437	60	365
Leedy, John K., Tom's Brook, Va. Siphonic water-distributing apparatus.	485,953	Nov. 8	1225	323	61	839
Leehey, Timothy J., Indianapolis, and J. O'Connell, Bedford, Ind. Combined umbrella- lock and satchel-fastener.	486,256	Nov. 15	1728	455	61	957
Leek, John W., Cincinnati, Ohio. Running-gear for vehicles.	475,578	May 24	2698	684	59	1201
Leek, William H., Quincy, Cal. Educational apparatus.	476,468	June 7	370	86	59	1509
Leeman, Henry, Louisiana, Mo. Horse-detacher.	487,126	Nov. 29	3144	806	61	1269
Leeming, Frank, Bradford, England. Mechanism for operating the shuttle-boxes and pick- up mechanism of looms.	467,753	Jan. 26	2359	597 598	58	471
Lees & Co., Asa. (See Stark, John, assignor.)						
Lees, John, Jr., Adrian, Mich. Suspender-end attachment.	481,360	Aug. 23	2612	642	60	1121

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Lees, John, Jr., assignor of one-half to E. T. Ludecke, Adrian, Mich. Dust-pan.....	472,371	Apr. 5	569	147	59	107
Lees, Ralph. (See Lees, Thomas, R., and W., Jr.)						
Lees, Thomas, R., and W., Jr., Hollinwood, near Oldham, England. Cut-off-valve gear...	472,658	Apr. 12	996	{ 257 258 }	59	203
Lees, William, Jr. (See Lees, Thomas, R., and W., Jr.)						
Leeser, Emil, Chicago, Ill. Cork-extractor.....	467,232	Jan. 19	1518	388	58	305
Leeson, Joseph R. (See Wardwell, Simon W., Jr., assignor.)						
Leet, Daniel W., Milwaukee, Wis. Bath-room drying companion.....	486,074	Nov. 22	2374	621	61	1099
Lefebvre, Albert H., assignor to Harmon Machine Company, Watertown, N. Y. Feed for pulp-grinding machines.....	483,458	Sept. 27	2480	624	60	1858
Lefebvre, Joseph J., and J. O. Cessna, Redding, Cal. Bar-fixture.....	471,327	Mar. 22	2609	661	58	1632
Lefebvre, Louis. (See Gagnon and Lefebvre.)						
Lefever, Daniel M., Syracuse, N. Y. Lock and ejector mechanism for breakdown guns...	475,873	May 31	3174	{ 805 806 }	59	1307
Lefever, Edward, and J. A. Bremner, Syracuse, N. Y. Shell for high explosives.....	476,395	June 7	265	63	59	1489
Leffel, Uriah H., Troy, Ohio. Plug-cutter.....	473,231	Apr. 19	1919	483	59	389
Leffingwell, William W., Dalton City, Ill. Barrel-roller.....	473,630	Apr. 26	2598	654	59	542
Leffler, Paul W. (See Hoyt and Leffler.)						
Leffmann, Henry, and W. Beam, assignors of one-third to J. E. Lonergan, Philadelphia, Pa. Testing milk.....	479,193	July 19	1742	-----	60	366
Lefler, Martin L., et al. (See Kested, Bradley D., assignor.)						
Lefler, Winfield S., et al. (See Kested, Bradley D., assignor.)						
Leger, Edward, assignor of one-third to H. B. Leger, Chicago, Ill. Shoe-holder.....	483,808	Oct. 4	429	106	61	89
Leger, Edward, assignor of one-third to H. B. Leger, Chicago, Ill. Shoe-holder.....	483,963	Oct. 4	662	166	61	137
Leger, Harry B. (See Leger, Edward, assignor.)						
Legg, Albert, and C. W. Weston, Milton, N. Y. Sewing-machine.....	474,840	May 17	1542	{ 392 393 394 }	59	959
Legg, Albert, Milton, and C. W. Weston, New York, N. Y. Sewing-machine needle.....	474,841	May 17	1544	394	59	959
Legg, Albert, Milton, and C. W. Weston, New York, N. Y. Sewing-machine.....	474,842	May 17	1545	{ 394 395 }	59	960
Legg, Benjamin A., Allegheny, Pa. Mining-machine.....	482,045	Sept. 6	200	48	60	1374
Legg, Benjamin A., Allegheny, Pa. Mining-machine.....	482,046	Sept. 6	204	48, 49	60	1375
Legg, Joshua D., Long Eddy, N. Y. Corner bracket-shelf.....	483,069	Sept. 20	1864	472	60	1728
Leggett, Walter L., Galesburg, Ill. Fruit-jar filler.....	475,874	May 31	3179	806	59	1309
Leggett, Walter L., assignor of one-half to C. P. King, Galesburg, Ill. Keg or barrel filter.....	486,484	Nov. 22	2075	550	61	1041
Lehberger, George, assignor of one-half to F. W. Stammer, Johnstown, Pa. Wire-rod mill.....	466,382	Nov. 15	1913	{ 506 507 }	61	996
Lehman, Anton J., New York, N. Y. Electrolytic diaphragm.....	483,692	Oct. 4	254	-----	61	53
Lehman, Anton J., New York, N. Y. Armature-core for electric motors and dynamos.....	485,284	Nov. 1	194	55	61	613
Lehman, Isador, Cleveland, Ohio. Finger-ring.....	486,720	Nov. 22	2446	638	61	1114
Lehman, Israel J., Cleveland, Ohio. Wrought-metal hanger for joists.....	478,163	July 5	140	36	60	30
Lehman, Samuel. (See Sooshy, Joseph M., assignor.)						
Lehman, William B. (See Neff, Abraham J., assignor.)						
Lehmann, Anthony A. (See Goldstein, Albert, assignor.)						
Lehmann, Anthony A., Baltimore, Md. Pneumatic fire-alarm.....	486,675	Nov. 22	2376	{ 621 622 623 }	61	1099
Lehmann, Anthony A., Baltimore, Md. Pneumatic fire-alarm.....	488,018	Dec. 13	1283	{ 320 321 322 }	61	1593
Lehmann, Fritz, Berlin, Germany. Apparatus for cleaning forks.....	485,048	Oct. 25	2406	619	61	523
Lehmann, Herrmann, Berlin, Germany. Cravat-holder.....	478,342	July 5	437	107	60	87
Lehmann, Karl, Berlin, Germany. Pneumatic wheel-tire.....	480,595	Aug. 9	1355	337	60	852
Lehmann, Robert E., Philadelphia, Pa. Axle.....	472,762	Apr. 12	1157	296	59	231
Lehmann, Rudolf, Chicago, Ill. Combined chair and sofa-bed.....	473,937	May 3	85	19	59	653
Lehr Agricultural Company. (See Lehr, Joseph W., assignor.)						
Lehr, Harry, New York, N. Y. Jewelry.....	482,483	Sept. 13	940	229	60	1531
Lehr, Joseph, and J. Bodani, Rochester, N. Y. Pressure-regulator.....	486,485	Nov. 22	2076	550	61	1041
Lehr, Joseph W., assignor to Lehr Agricultural Company, Fremont, Ohio. Cotton and corn planter.....	478,441	July 5	584	142	60	115
Lehucher, Melina A. (See Lehucher and Mathieu.)						
Lehucher, Victor A. and M. A., and A. Mathieu, Paris, France. Cover for boxes.....	482,258	Sept. 6	550	131	60	1442
Leibe, Hugo, Baltimore, Md. Crimping-machine for cruppers.....	477,014	June 14	1221	296	59	1694
Leiber, Henry. (See Pine, Arthur F., assignor.)						
Leihman, Frank, assignor to E. P. Reichhelm & Co., New York, N. Y. Gas-burner.....	471,799	Mar. 29	3335	849	58	1776
Leidich, Peter C., Ashland, Pa. Box for packing and shipping bottles.....	475,456	May 24	2502	638	59	1164
Leigh, Lewis E. (See Perkins and Leigh.)						
Leigh, William H., Beaver Falls, Pa. Track-sweeper.....	485,348	Nov. 1	308	82	61	635
Leighton, Arthur M., assignor of one-half to J. H. Livermore, Port Townsend, Wash. Last.....	487,627	Dec. 6	628	161	61	1446
Leighton, George H., et al. (See Beckwith, Theodore A., assignor.)						
Leimberger, Frederick W. (See Seward and Leimberger.)						
Leimbert, Frank C., E. J. Stout, and B. C. Springsteen, Denver, Colo. Torpedo switch-signal.....	471,980	Mar. 29	3581	914	58	1825
Leinert, Charles H. (See Nason and Leinert.)						
Leiminger, John, Canton, Ohio. Harness-support.....	479,947	Aug. 2	268	66	60	633
Leischer, Charles, East Pierre, S. D. Car-coupling.....	488,078	Dec. 13	1400	348	61	1618
Leiser, Zacharias C. (See Weaver and Leiser.)						
Leitch, William B., Allerton, Iowa. Sanding device for railway-cars.....	485,703	Nov. 8	849	228	61	763
Lejeune, Henry E., Thibodeaux, La. Lubricator.....	488,438	Dec. 20	1984	495	61	1749
Leland, Carrie, Fremont, Nebr. Pressing-frame.....	486,347	Nov. 15	1866	491	61	985
Leland, Edwin A., assignor to C. M. Pratt, Brooklyn, N. Y. Steam-heater for railway-car-heating apparatus.....	471,869	Mar. 29	3429	875	58	1795
Leland, Harry W., Jersey City, N. J. Circuit-controller.....	486,212	Nov. 15	1645	435	61	940
Lelie, Emile C., Ste. Genevieve, Mo. Back-band hook for harness.....	468,666	Feb. 9	1188	303	58	765
Lemaire, Timothy, Troy, N. Y. Fishing-rod holder.....	473,073	Apr. 19	1637	417	59	337
Lemar, Richard T., Wabash, Ind. End-gate.....	467,420	Apr. 19	1804	461	58	359
Lembach, Adolf, et al. (See Ziegler, Josef, assignor.)						
Lembke, Charles, New York, N. Y. Eyeglasses.....	467,034	Jan. 12	1177	298	58	232
Lemichel, Jules. (See Etève and Lemichel.)						
Lemman, John, Wakefield, Mass. Car-seat.....	487,034	Nov. 29	2997	772	61	1238
Lemmon, Emma J., assignor to J. A. Lemmon, Huntingburg, Ind. Flour-safe.....	486,048	Nov. 8	1374	365	61	870
Lemmon, John A. (See Lemmon, Emma J., assignor.)						
Lemon, Eli J., assignor of one-half to R. H. West, Dallas, Tex. Car-coupling.....	467,421	Jan. 19	1804	461	58	359
Lemon, John T., Columbus, Ohio. Carpet-stretching device.....	477,809	June 28	2527	634	59	1986

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lemp, Hermann, Lynn, Mass., assignor to Schuyler Electric Company, Middletown, Conn. Liquid rheostat	467,255	Jan. 19	1556	396	58	313
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Induction-discharge protector for welding apparatus	473,514	Apr. 26	2395	606 607	59	503
Lemp, Hermann, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Compound-wound alternating-current dynamo	479,170	July 19	1697	425 426	60	358
Lemp, Hermann, Lynn, and W. S. Moody, Chelsea, Mass., assignors to Thomson Electric Welding Company, of Maine. Electric metal-working	467,233	Jan. 19	1519	388 389	58	306
Lencauchez, Alexandre. (See Coze and Lencauchez.)						
Lencauchez, Alexandre. (See Dnrant and Lencauchez.)						
Lenderoth, William, Rosebank, N. Y. Baker's oven	475,403	May 24	2415	616	59	1147
Leug, Charles, Pittsburg, Pa., assignor to E. M. Sanger, New York, N. Y. Implement for finishing the necks of bottles	460,774	Aug. 16	1641	411	60	924
Lenhart, Marguerite J., et al. (See Moorhouse, Walter, assignor.)						
Leni, Charles, Acton, England. Cash-register	481,361	Aug. 23	2612	642	60	1121
Lennox, Charles P., Toronto, Canada. Dental tool	478,343	July 5	438	108	60	87
Lenoch, Jaroslav, et al. (See Klenha, Vaclav, assignor.)						
Lenoir, Samuel F., Sumter, S. C. Car-coupling	488,792	Dec. 27	2547	632	61	1877
Lenox, Edwin S., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Bale-tie	466,609	Jan. 5	481	124	58	92
Lent, Lucas M. (See Hornby and Lent.)						
Lent, Smith, et al. (See Weller, Chester A., assignor.)						
Lenthe, Frederick. (See McGrain, John, assignor.)						
Lenty, Joseph, Troy, N. Y. Hose-coupling	476,752	June 7	788	194	59	1594
Lentz, David H., Roanoke, Va., and A. W. Thompson, Newark, N. J., assignors to Continuous Rail Joint Company of America, of New Jersey. Rolls for forming connecting-plates for rail-joints	481,697	Aug. 30	3154	770 813 814 815	60	1242
Lentz, Gustav, Dusseldorf, Germany. Steam-boiler	481,796	Aug. 30	3334	815 816 817	60	1277
Lentz, Gustav, Dusseldorf, Germany. Apparatus for sanding rails	481,797	Aug. 30	3336	815	60	1278
Lentz, Gustav, Dusseldorf, Germany. Bogie-frame for locomotive-engines	487,187	Nov. 29	3235	828	61	1287
Lentz, Otto, Cnlm, Germany. Boring apparatus	486,877	Nov. 29	2712	707	61	1183
Lenzen, Theodore W., and L. Heckenroth, San José, Cal. Blacksmith's forge	479,286	July 19	1878	470	60	393
Leonard, Ben S. (See Platt, William M., assignor.)						
Leonard, Charles H. (See Barrett, James H., assignor.)						
Leonard, Charles H., Elizabeth, N. J. Nursing or feeding bottle holder	469,480	Feb. 23	2465	632	58	1031
Leonard, Charles N., assignor to Drake & Wood Company, Indianapolis, Ind. Portfolio	471,390	Mar. 22	2710	691	58	1653
Leonard, Charles N., assignor to Drake & Wood Company, Indianapolis, Ind. Surgical chair	472,372	Apr. 5	569	147	59	107
Leonard, Charles N., R. B. Roberts, and W. D. Allison, Indianapolis, Ind.; said Leonard and Roberts assignors to said Allison. Surgical table	473,122	Apr. 19	1722	436	59	351
Leonard, George B. (See Logan, James B., assignor.)						
Leonard, Harry W., New York, N. Y. System of electrical distribution	468,099	Feb. 2	283	69	58	579
Leonard, Harry W., New York, N. Y. Electric elevator	468,100	Feb. 2	285	70	58	579
Leonard, Harry W., New York, N. Y. System of electrical distribution	476,544	June 7	478	113 114 115	59	1532
Leonard, Harry W., New York, N. Y. System of electrical distribution	478,344	July 5	439	108 109	60	87
Leonard, Harry W., New York, N. Y. System of electrical distribution	484,208	Oct. 11	1032	262	61	224
Leonard, John N., Northampton, Mass. Rolls for doubling and twisting machines	483,809	Oct. 4	430	106	61	89
Leonard, Orin, Belvidere, Ill. Milk-cooler	471,646	Mar. 29	3073	781	58	1728
Leonhard, Gottlob T., Paterson, N. J. Paper drying and cutting apparatus	478,975	July 12	1395	344 345	60	290
Leonhardt Wagon Manufacturing Company. (See Leonhardt, William, assignor.)						
Leonhardt, William, assignor to Leonhardt Wagon Manufacturing Company, Baltimore, Md. Wagon-top	471,484	Mar. 22	2850	725	58	1679
Leonhart, George J., Ashland, Ohio. Billiard-chalk holder	479,889	Aug. 2	175	43	60	616
Lepley, Daniel F., Connellsville, Pa. Steam-pump	471,870	Mar. 29	3431	876	58	1795
Leppert, Adolph, Brooklyn, N. Y. Refrigerator	468,351	Feb. 9	700	174	58	669
Leprohon, Pantaléon M., Brooklyn, N. Y. Fishing-reel	488,678	Dec. 27	2378	589	61	1843
Lereh, Fredrick W. (See Hunt and Lereh.)						
Lerdall, Herman T., et al., executors. (See Urdahl, Thomas.)						
Lesh, John A., Markelsville, Pa. Shaft-tug	487,950	Dec. 13	1171	292	61	1570
Leslie, Arthur M., Chicago, Ill. Shuttle for sewing-machines	482,850	Sept. 20	1515	377	60	1658
Leslie Brothers Manufacturing Company. (See Metzger, Jules P., assignor.)						
Leslie, James W., Everett, Mass. Hanger for curtains	476,469	June 7	372	86	59	1509
Leslie, James W., Everett, Mass. Measuring device for liquids	476,470	June 7	373	87	59	1510
Leslie, James W., Everett, assignor to Leslie Manufacturing Company, Boston, Mass. Traverse-ring	479,713	July 26	2600	647	60	545
Leslie, James W., Everett, assignor to Leslie Manufacturing Company, Boston, Mass. Traverse-ring	479,714	July 26	2602	647	60	545
Leslie Manufacturing Company. (See Leslie, James W., assignor.)						
Lesly, Henry, Birmingham, Ala. Car-coupling	477,561	June 21	2120	526	59	1884
Lester, Daniel M. (See Beyer and Lester.)						
Lester, George W., Racine, Wis. Tongue-support	468,879	Feb. 16	1514	386	58	839
Lester, Henry G. (See Miller and Lester.)						
Lester, James F. (See Forbes, Walter T., assignor.)						
Lester, James S., Atlanta, Ga. Window-screen	476,154	May 31	3622	915	59	1397
Lester, Lewis W., Glencoe, Minn. Locomotive-boiler	479,648	July 26	2481	618	60	523
Lester, Lucrtha, Cuba, N. Y. Fire-escape	485,954	Nov. 8	1226	323	61	840
Lester Piano Company. (See Trefz, Otto R., assignor.)						
Lester, Thomas S. (See Miller and Lester.)						
Lester & Wasley. (See Beyer and Lester, assignors.)						
Lestina, Otto, Chicago, Ill. Soft-stop attachment for pianos	485,872	Nov. 8	1086	288	61	811
Lestina, Otto, Chicago, Ill. Piano-action	485,873	Nov. 8	1087	289	61	811
Letalle, Léon, Beauvais, France. Loom for weaving chenille webs	473,260	Apr. 19	1961	492	59	397
Letalle, Léon, Beauvais, France. Loom for weaving chenille carpets	473,261	Apr. 19	1963	493	59	398
Letalle, Léon, Beauvais, France. Loom-shuttle	475,125	May 17	1987	503	59	1047
Letcher, George. (See Jeffers, John F., assignor.)						
Lettelier, John G., Los Angeles, Cal. Machine for making box-binding channel-strips	482,484	Sept. 13	940	229 230	60	1531
Lettré, Philip H., assignor to T. I. Smith & Company, North Attleborough, Mass. Link for sleeve or cuff buttons	479,649	July 26	2482	618	60	523

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Letts, Walter M., Sedalia, Mo. Spark-arrester and draft-regulator	475,579	May 24	2699	684	59	1201
Lenckert, William, Brooklyn, N. Y. Fastener for clothes-lines	476,471	June 7	374	87	59	1510
Levedahl, Axel, assignor to Gardner Sewing Machine Company, Aurora, Ill. Wheel	480,022	Aug. 2	426	107	60	662
Lever, Oswald, <i>et al.</i> (See Hofbauer, Frank, assignor.)						
Lever, Oswald, and W. S. Grundy, Philadelphia, Pa. Cop-winding machine	486,257	Nov. 15	1730	455	61	958
Lever, Oswald, and W. S. Grundy, Philadelphia, Pa. Driving mechanism for cop and bobbin winders	486,258	Nov. 15	1733	456	61	958
Levett, Louis, New York, N. Y. Sign-letter	480,106	Aug. 2	549	138	60	687
Levey, John, assignor of one-half to G. E. Martin, Lindsay, Canada. Regulator for steam-furnaces	472,373	Apr. 5	575	148	59	108
Levez, Louis A., assignor of one-half to U. Racine, Providence, R. I. Plating metals	470,623	Mar. 8	1536	400	58	1404
Levi, Ernst. (See Beilmann and Levi.)						
Levi, Hermann. (See Trone, Pierre G., assignor.)						
Levi, Mordicai, Charleston, W. Va. Paving-block	466,351	Jan. 5	65	17	58	15
Levi, Mordicai, Charleston, W. Va. Steam-generator	466,695	Jan. 5	604	157	58	117
Levin, William, New York, N. Y. Pruning implement	476,279	June 7	73	16	59	1452
Levy, Alexander, <i>et al.</i> (See Turner, Alonzo G., assignor.)						
Levy, David, New York, N. Y. Shutter-worker	470,349	Mar. 8	1125	288	58	1323
Levy, Ezekiel J. (See Mabie, Langford C., assignor.)						
Levy, Henry, assignor of one-half to A. Hirsh, New York, N. Y. Device for attaching covers to picture-frames	467,700	Jan. 26	2272	576	58	454
Levy, Henry, assignor of one-half to A. Hirsh, New York, N. Y. Device for holding covers on picture-frames	467,701	Jan. 26	2274	577	58	455
Levy, Henry, assignor of one-half to A. Hirsh, New York, N. Y. Clasp for holding covers on picture-frames	467,702	Jan. 26	2275	577	58	455
Levy, Henry, assignor to himself and A. Hirsh, New York, N. Y. Device for securing covers to frames	467,980	Feb. 2	110	27	58	545
Levy, Joseph B. (See Smith, William, assignor.)						
Lewelling, S. W. (See Abernathy, Loranzy H., assignor.)						
Lewerth, John W., New York, N. Y. Multiple-button drilling-machine	466,610	Jan. 5	482	124	58	92
Lewin, J. M., <i>et al.</i> (See Manderfield, George J., assignor.)						
Lewin, Samuel, <i>et al.</i> (See Manderfield, George J., assignor.)						
Lewing, Louis R., Cincinnati, Ohio. Combination wash-stand and close stool	472,673	Apr. 12	1025	264	59	206
Lewinsohn, Simon, Berlin, Germany. Making imitation long heron-feathers	485,329	Nov. 1	273	74	61	628
Lewis, Aaron D., Canton, Mo. Electric perforating-pen	485,767	Nov. 8	939	251	61	782
Lewis, Albert, Marshalltown, Iowa. Power-transmitter	466,352	Jan. 5	66	17	58	15
Lewis, Alexander C., McCrory, Ark. Rotary engine	461,540	Jan. 5	367	92	58	71
Lewis, Andrew T., East Portland, assignor to himself, and F. O. Downing, Portland, Oreg. Magazine tack-hammer	472,374	Apr. 5	576	148	59	108
Lewis, Anthony L., Evanston, Ill. Window-cleaner	483,359	Sept. 27	2342	589	60	1831
Lewis, Charles R. (See Hamblin, Joshua J., assignor.)						
Lewis, Charles R. (See Logan and Lewis.)						
Lewis, Charles S., Waterbury, Conn. Cash register and indicator	478,164	July 5	141	36, 37	60	31
Lewis, Edward F., assignor to Waterbury Farrel Foundry and Machine Company, Waterbury, Conn. Pressure-plate	472,301	Apr. 5	462	119	59	87
Lewis, Elliott L., Troy, N. Y. Animal-trap	472,703	Apr. 12	1114	286	59	223
Lewis, Eugene H., assignor to Michigan Sand Brick Company, St. Joseph, Mich. Process of and composition for manufacturing sand bricks	471,844	Mar. 29	3398		58	1789
Lewis, Everett C., assignor of one-half to L. B. Pease, Woonsocket, R. I. Telephone-holder	487,369	Dec. 6	216	59	61	1363
Lewis, Frank H., <i>et al.</i> (See Burton, Augustus G., assignor.)						
Lewis, Franklin F. (See Lewis, Stephen B. and F. F.)						
Lewis, George A. (See Steele, Elbridge J., assignor.)						
Lewis, George E. (See Pierce, Chester C., assignor.)						
Lewis, George T., Philadelphia, Pa., and C. V. Petraeus, Camden, N. J., assignors to Western Pater Company, Denver, Colo. Treating sulphide ores of zinc and lead	481,499	Aug. 23	2841		60	1166
Lewis, George T., Philadelphia, Pa., and C. V. Petraeus, Camden, N. J., assignors to Western Patent Company, Denver, Colo. Treating sulphide ores	481,500	Aug. 23	2842		60	1166
Lewis, Georgia M. (See Cox and Lewis.)						
Lewis, Granville R., Lynchburg, Va. Car-coupling	479,106	July 19	1601	400	60	340
Lewis, H. L. D., <i>et al.</i> (See Fitzwater, William M., assignor.)						
Lewis, H. P., <i>et al.</i> (See Jacoby, William, assignor.)						
Lewis, Harry C. (See Sommerfeld, Heinrich, assignor.)						
Lewis, Harry J., Pittsburg, Pa. Buckle-plate	469,063	Feb. 16	1822	466	58	900
Lewis, Henry R., London, and C. B. Phillips, Chester, England. Extracting metals from refractory ores	487,188	Nov. 29	3236	{ 828 829 }	61	1287
Lewis, Isaac N., Fort Schnyler, N. Y. Speed-indicator	480,107	Aug. 2	550	139	60	687
Lewis, Jasper B., <i>et al.</i> (See Jewell, Delbert W. and G., assignors.)						
Lewis, John F. (See Slick, Edwin E., assignor.)						
Lewis, John F., Tnrtle Creek, Pa. Ingot-extractor	480,432	Aug. 9	1102	{ 275 276 }	60	801
Lewis, John G. (See Hamilton and Lewis.)						
Lewis, John G., and R. Hamilton, Jefferson City, Mo.; said Hamilton assignor to said Lewis. Trousers, &c., and pattern therefor	478,195	July 5	191	49	60	40
Lewis, John H., Water Valley, Miss. Saddle-stirrup	469,153	Feb. 16	1937	496	58	923
Lewis, John N., Coulee City, Wash. Rail-joint	476,753	June 7	789	194	59	1594
Lewis, Josiah P. (See Ward, William H., assignor.)						
Lewis, Ledyard V., and S. S. Allen, Sun Prairie, Wis. Corn-harvester	477,132	June 14	1409	{ 342 343 }	59	1732
Lewis, Leroy S., East Hartford, Conn., assignor to H. B. Mitchel, Malden, Mass. Apparatus for purifying water	472,641	Apr. 12	975	253	59	199
Lewis, Leroy S., East Hartford, Conn., assignor to Sanitary Manufacturing Company, Catlettsburg, Ky. Vaporizer	474,640	May 10	1215	311	59	881
Lewis, Lorenzo L., assignor of one-half to R. D. Coulter, Orange City, Fla. Tubular inserted saw-tooth	485,503	Nov. 1	536	142	61	682
Lewis, Louis B., Columbus, Ohio. Window-guard	471,056	Mar. 15	2192	564	58	1541
Lewis, Mortimer G., New York, N. Y. Bench-vise	466,466	Jan. 5	250	63	58	48
Lewis, Mortimer G., New York, N. Y. Bench-vise	472,674	Apr. 12	1025	264	59	206
Lewis, Nathan P., Hutchins, Miss. Combined harrow and cultivator	487,848	Dec. 13	1005	253	61	1538
Lewis, Orlando E. (See Lombard, Nathaniel, assignor.)						
Lewis, Pearl C., Catskill, N. Y. Chair	482,745	Sept. 20	1363	{ 337 338 }	60	1627
Lewis, Robert F., Scranton, Pa. Horseshoe	479,137	July 19	1654	413	60	349
Lewis, Robert T., Jr. (See Austin and Lewis.)						
Lewis, Robert T., Jr., and G. A. Driggs, Waterbury, Conn. Drapery pin and hook	467,139	Jan. 12	1378	353	58	271

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lewis, Samuel R., Raton, N. Mex. Ter. Feeder-lifter.....	486,486	Nov. 22	2078	550	61	1041
Lewis, Samuel W., Brooklyn, N. Y. Hydrant-valve.....	488,079	Dec. 13	1401	348	61	1619
Lewis, Stephen B. and F. F., Janesville, Wis. Straight-knitting machine.....	466,853	Jan. 12	881	{ 225 226 }	58	177
Lewis, T. S., <i>et al.</i> (See Wood, Albert A., assignor.)						
Lewis, Thomas S., Wilmington, Del. Ice-cream freezer.....	474,475	May 10	951	245	59	831
Lewis, Walter, assignor to G. T. Turner, Philadelphia, Pa. Knot-picker for brush-makers.	470,003	Mar. 1	542	134	58	1204
Lewis, Walter, assignor of one-half to G. T. Turner, Philadelphia, Pa. Supporting and locking attachment for bicycles.....	485,285	Nov. 1	195	56	61	613
Lewis, Walter C., Boston, Mass. Right and left stocking.....	474,391	May 10	818	214	59	806
Lewis, William E., Corry, Pa. Ink-well.....	484,803	Oct. 25	2003	514	61	444
Lewis, William E., Pemaquid, Me. Culinary apparatus.....	473,400	Apr. 19	2203	553	59	445
Lewis, William G., Caledonia, Iowa. Colter attachment for plows.....	476,396	June 7	270	63	59	1490
Lewis, William H. (See Anthony and Lewis.)						
Lewis, William H., <i>et al.</i> (See Morrell, Robert, assignor.)						
Lewis, William H., Huntington, assignor to E. & H. T. Anthony & Company, New York, N. Y. Plate-holder.....	468,456	Feb. 9	853	216	58	699
Lewis, William M., New Hartford, Iowa. Mechanical motor.....	475,580	May 24	2700	684	59	1202
Lewis, William M., New Castle, Colo. Boiler water-level recorder.....	483,722	Oct. 4	293	73	61	61
Lewis, William T., Peoria, Ill. Bicycle-brake.....	471,845	Mar. 29	3398	866	58	1789
Lewis, William T., Peoria, Ill. Brake for bicycles.....	478,194	July 5	190	49	60	40
Lewis, William T., Peoria, Ill. Bicycle-brake.....	486,935	Nov. 29	2845	736	61	1209
Ley, Albert S. (See Ley, James C. and A. S.)						
Ley, James C. and A. S., Hancock, Mich. Spout and stopper for oil-cans.....	468,152	Feb. 2	369	91	58	596
Levien, Edward. (See Meigs and Leyden.)						
Libbey, Hosea W., Boston, Mass. Stove and burner for hydrocarbon oils.....	467,608	Jan. 26	2130	541	58	428
Libbey, Hosea W., Boston, Mass. Fish-plate.....	468,881	Feb. 16	1517	387	58	840
Libbey, Hosea W., Boston, Mass. Disk carbon for arc lamps.....	471,526	Mar. 22	2902	738	58	1689
Libbey, Hosea W., Boston, Mass. Evaporator attachment for stovepipes.....	472,060	Apr. 5	74	20	59	16
Libby, Augustus F., <i>et al.</i> (See Morrell, Robert, assignor.)						
Libby, Charles P. (See Emery, Charles H., assignor.)						
Libby, Frederic M., Portland, Me. Perforated penholder.....	484,967	Oct. 25	2272	586	61	497
Library Bureau. (See Godfrey, Charles B., assignor.)						
Librowicz, Julius, New York, N. Y. Protective bottle-stopper.....	484,330	Oct. 11	1235	315	61	263
Lichtfeldt, Fredrick, Milwaukee, Wis. Sewing-machine.....	478,063	June 28	2935	733	59	2058
Liddell, John G., New Haven, Conn. Attachment for cartridge-priming machines.....	479,819	Aug. 2	65	15, 16	60	594
Liddell, William, Brooklyn, N. Y., assignor to W. A. Bingham, Bloomfield, N. J. Paper-bag machine.....	487,225	Nov. 29	3296	841	61	1297
Liddle, Robert Z., Albany, N. Y. Wick-tube for oil-stoves.....	480,268	Aug. 9	840	214	60	755
Liddle, Robert Z., Albany, N. Y. Oil-stove.....	484,030	Oct. 11	767	194	61	172
Lidgerwood Manufacturing Company. (See North, Charles M., assignor.)						
Lidke, Fredrick C., New York, N. Y. Coin-table.....	478,165	July 5	144	37	60	31
Lidke, Fredrick C., New York, N. Y. Hand-stamp.....	481,362	Aug. 23	2614	643	60	1121
Liebe, Robert, assignor to Fouquet & Franz, Rottenburg, Germany. Method of and apparatus for making colored figures in knit goods.....	488,019	Dec. 13	1287	{ 321 322 }	61	1594
Liebe, Charles, New York, N. Y. Furniture-fastening.....	470,246	Mar. 8	923	228	58	1287
Liebe, Charles, New York, N. Y. Fastening device.....	475,581	May 24	2701	685	59	1202
Liebeck, Louis H. (See Petterson and Liebeck.)						
Lieberthal, Hyman, Bay City, Mich. Suspender-buckle.....	479,074	July 19	1550	387	60	330
Liebmann, Rudolph, New York, N. Y. Button.....	472,375	Apr. 5	579	148	59	109
Liedel, Henry A., Haywards, Cal. Safety watch-pocket.....	475,017	May 17	1822	462	59	1014
Liedke, Charles H., assignor to J. S. Cowdery, Sandusky, Ohio. Crayon-machine.....	476,051	May 31	3450	{ 870 871 }	59	1362
Liedke, Edward L. (See Cowdery, Curtis, and Liedke.)						
Lienaur, Charles T., Berlin, Germany. Pneumatic sewerage system.....	482,439	Sept. 13	873	{ 208 209 }	60	1519
Light, Abram J. (See Light, Samuel E., assignor.)						
Light, George S., Covington, Ky. Mail-box.....	481,621	Aug. 30	3039	742	60	1220
Light, Lyman T., Covington, Ky. Letter-box.....	483,070	Sept. 20	1865	473	60	1728
Light, Samuel E., assignor of one-half to A. J. Light, Lebanon, Pa. Machine for casting hollow ingots.....	467,469	Jan. 19	1825	{ 480 481 }	58	375
Lighthody, Colin, Brooklyn, N. Y. Electrical atomizer.....	469,481	Feb. 23	2467	633	58	1032
Lighte, Ferdinand C., Florence, S. C. Touch-regulator.....	472,376	Apr. 5	580	149	59	109
Lightford, James G. (See Stacey and Lightford.)						
Lightford, James G., Indianapolis, Ind. Motor for street-cars.....	481,715	Aug. 30	3187	778	60	1248
Lighton, John B., assignor to John Lighton Machine Company, Syracuse, N. Y. Lock.....	473,401	Apr. 19	2204	{ 553 554 }	59	445
Ligon, James R., Sr., Branchville, S. C. Window-shade bracket.....	473,402	Apr. 19	2207	554	59	446
Liles, John M., and J. B. Williams, assignors of one-third to W. A. Williams, Rockingham, N. C. Tire-shrinker.....	474,392	May 10	819	214	59	806
Lillard, William B. (See Hall, Charles K., assignor.)						
Lillard, William B., New Orleans, La. Electric-wire coupling.....	468,086	Feb. 2	266	65	58	576
Lillard, Zachary T., and U. Erhard, Kansas City, Mo. Printing or recording telegraph.....	482,015	Sept. 6	152	37, 38	60	1365
Lilley, Hugh H. V., assignor of one-half to T. Lilley, Milford, Mass. Lasting.....	482,016	Sept. 6	157	38	60	1366
Lilley, Thomas. (See Lilley, Hugh H. V., assignor.)						
Lillie, Samuel M., assignor to Sugar Apparatus Manufacturing Company, Philadelphia, Pa. Vacuum evaporating apparatus.....	466,862	Jan. 12	898	230	58	180
Lillie, Samuel M., assignor to Sugar Apparatus Manufacturing Company, Philadelphia, Pa. Vacuum evaporating-pan.....	470,060	Mar. 1	623	155	58	1220
Lillie, Samuel M., assignor to Sugar Apparatus Manufacturing Company, Philadelphia, Pa. Utilizing heat in the manufacture of sugar and salt.....	486,983	Nov. 29	2920	.....	61	1225
Lily, William H., Lancaster, Pa. Cigar-tip cutter.....	476,660	June 7	652	158	59	1566
Liming, John, Mount Alverno, Pa. Eyeglasses.....	478,616	July 12	849	209	60	184
Linberg, Lars, Galesburg, Ill. Last.....	474,994	May 17	1786	{ 451 452 395 396 }	59	1008
Lincoln, David B., Aurora, Ill., assignor to J. A. Manly, Grand Rapids, Mich., and C. T. Daily, Kansas City, Mo. Advertising-cabinet.....	486,113	Nov. 15	1501	{ 395 396 }	61	912
Lincoln, Frederick H. (See Bodette, George H., assignor.)						
Lincoln, Levi C. (See Bailey and Lincoln.)						
Lincoln, Marshall, Boston, Mass. Ticket-holder.....	485,202	Nov. 1	75	23, 24	61	588
Lincoln Road Grader Manufacturing Company. (See Pugsley, William E., assignor.)						
Lincoln, Theodore M., Hartford, Conn. Stove for heating ovens for japanning, enameling, and glazing.....	482,485	Sept. 13	944	230	60	1532
Lindahl, Frank E., Chicago, Ill. Watchmaker's tool.....	478,615	July 12	848	208	60	184

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lindahl, Henry, assignor of one-half to J. S. Gustin, Chicago, Ill. Clamp for electric conductors	487,332	Dec. 6	154	44	61	1354
Lindberg, Andrew H. and P. A., New York, N. Y. Piano-stool	468,916	Feb. 16	1575	399 400	58	852
Lindberg, Oskar, Helsingborg, Sweden, assignor of one-half to J. E. Sandelin, New York, N. Y. Oil-filter	487,421	Dec. 6	815	81	61	1383
Lindberg, Peter A. (See Lindberg, Andrew H. and P. A.)						
Lindemeyer, Philip, Baltimore, Md. Paper box	476,661	June 7	653	158	59	1566
Lindemeyer, Philip, Baltimore, Md., assignor to I. Friedenwald. Paper box	466,792	Jan. 12	783	203	58	158
Lindemeyer, Philip, assignor of one-half to S. Dalsheimer, Baltimore, Md. Card or picture support	469,436	Feb. 23	2383	611	58	1016
Lindemuth, Gotthard, Hohenkirchen, Germany. Straight-bar knitting-frame	476,397	June 7	271	64	59	1490
Lindeström, Hjalmar, Chicago, Ill. Mower	469,019	Feb. 16	1764	450	58	889
Lindgren, August, assignor to Moline Plow Company, Moline, Ill. Wheel-cultivator	469,154	Feb. 16	1937	496	58	924
Lindgren, August, assignor to Moline Plow Company, Moline, Ill. Beet-cultivator	466,614	Nov. 23	2282	595	61	1079
Lindgren, August, Moline, Ill., assignor to Moline Plow Company, of Illinois. Seeding-machine	473,324	Apr. 19	2063	519	59	418
Lindhorst, Frank. (See Weinmann and Lindhorst.)						
Lindley, Zachary M., assignor of one-third to E. B. Jacobs and V. A. Wallace, Carthage, Mo. Reel attachment for harvesting and reaping machines	470,061	Mar. 1	625	155	58	1220
Lindner, Adolph, Berlin, Germany. Magazine-gun	483,229	Sept. 27	2125	538	60	1791
Lindner, Josef, assignor of one-half to M. Gruber, New York, N. Y. Sign	473,883	Apr. 26	2984	752 753	59	616
Lindner, Otto, Brussels, Belgium. Pneumatic tire for wheels	474,453	May 10	928	238	59	826
Lindner, Robert, Chemnitz, Germany. Starting-gear for compound locomotives	481,181	Aug. 23	2306	568 569	60	1065
Lindoff, George. (See Bradley, Smith W., assignor.)						
Lindsay, James G. (See Bonaffon, Albert L., assignor.)						
Lindsay, James G., assignor of one-half to A. L. Bonaffon, Philadelphia, Pa. Metallic fence	488,210	Dec. 20	1622	404	61	1679
Lindsay, John, Millbury, Mass. Toothed wheel	480,930	Aug. 16	1877	468	60	971
Lindsay, Thomas, Brookville, Ind. Drier for paper-machines	480,407	Aug. 9	1058	265	60	794
Lindsay, Walter M., West Derby, Vt. Tennis-marker	487,951	Dec. 13	1172	292	61	1570
Lindsay, William G., Antigo, Wis. Ironing-table	483,400	Sept. 27	2481	625	60	1858
Lindsey, Andrew E. S., Imperial, Pa. End-gate tightener for cars and wagons	480,664	Aug. 9	1471	366	60	875
Lindsey, Matthew G., Anderson, S. C. Hydraulic motor	488,246	Dec. 20	1676	419	61	1689
Lindskog, Charles G., Salt Lake City, Utah Ter. Sash-fastener	476,947	June 14	1123	270	59	1674
Lindström, Charles, Altoona, Pa. Center-plate fastening	480,408	Aug. 9	1059	265	60	794
Lindström, Charles, Altoona, Pa. Indicator-lock	481,960	Sept. 6	58	14	60	1346
Lineback, John B., Oaks, Indian Ter. Adjustable neck-yoke	470,320	Mar. 8	1069	272	58	1314
Linebarger, Jonathan H., Clarion, Iowa. Plow	472,302	Apr. 5	465	119	59	87
Lineff, Alexander L., London, England. Closed conduit for electric railways	480,409	Aug. 9	1060	265 266	60	794
Linegar, Charles. (See Simmonds and Linegar.)						
Lines, John. (See Hyde and Lines.)						
Lines, Thomas D., assignor to C. A. Denison, Syracuse, N. Y. Thill-coupling	475,507	May 24	2588	658	59	1180
Lines, Thomas D., assignor to C. A. Denison, Syracuse, N. Y. Thill-coupling	475,508	May 24	2590	659	59	1180
Lines, Thomas D., assignor to C. A. Denison, Syracuse, N. Y. Thill-coupling	475,509	May 24	2591	659	59	1180
Lines, Thomas D., assignor to C. A. Denison, Syracuse, N. Y. Spring-vehicle	478,937	July 12	1330	330	60	278
Lingford, Edward. (See Lingford, Henry B. and E.)						
Lingford, Henry B. and E., Ripon, England. Apparatus for feeding calves	488,693	Dec. 27	2401	595	61	1847
Lingley, John H. (See Fowler and Lingley.)						
Lingley, John H. (See Fowler, Lingley, and Dodge.)						
Linham Dado Machine Company. (See Linham, Robert E., assignor.)						
Linham, Hermie, administratrix. (See Linham, Robert E.)						
Linham, Robert E., deceased; H. Linham, executrix, and assignor, by mesne assignments, to Linham Dado Machine Company, Mansfield, Ohio. Molding-cutter	472,675	Apr. 12	1027	265	59	207
Linham, Robert E., deceased; H. Linham, executrix, and assignor, by mesne assignments, to Linham Dado Machine Company, Mansfield, Ohio. Molding-cutter	472,676	Apr. 12	1027	265	59	207
Linham, Robert E., deceased; H. Linham, executrix, and assignor, by mesne assignments, to Linham Dado Machine Company, Mansfield, Ohio. Molding-cutter	472,677	Apr. 12	1028	265	59	207
Linham, Robert E., deceased; H. Linham, executrix, and assignor, by mesne assignments, to Linham Dado Machine Company, Mansfield, Ohio. Molding-cutter	472,678	Apr. 12	1029	265	59	207
Linham, Robert E., deceased; H. Linham, executrix, and assignor, by mesne assignments, to Linham Dado Machine Company, Mansfield, Ohio. Molding-cutter	472,679	Apr. 12	1030	266	59	207
Linhardt, John A. (See Masterson, Herbert, assignor.)						
Linindoll, Charles C., Fort Edward, N. Y. Hasp-lock	474,021	May 3	218	52	59	680
Link-Belt Engineering Company. (See Caskey and Dodge, assignors.)						
Link-Belt Engineering Company. (See Cavanagh, Joseph, assignor.)						
Link-Belt Engineering Company. (See Dodge, James M., assignor.)						
Link-Belt Engineering Company. (See Ewart and Dodge, assignors.)						
Linkert, John, assignor of one-half to H. Arland, Hamilton, Canada. Artificial foot	468,352	Feb. 9	701	174	58	669
Linkiewicz, Leopold, Minneapolis, Minn. Butter-cutter	477,905	June 28	2693	674	59	2011
Linkletter, Robert, Jersey City, N. J. Hinge	472,622	Apr. 12	954	247	59	195
Linn, Charles, Sioux City, Iowa. Dump-wagon	486,114	Nov. 15	1502	396	61	912
Linoleum Manufacturing Company. (See Godfrey, Leake, and Lucas, assignors.)						
Linscott, John M., Worcester, Mass. Let-off motion for looms	485,330	Nov. 1	274	74	61	628
Linthicum, John F., Sacramento, Cal. Machine for wrapping papers	478,345	July 5	442	109 110	60	88
Linvile, Samuel R., Philadelphia, Pa. Individualizing cut-out for printing-telegraphs	477,665	June 28	2299	576 577	59	1935
Linvile, Samuel R., Philadelphia, Pa. Time cut-out for electric-service systems	480,369	Aug. 9	999	251 252	60	784
Lipe, Charles E., Syracuse, N. Y. Machine for making insulated magnetic coils	473,123	Apr. 19	1725	436 437	59	351
Lipe, Charles E., and J. A. Pross, Syracuse, N. Y. Process of and apparatus for welding metals	473,884	Apr. 26	2985	753	59	616
Lipman, Hymen L., Philadelphia, Pa. Tank	479,602	July 26	2412	601	60	510
Lipman, John, and C. J. Rinderknecht, assignors of one-fourth to F. X. Beaupere, Indianapolis, Ind. Automatic railway-switch	479,373	July 19	2028	506	60	423
Lipp, Frederick. (See Hegershoff and Lipp.)						
Lipp, Frederick. (See Laubensdorfer and Lipp.)						
Lipp, Louis, Cincinnati, Ohio. Flushing-tank	466,828	Jan. 12	835	215	58	169
Lipp, William F., Dayton, Ohio, and E. J. Preston, Alexandria, Ky. Screen-door	477,562	June 21	2121	527	59	1884

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lippelmann Carriage Company. (See Swan, Henry C., assignor.)						
Lippitt, Theodore C., Shenandoah, Iowa. Hay-loader.	474,476	May 10	953	245	59	831
Liquid Carbonic Acid Manufacturing Company. (See Convert, Charles F. A., assignor.)						
Lish, William H., assignor to G. H. Becker and H. Brubaker, York, Pa. Combined step-ladder and ironing-board holder	472,303	Apr. 5	466	119 447 448 449	59	87 1825
Lishman, Thomas G., Bristol, England. Steam-boiler or other furnace	477,376	June 21	1829	573	60	488
Lisk, David A., and T. D. Brown, Clifton Springs, N. Y. Bottom for metallic vessels	476,280	June 7	74	16	59	1452
Lisk, David A., and T. D. Brown, Clifton Springs, N. Y. Vent for shipping-cans	476,281	June 7	75	16	59	1452
Lisk, David A., and T. D. Brown, assignors to Lisk Manufacturing Company, Limited, Clifton Springs, N. Y. Self-sealing shipping-can	471,871	Mar. 29	3433	876	58	1796
Lisk, George W., Clifton Springs, N. Y. Anti-rust vessel	479,517	July 26	2295	573	60	488
Lisk Manufacturing Company. (See Lisk and Brown, assignors.)						
Lisle, Edward, Wolverhampton, England. Velocipede	476,884	June 14	1014	246	59	1652
List, William A., Wheeling, W. Va. Machine for joining and rolling sheets for roofing	480,665	Aug. 9	1472	367	60	875
Lister, Joseph, Chicago, Ill. Pipe-coupling	486,936	Nov. 29	2845	736	61	1210
Lister, Oliver B. (See Robinson, Joe and R., assignors.)						
Litch, Lemuel W., Swampscott, Mass. Heel-stiffener machine	480,023	Aug. 2	427	107 108	60	662
Litel, John A., Ham's Prairie, Mo. Wrench	483,461	Sept. 27	2483	625	60	1859
Littell Indicator Lock and Car Seal Company. (See Young and Littell, assignors.)						
Littell, William F. (See Young and Littell.)						
Little, Charles H. (See Knapp and Little.)						
Little, Charles H., et al. (See Johns, Will R., assignor.)						
Little, Charles R., West Duluth, Minn. Lumber-sorter	486,584	Nov. 22	2229	585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	61	1069
Little, Ezekiel C., St. Louis, Mo., assignor of one-half to M. F. Williams. Clay drying and sifting apparatus	485,636	Nov. 8	736	193 194	61	739
Little, Frank J., assignor of one-half to J. B. Dinsmore, Portland, Mich. Plate for vapor-stoves	483,932	Oct. 4	610	154	61	126
Little Gem Manufacturing Company. (See Mathewson, Nathan F., assignor.)						
Little, George C., Vance, Kans. Brick-kiln	467,981	Feb. 2	112	28	58	545
Little, James R., Quincy, Ill. Metal wheel	470,941	Mar. 15	2021	517	58	1507
Little, James R., Quincy, Ill. Making metal wheels	471,008	Mar. 15	2128	546	58	1528
Little, James R., Quincy, Ill. Manufacture of metal wheels	472,893	Apr. 12	1338	343 344	59	268
Little, James R., Quincy, Ill. Metal wheel	475,582	May 24	2703	685	59	1202
Little, James R., Quincy, Ill. Metal wheel	475,583	May 24	2704	685	59	1203
Little, James R., Quincy, Ill. Constructing metal wheels	475,584	May 24	2705	686	59	1203
Little, James R., Quincy, Ill. Metal wheel	487,280	Dec. 6	66	20	61	1335
Little, James R., Quincy, Ill. Metal wheel	487,281	Dec. 6	67	20	61	1335
Little, James R., Quincy, Ill. Manufacturing metal wheels	487,282	Dec. 6	67	21	61	1335
Little, James R., Quincy, Ill. Manufacturing metal wheels	487,283	Dec. 6	69	21	61	1335
Little, James R., Quincy, Ill. Machine for making metal wheels	488,124	Dec. 13	1463	369	61	1631
Little, James R., Quincy, Ill. Hub-blank for metal wheels	488,125	Dec. 13	1465	370	61	1631
Little, James R., Quincy, Ill. Making metal wheels	488,126	Dec. 13	1467	370	61	1632
Little, James R., Quincy, Ill. Die for making metal wheels	488,127	Dec. 13	1470	371	61	1632
Little, James R., Quincy, Ill. Metal wheel	488,439	Dec. 20	1984	495 496	61	1749
Little, James R., Quincy, Ill. Manufacture of metal wheels	488,440	Dec. 20	1987	496	61	1749
Little, John R., assignor of one-half to H. E. Bellerose, West Stewartstown, N. H. Saw-tooth-setting machine	483,497	Sept. 27	2529	636	60	1868
Little, Orton C., assignor of one-half to D. T. H. MacKinnon, Menasha, Wis. Pulley	483,227	Sept. 27	2122	537	60	1790
Little, Orton C., assignor of one-half to D. T. H. MacKinnon, Menasha, Wis. Collar	483,228	Sept. 27	2123	537	60	1791
Little, Percy, Mount Vernon, N. Y. Barrel-contractor	473,764	Apr. 26	2791	702	59	579
Little, Percy, Mount Vernon, N. Y. Barrel-expander	474,020	May 3	216	51	59	679
Little, Reuben H., Red Oak, Ga. Cultivator	472,734	Apr. 12	1115	286	59	223
Little, Robert H., Chicago, Ill., assignor of two-thirds to H. H. Heimerdinger and I. Meyer. Apparatus for delivering cards and other articles for advertising purposes	479,820	Aug. 2	67	16	60	595
Little, Robert H., Chicago, Ill., assignor of two-thirds to H. H. Heimerdinger and I. Meyer. Liquid-dispensing apparatus	481,698	Aug. 30	3156	770 771	60	1243
Little, Robert H., assignor to J. G. Saxe, Chicago, Ill. Apparatus for dispensing articles of merchandise	481,908	Aug. 30	3515	860 861	60	1312
Little, Robert H., assignor to E. D. Stiles, Chicago, Ill. Coin-operated vending-machine	483,255	Sept. 27	2194	551 552	60	1803
Little, Thomas A., Wheeling, W. Va. Natural-gas burner	478,117	July 5	61	16	60	14
Little, William D., Syracuse, and E. W. Bogardus, Port Byron, N. Y. Adjuster and leveler for billiard and pool tables	474,750	May 10	1385	350	59	915
Little, William H., Picture Rocks, Pa. Ironing-table	486,878	Nov. 29	2715	707	61	1184
Littlejohn, Joseph E. (See Thomas and Littlejohn.)						
Littlewood, George H. (See Phillips and Littlewood.)						
Livengood, Winfield S., assignor to E. C. Sooy, Kansas City, Mo. Baling-press	479,287	July 19	1879	470 471	60	394
Livengood, Winfield S., assignor to W. C. Chadbourne, J. A. Duncan, and W. Masters, Kansas City, Mo. Bale-tie machine	468,667	Feb. 9	1189	303	58	765
Livengood, Winfield S., assignor to J. A. Duncan and W. Masters, Kansas City, Mo. Wire-supporting reel	473,160	Apr. 19	1786	450	59	364
Livengood, Winfield S., assignor, by mesne assignments, to Midland Manufacturing Company, Kansas City, Mo. Bale-tie machine	486,615	Nov. 22	2284	595	61	1080
Livergood, Hiram J., Brantford, Canada. Wheat-separating machine	468,568	Feb. 9	1043	265	58	737
Livernore, Charles W., deceased; M. A. B. Livernore, Providence, R. I., executrix, and assignor to Kenney Electrical Cash Carrier Company, Portland, Me. Cash-carrier apparatus	479,762	July 26	2684	666 667 668	60	561
Livernore, Darwin O., Los Gatos, Cal. Sash-fastener. (Reissue)	11,230	Mar. 15	2242	575	58	1551
Livernore, James H. (See Leighton, Arthur M., assignor.)						
Livernore, James H., Port Townsend, Wash. Extension shoe-last	480,596	Aug. 9	1356	337	60	852
Livernore, Mary A. B., executrix. (See Livernore, Charles W.)						
Livers, John A. (See Doersom, Philip, assignor.)						
Livingston, Andrew W., and S. E. Starrett, San Francisco, Cal. Gun	477,946	June 28	2756	630	59	2024
Livingston, David, Thornville, Ohio. Potato-digger	478,442	July 5	586	143	60	115
Livingston, Ferris S., Philadelphia, Pa. Lubricator	486,676	Nov. 22	2379	622	61	1100
Livingston, Henry H., Savannah, Ga. Label-cabinet	467,035	Jan. 12	1178	298	58	232
Livingston, Henry J., New Orleans, La. Composition of matter for producing Portland cement	486,165	Nov. 15	1583		61	929

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Livingston, Henry S. (See Breslin, Joseph, assignor.)						
Livingston, Joseph R., Velasco, Tex. Oar-lock attachment	488,318	Dec. 20	1790	450	61	1710
Livingston, Murray V. (See Touey and Livingston.)						
Livsey, John B., Allenton, R. I. Belt-shifter for carding-machines	476,282	June 7	76	16	59	1452
Lizotte, Albert, Quincy, Mass. Shoe-lace fastener	484,438	Oct. 18	1411	360	61	310
Ljung, Gustaf. (See Nicol and Ljung.)						
Lloyd Booth Company. (See Bray, Charles W., assignor.)						
Lloyd, Charles A., Baltimore, Md. Ventilating-awning	476,662	June 7	655	159	59	1566
Lloyd, Edwin L., Philadelphia, Pa. Bottle-stopper	474,642	May 10	1217	311	59	882
Lloyd, Edwin L., Philadelphia, Pa. Electric-wire holder	475,781	May 31	3013	764	59	1275
Lloyd, Francis H., <i>et al.</i> (See Winby, William E. and W. M., assignors.)						
Lloyd, Henry H., Philadelphia, Pa., assignor to Electric Storage Battery Company, Gloucester City, N. J. Secondary battery	477,182	June 14	1492	365	59	1749
Lloyd, John, Jr., Red Bank, N. J. Key-coupler for organs	479,434	July 26	2141	535	60	459
Lloyd & Lloyd. (See Unwin and Howard, assignors.)						
Lloyd, Seth and W. R., West New Brighton, N. Y. Steam-actuated rock-drill	481,632	Aug. 30	3054	746	60	1223
Lloyd, Thomas, Boston, Mass. Burnisher	485,416	Nov. 1	415	111	61	657
Lloyd, William A., Pittsburg, Pa. Knife for cutting the rope used in boring Artesian and oil wells	484,804	Oct. 25	2004	515	61	444
Lloyd, William A., Pittsburg, Pa. Sand-rope reel	485,203	Nov. 1	76	24	61	588
Lloyd, William R. (See Lloyd, Seth and W. R.)						
Loan, William F., Portland, Oreg. Holder for brushes, dusters, &c	468,036	Feb. 2	196	48	58	562
Loar, George F., Gibson City, Ill. Attachment for type-writing machines	471,872	Mar. 29	3434	876	58	1716
Lobangh, John, Crenshaw, Pa. Combined fuse and file holder	482,642	Sept. 13	1191	288	60	1581
Lobdell, Alonzo, Racine, Wis. Vehicle-dash	468,569	Feb. 9	937	258	58	737
Lobet, Jean, Flémalle-Liege, Belgium. Machine for cutting lamp-chimneys	477,133	June 14	1411	343	59	1732
Loch, Joseph, Brooklyn, N. Y. Slot-protector for money-sales	480,108	Aug. 2	552	139	60	688
Loch, Joseph, Brooklyn, N. Y. Lock	481,235	Aug. 23	2398	592	60	1084
Loch, Joseph, assignor to Burns & Barclay Company, New York, N. Y. Savings-receptacle	466,353	Jan. 5	67	17	58	15
Lochman, Augustus, Milton, Pa. Door-securer	477,426	June 21	1899	468	59	1839
Lochmann, Emil R., St. Louis, Mo. Flying toy	481,182	Aug. 23	2308	569	60	1066
Lochmann, Ernst G., Gohlis-Leipzig, Germany. Picture-aquarium	475,404	May 24	2416	617	59	1148
Lochmann, Oskar P., Gohlis, Germany. Musical box	468,503	Feb. 9	937	258	58	715
Locke, Daniel W., Bucyrus, Ohio. Shaft attachment	485,874	Nov. 8	1087	289	61	811
Locke, Fred M., Victor, N. Y. Insulator-pin	476,207	May 31	3716	939	59	1413
Locke, Fred M., Victor, N. Y. Insulator	484,209	Oct. 11	1034	263	61	224
Locke, Joseph M., Cincinnati, Ohio. Controlling device for elevators	469,196	Feb. 16	2003	511	58	936
Locke, Nathaniel C., Salem, Mass. Reducing-valve	475,585	May 24	2706	686	59	1203
Lockett, Joseph C., Boston, assignor to C. S. Pierce, Brockton, Mass. Crimping-machine	485,204	Nov. 1	77	24, 25	61	588
Lockhart, George H. (See Ford and Lockhart.)						
Lockhart, William C., Waterloo, Ind. Spray-nozzle	487,628	Dec. 6	629	162	61	1446
Lockstaedt, Charles C., Chicago, Ill. Reclining-chair	477,906	June 28	2694	674	59	2011
Lockstaedt, Charles C., Chicago, Ill. Elevated structure	477,907	June 28	2694	674	59	2011
Lockstaedt, Charles C., Chicago, Ill. Split pulley	484,935	Oct. 25	2229	575	61	488
Lockstaedt, Charles C., Chicago, Ill. Can	484,936	Oct. 25	2230	575	61	489
Lockstaedt, Charles C., Chicago, Ill. Combined sofa and bed	485,637	Nov. 8	738	194	61	740
Lockstaedt, Charles C. and J. F. Gubbins, Chicago, Ill. Filter	483,230	Sept. 27	2127	538	60	1791
Lockwood, Charles H., assignor of one-half to J. A. Begy, Rochester, N. Y. Leveling-instrument	479,518	July 26	2296	573	60	489
Lockwood, Charles L., Covington, Ky., assignor to himself, J. W. and G. A. Shrague, Cincinnati, Ohio. State-room for cars or ships	486,049	Nov. 8	1375	365	61	870
Lockwood, De Witt C., Shelton, Conn. Fishing rod and reel	484,439	Oct. 18	1412	360	61	310
Lockwood, Fred. (See Snyder and Lockwood.)						
Lockwood, Frederic A., Boston, Mass. Conveyor mechanism	467,943	Feb. 2	61	14	58	537
Lockwood, Frederic A., Boston, Mass. Dredging apparatus	472,735	Apr. 12	1116	226	59	224
Lockwood, George E., assignor to G. H. Colket, Philadelphia, Pa. Can-soldering machine. (Reissue)	11,297	Dec. 27	2844	700 701 702	61	1940
Lockwood, George F., assignor of one-half to J. F. Barrows, Saginaw, Mich. Insulated gear-wheel	474,913	May 17	1645	420	59	981
Lockwood, George M., Washington, D. C. Coin-delivering apparatus	475,086	May 17	1933	490	59	1035
Lockwood, Hamilton, <i>et al.</i> (See Glazier, George W., assignor.)						
Lockwood, John M., San Francisco, Cal. Electric-lighting system	472,623	Apr. 12	955	247	59	195
Lockwood, Morris C., assignor of five-sixths to J. Shiner and J. Northrup, Vineland, N. J. Heel-breasting machine	472,736	Apr. 12	1118	287	59	224
Lockwood, Rhodes, Boston, Mass. Atomizer	478,118	July 5	62	16	60	14
Lockwood, Samuel T., and S. K. White, Chicago, Ill. Cloth-folding machine	482,373	Sept. 13	761	185	60	1499
Lockwood, Thomas J., Muncie, Ind. Gun-lock	468,002	Feb. 2	144	35	58	552
Lockwood, Thomas J., Muncie, Ind. Gun-lock	468,003	Feb. 2	147	35	58	552
Lockwood, Thomas J., Muncie, Ind. Gun-lock	468,004	Feb. 2	150	36	58	553
Lockwood, William C., New York, N. Y. Telephony	469,706	Mar. 1	53	16	58	1109
Lodge, Addison D., Vandalia, Ohio. Door-closer	481,798	Aug. 30	3337	815	60	1278
Lodwick, William H., Cincinnati, Ohio. Index and mail-assorter	478,617	July 12	850	209	60	184
Loebis, Edward A., Rochester, N. Y. Stovepipe-shelf	488,247	Dec. 20	1678	419	61	1669
Loeffler, Gustav W., Apopka, Fla. Wagon running gear	469,155	Feb. 16	1940	497	58	924
Loepere, Hugo F., assignor of one-half to Z. L. H. Loepere, Buffalo, N. Y. Fumigator	473,631	Apr. 26	2599	654	59	542
Loepere, Zelmira L. H. (See Loepere, Hugo F., assignor.)						
Loewe, Oscar, Berlin, Germany. Device for opening and closing cocks, &c	478,444	July 5	589	143	60	116
Loewenberg, Joseph. (See Young, Moskowit, Adler and Loewenberg.)						
Loewenberg, Joseph, <i>et al.</i> (See Young and Moskowit, assignors.)						
Loewer, Henry, Rochester, N. Y. Scallop-machine	486,408	Nov. 15	1960	521	61	1005
Lofie, Henry, Syracuse, N. Y. Trolling-spoon	481,652	Aug. 30	3085	752	60	1229
Leftin, Melville, Hildreth, Ill. Nail-puller	471,873	Mar. 29	3435	877	58	1796
Leftis, Frank P. H. (See Cook, Frederick W., assignor.)						
Lefton, Herbert M., Savannah, Ga. Brake	476,283	June 7	77	17	59	1453
Leftus, James F., and E. B. Williams, Thorndike, Mass. Combination ice-pick	476,052	May 31	3453	871	59	1363
Legan, Cyrus F., Lock Haven, Pa. Step-cock	478,618	July 12	851	209	60	184
Legan, Ferdinand. (See Janeway and Logan.)						
Legan, Hugh, and C. R. Lewis, Jefferson City, Mo.; said Logan assignor to said Lewis. Pocket	467,818	Jan. 26	2458	624	58	490
Legan, James, <i>et al.</i> (See Swift, Henry D. and D. W., assignors.)						
Legan, James B., assignor of one-half to G. B. Leonard, Mount Vernon, Ill. Bake-oven for gasoline-stoves	470,624	Mar. 8	1537	400	58	1404

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Logan, John, and M. H. Stevens, Waltham, Mass. Apparatus for hardening strips of metal.	484,968	Oct. 25	2274	{ 586 587 }	{ 61 60 }	497 1822
Logan, John H., Overlook, N. Y. Holdback	483,325	Sept. 27	2300	578	60	1822
Logan, Martin, New York, N. Y. Buckle	477,947	June 28	2757	691	59	2025
Logan, Maurice S., Otterville, assignor of one-half to J. H. Barley, Sedalia, Mo. Electric-arc lamp	479,007	July 19	1447	{ 359 360 }	{ 60 60 }	311
Logan, William H. (See Rupert, George G., assignor.)						
Logan, William L. (See Wertsbaugher, Judson S., assignor.)						
Lohbiller, Anton, Boston, Mass. Safety-valve and muffler	488,020	Dec. 13	1289	322	61	1594
Lohman, Charles H., Chicago, Ill. Photographic-plate carrier	478,235	July 5	274	68	60	55
Lohner, Otto. (See Erren and Lohner.)						
Lomax, Edward L., Omaha, Nebr., and B. B. Anderson, assignors of one-third to A. I. Blanchard, Chicago, Ill. Railway-ticket.	484,331	Oct. 11	331	315	61	264
Lomb, Carl F., Rochester, N. Y. Letter-file	470,062	Mar. 1	626	155	58	1221
Lomb, Carl F., and M. R. Jewell, Rochester, N. Y., assignors to Office Specialty Manufacturing Company, of New York. Check and bill file	474,501	May 10	990	255	59	838
Lombard, Nathaniel, Boston, Mass. Automatic weighing-scale	475,405	May 24	2417	617	59	1148
Lombard, Nathaniel, assignor of one-half to H. A. Clark, Boston, Mass. Lawn-mower	473,845	Apr. 26	2920	{ 734 735 }	{ 59 59 }	604
Lombard, Nathaniel, assignor of one-half to O. E. Lewis, Boston, Mass. Hand tacking implement	481,653	Aug. 30	3086	753	60	1229
Londou Metallurgical Company. (See Cowper-Coles, Sherard O., assignor.)						
Loneragan, John E. (See Leffmann and Beam, assignors.)						
Long, Barnett, <i>et al.</i> (See Long, George W., assignor.)						
Long, Charles B., Shrewsbury, Mass. Band-saw mill	475,328	May 24	2293	{ 589 590 }	{ 59 59 }	1125
Long, Charles E. (See Gerry and Long.)						
Long, Daniel W., and C. Dimick, Lockport, Ill. Parcel-holder or advertising-valise	476,803	June 14	877	216	59	1625
Long, David. (See Crossland and Long.)						
Long, David F., Wadsworth, Ohio. Combined child's wagon, velocipede, and baby-walker.	474,138	May 3	388	94	59	713
Long, Eber A., assignor to South Bend Pulley Company, South Bend, Ind. Pulley	479,221	July 19	1782	447	60	373
Long, Edward M., Worcester, Mass. Protractor and bevel	474,393	May 10	820	214	59	806
Long, Edwin C., Manchester, N. Y. Garment-supporter	473,232	Apr. 19	1921	483	59	389
Long, Eugene. (See Curtis and Long.)						
Long, Eugene F., assignor of one-half to E. H. Ripple, Scranton, Pa. Coal-separator	488,211	Dec. 20	1622	405	61	1679
Long, Flora, Fort Wayne, Ind. Dressmaker's square and rule	470,809	Mar. 15	1825	468	58	1469
Long, Frances G. (See Long, Sumner C. and F. G.)						
Long, Frank H., Manning, Iowa. Sod-cutting harrow	484,440	Oct. 18	1412	360	61	310
Long, George W., Delaware, Iowa. Corn-harvester	467,110	Jan. 12	1320	{ 334 335 }	{ 58 58 }	260
Long, George W., assignor of two-thirds to B. Long and G. F. Grove, Greencastle, Pa. Pump	470,063	Mar. 1	627	156	58	1221
Long, Henry E. (See Farquher, John D., assignor.)						
Long, Herman E., <i>et al.</i> (See Cogswell, Wilfred G., assignor.)						
Long, James, Packerton, Pa. Punching-machine	481,574	Aug. 30	2968	728	60	1207
Long, John M., Hamilton, Ohio. Shearing-machine	479,122	July 19	1631	408	60	345
Long, Michael, Middletown, Conn. Valve	477,845	June 28	2598	651	59	1993
Long, Montgomery, assignor to O. P. Morgan and L. W. Osborne, Spartanburg, S. C. Hydraulic force-pump	476,398	June 7	273	64	59	1491
Long, Nathan H., Muncie, Ind. Washing-machine	486,721	Nov. 22	2147	638	61	1114
Long, Samuel R., Springtown, Pa. Lock	487,878	Dec. 13	1059	265	61	1548
Long, Solon C. (See Jeffs, Samuel, assignor.)						
Long, Sumner C. and F. G., Dayton, Ohio. Baking-pan	486,259	Nov. 15	1734	457	61	959
Long, Thomas. (See Dowd and Long.)						
Longanecker, Samuel, Troy, Ohio. Physician's operating-chair	481,040	Aug. 16	2052	512	60	1005
Longard, George E., Halifax, Canada. Radiator	480,597	Aug. 9	1357	{ 337 338 }	{ 60 60 }	852
Longden, Charles E., assignor to Seamless Rubber Company, New Haven, Conn. Syringe.	470,430	Mar. 8	1262	323	58	1349
Longenecker, Andrew J., Elk Grove, Cal. Fruit-packer	479,650	July 26	2483	618	60	523
Longenecker, Charles K., assignor to Weston Engine Company, Painted Post, N. Y. Stuffing-box	481,406	Aug. 23	2689	660	60	1135
Longinus, Joseph, Pottsville, Pa. Spindle	482,259	Sept. 6	551	131	60	1442
Longmore, James, and W. L. Watson, London, England. Machine for decorticating rhea, &c.	472,606	Apr. 12	926	239	59	190
Longtin, Emeric, <i>et al.</i> (See Cartwright, Edward, assignor.)						
Longval, Oliver, assignor of one-fourth to F. C. Walton, Worcester, Mass. Carpenter's plane.	471,391	Mar. 22	2712	691	58	1653
Lonsdale, Richard A. (See Lonsdale, William and R. A.)						
Lonsdale, William and R. A., Chicago, Ill. Curling-iron	484,743	Oct. 18	1889	481	61	408
Leek, John C., San José, Cal. Car-coupling	474,090	May 3	328	78, 79	59	700
Loomis, Alfred E. (See Schryver, Washington I., assignor.)						
Loomis, Charles C. (See Haskins, Schlenburg, and Chadwick, assignors.)						
Loomis, Chester P., <i>et al.</i> (See Loomis, George L., assignor.)						
Loomis, Edward B., Memphis, Tenn. Dust and cinder protector for car-windows	477,948	June 28	2759	691	59	2025
Loomis, Frank F., Akron, Ohio. Non-interfering fire-alarm-telegraph box	469,745	Mar. 1	121	32	58	1123
Loomis, Frank F., Akron, Ohio. Signal for electric railways	479,138	July 19	1654	413	60	349
Loomis, Frank F., Akron, Ohio. Reciprocating electric drill	479,948	Aug. 2	269	66	60	633
Loomis, Frank F., Akron, Ohio. Electric switch	479,949	Aug. 2	271	66	60	633
Loomis, Frank F., Akron, Ohio. Fire-alarm-telegraph indicator	479,950	Aug. 2	272	67	60	634
Loomis, George L., Northampton, Mass., assignor to himself, J. N. and C. P. Loomis, W. R. Sults, and C. Coffey, Granby, Conn. Lock-hinge	472,483	Apr. 5	744	190	59	141
Loomis, Hiram A., Springfield, Ark. Iron bridge	482,017	Sept. 6	158	38	60	1366
Loomis, James N., <i>et al.</i> (See Loomis, George L., assignor.)						
Loomis, Lyman U., Tacoma, Wash. Pocket-savings-bank	471,485	Mar. 22	2851	726	58	1679
Loomis, Reuben, Batavia, N. Y. Car-coupling	483,763	Dec. 27	2505	623	61	1863
Loomis, Webster E., Springfield, Ill. Magazine-gun	477,666	June 28	2308	577	59	1937
Loos, John F. (See Bloom, Nicholas H., assignor.)						
Loose, Edward U. (See Dake and Loose.)						
Loose, Edward W. (See Robbins, Andrew B., assignor.)						
Lorang, Rudolph. (See Ingmanson and Lorang.)						
Lord, Charles B. (See Cash, Francis C., assignor.)						
Lord, Charles E., Boston, Mass. Cash-register	470,247	Mar. 8	924	229	58	1287
Lord, Charles E., Boston, Mass., assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	478,196	July 5	192	49, 50	60	40
Lord, Daniel W., Malden, Mass. Buoyant propeller	484,503	Oct. 18	1509	383	61	329

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lord, Edgar A. (See Dumais, Jean B. Z., assignor.)						
Lord, Humphrey W. (See Alden, Oliver R., assignor.)						
Lord, Isaac W., Cucamonga, Cal. Indicating-funnel	475,875	May 31	3179	806	59	1309
Lord, Silvie, New York, N. Y. Flower-holder	485,417	Nov. 1	416	111	61	657
Loree, Manfred U., Miamisburg, assignor of two-thirds to G. Driggs and O. Kaszmirsky, Dayton, Ohio. Folding boat	486,260	Nov. 15	1735	457	61	959
Loree, Perry E., assignor to National Cash Register Company, Dayton, Ohio. Autographic register	485,955	Nov. 8	1227	323	61	840
Lorentzen, John F. B., Hector, Minn. Plow	481,633	Aug. 30	3057	746	60	1223
Lorenz, Herman, <i>et al.</i> (See Curran, William, assignor.)						
Lorenz, William A., Hartford, Conn. Music-desk	475,126	May 17	1988	504	59	1047
Lorenz, William A., assignor of one-half to W. H. Honiss, Hartford, Conn. Compartment paper bag	466,723	Jan. 5	667	171	58	126
Lorenz, William A., assignor of one-half to W. H. Honiss, Hartford, Conn. Compartment paper bag	471,254	Mar. 22	2505	635	58	1612
Lorenz, William A., assignor of one-half to W. H. Honiss, Hartford, Conn. Compartment paper bag	471,255	Mar. 22	2506	636	58	1612
Lorenz, William A., assignor of one-half to W. H. Honiss, Hartford, Conn. Compartment paper bag	471,256	Mar. 22	2508	636 637	58	1613
Lorenz, William A., assignor of one-half to W. H. Honiss, Hartford, Conn. Compartment paper bag	471,257	Mar. 22	2509	637	58	1613
Lorenz, William A., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Type-justifying apparatus	467,335	Jan. 19	1684	431	58	336
Lorenz, William A., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Type-arranger	467,355	Jan. 19	1711	437 438	58	341
Lorimer, John H., Philadelphia, Pa. Dyeing or scouring machine	480,502	Aug. 9	1213	303	60	824
Loring, Francis W., Boston, Mass. Hinge	472,192	Apr. 5	287	75	59	54
Loss, Henry W., Philadelphia, Pa. Machine for forging eye-bars	476,155	May 31	3623	916	59	1397
Loss, Henry W., Philadelphia, Pa. Stop-valve for high pressures	486,722	Nov. 22	2448	638	61	1115
Loss, Henry W., Philadelphia, Pa. Gripping device for forging-machines	486,723	Nov. 22	2450	639	61	1115
Loss, John C., <i>et al.</i> (See Trump, John G., assignor.)						
Lothinière, Alain J. de, Quebec, Canada. Stirrup	475,127	May 17	1989	504	59	1047
Loth, William J., Waynesborough, Va. Detachable heating-drum for stoves	478,874	July 12	1233	306	60	260
Lothrop, George H., Detroit, Mich. Railway-signal	488,441	Dec. 20	1989	496 497	61	1750
Lotinga, Eleanor, Ely, near Cardiff, England. Convertible child's carriage	474,641	May 10	1217	311	59	881
Lott, William F., assignor of one-half to E. T. McDonnell, Philadelphia, Pa. Combined telegraph-key and circuit-closer	481,114	Aug. 16	2183	541	60	1029
Lotz, Henry, Horicon, Wis. Spinning-wheel	467,654	Jan. 26	2193	557	58	440
Loud, Herbert, Everett, Mass. Pulley-block	475,692	May 24	2868	725	59	1234
Loud, Waldo A., Springfield, Mass. Lawn-mower	483,157	Sept. 27	2011	508	60	1768
Louden, George W., <i>et al.</i> (See Baldwin, Ozro J., assignor.)						
Louden, George W., Pittsburg, Pa. Adjustable bit-holder	480,666	Aug. 9	1474	367	60	876
Louden Machinery Company. (See Louden, William, assignor.)						
Louden, William, Fairfield, Iowa. Hay-carrier	472,175	Apr. 5	255	67, 68	59	48
Louden, William, assignor to Louden Machinery Company, Fairfield, Iowa. Hay-elevator pulley	481,263	Aug. 23	2456	605	60	1094
Louden, William A., <i>et al.</i> (See Baldwin, Ozro J., assignor.)						
Louden, Davis. (See Samson, Elias, assignor.)						
Loughlin, Michael E., assignor to Cleaveland Fence Company, Indianapolis, Ind. Post-top	479,123	July 19	1632	408	60	345
Loughran, John B. (See Loughran, Stephen J. and J. B.)						
Loughrau, Stephen J., Des Moines, Iowa. Boiler-furnace	475,329	May 24	2294	590	59	1126
Loughran, Stephen J. and J. B., Des Moines, Iowa. Furnace	468,482	Feb. 9	904	230	58	709
Loughrey, Wallace E., and A. H. McGrew, Centreville, S. D. Track-rail-aligning device	479,435	July 26	2144	535	60	460
Loughridge Brake and Car Company. (See Loughridge, Jacob E., assignor.)						
Loughridge, Jacob E., Philadelphia, Pa. Car-brake mechanism	484,597	Oct. 18	1647	418	61	358
Loughridge, Jacob E., Philadelphia, Pa., assignor to Loughridge Brake and Car Company, Camden, N. J. Brake mechanism for cars	484,598	Oct. 18	1649	418	61	358
Loughry, James C., Greensburg, Pa. Show-case	478,619	July 12	853	209	60	184
Loury, Harriet S., assignor of one-half to K. M. Wilson, Harrisonburg, Va. Lamp-heater	478,751	July 12	1049	258	60	224
Louthian, John E., Etiwanda, assignor of two-fifths to R. York, San Bernardino, Cal. Hose-coupling	475,406	May 24	2418	618	59	1148
Louvier, Oscar, assignor to L. Freund, Hamburg, Germany. Toy puzzle	469,818	Mar. 1	247	63	58	1149
Love Electric Traction Company. (See Love, John C., assignor.)						
Love, John C., Philadelphia, Pa., assignor to Love Electric Traction Company, Chicago, Ill. Contact device for electric railways	469,861	Mar. 1	314	80, 81	58	1162
Lovecraft, Frederick A., New York, N. Y. Registry-stamp	480,819	Aug. 16	1714	428	60	938
Lovejoy, Fred E. (See Bachelder and Lovejoy.) (Reissue.)						
Lovejoy, Thomas H. (See Heacock and Lovejoy.)						
Loveland Theron J., Bautam, Conn. Game apparatus	469,578	Feb. 23	2611	669	58	1060
Loveland, Walter S., and E. C. Henn, Bloomfield, Conn. Journal	470,497	Mar. 8	1361	354	58	1367
Loveland, Walter S., and E. C. Henn, Bloomfield, Conn. Securing collars upon blanks	471,129	Mar. 22	2313	594	58	1576
Loveland, Walter S., Hartford, and E. C. Henn, Bloomfield, Conn. Lathe	471,674	Mar. 29	3119	794 795	58	1736
Loveland, Walter S., assignor to Standard Manufacturing Company, Hartford, Conn. Re-usable check-valve	485,745	Nov. 8	913	244	61	776
Loveland, Walter S., assignor to Standard Manufacturing Company, Hartford, Conn. Check-valve	485,746	Nov. 8	914	244	61	777
Loveland, Walter S., assignor to Standard Manufacturing Company, Hartford, Conn. Cock	486,533	Nov. 22	2142	565	61	1054
Lovell, Albert K., Jackson, Mich. Wrench	476,767	June 7	807	199	59	1598
Lovell, Charles W., <i>et al.</i> (See Bredenberg, Alfred, assignor.)						
Lovell, Charles W., and A. Bredenberg, Brooklyn, assignors of one-third to J. W. Lovell, New York, N. Y. Bookbinding and covering machine	476,208	May 31	3717	939 940 941 942	59	1414
Lovell, Franklin J., Litchfield, Mich. Hay and grain loader	481,699	Aug. 30	3160	771 772	60	1243
Lovell, John W. (See Lovell and Bredenberg, assignors.)						
Lovell, John W., <i>et al.</i> (See Bredenberg, Alfred, assignor.)						
Lovell, Melvin N., and B. A. Walker, assignors to Chicago and Erie Stove Company, Limited, Erie, Pa. Spring counter-balance for stove or range doors	467,541	Jan. 26	2025	513	58	409
Lovendale, Julius H. (See Bouck and Lovendale.)						
Lovcridge, Philip S., Knoxville, Pa. Brick	481,700	Aug. 30	3162	772	60	1244

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Lovett, Thomas J., Chicago, Ill., assignor, by mesne assignments, to International Ore Separating Company, of New Jersey. Magnetic separator	486,879	Nov. 29	2715	708	61	1184
Lovett, Thomas J., Chicago, Ill., assignor, by mesne assignments, to International Ore Separating Company, of New Jersey. Magnetic separator	487,073	Nov. 29	3052	783 784	61	1250
Lovett, Thomas J., Chicago, Ill., assignor, by mesne assignments, to International Ore Separating Company, of New Jersey. Magnetic separator	487,074	Nov. 29	3055	784	61	1251
Low, Garrett W., and W. Shakespeare, Jr., Kalamazoo, Mich. Photographic shutter	471,675	Mar. 29	3121	795	58	1737
Low, Hamilton F., Cleveland, Ohio. Dish-washing machine	482,313	Sept. 6	653	156	60	1463
Lowberg, Samuel, New York, N. Y. Deck-cleaning machine	478,443	July 5	587	143	60	116
Lowden, James J., Boston, Mass. Steam-pressure regulator	469,373	Feb. 23	2292	589	58	999
Lowden, Leonidas C., Indianapolis, Ind. Wire-fence machine	466,499	Jan. 5	308	78	58	59
Lowden, William, Middleville, Mich. Fence-weaving machine	485,418	Nov. 1	417	112	61	658
Lowe, Braxton B., Key West, Fla. Wrench	474,477	May 10	955	246	59	831
Lowe, Charles J., Grand Forks, N. D. Means for propelling vessels	468,668	Feb. 9	1191	303	58	766
Lowe, Charles J., Chicago, Ill. Propeller-wheel	479,008	July 19	1450	360	60	312
Lowe, John, Providence, R. I. Making shoe-shank stiffeners	470,763	Mar. 15	1745	450	58	1454
Lowe, John T., Seattle, Wash. Device for producing blasts of air for ventilation, &c.	472,544	Apr. 12	840	214	59	173
Lowe, William S. and G. W. Van Rensselaer, Lima, Ohio. Torpedo-case	482,060	Sept. 6	224	54	60	1379
Lowell, John W. (See McClintock, Langhammer, and Lowell.)						
Lowell Machine Shop. (See Canning, William P., assignor.)						
Lowell Machine Shop. (See Whitworth, Thomas S., assignor.)						
Lowell, Silas P., Eugene, Oreg. Washing-machine	481,183	Aug. 23	2309	569	60	1066
Lowengrund, Isaac M., Philadelphia, Pa. Toilet-paper case	477,215	June 21	1564	384	59	1776
Löwenthal, Isidore. (See Goldnan, Edward, assignor.)						
Lowman, John W., Vicksburg, Miss. Pile-protector	488,896	Dec. 27	2702	669	61	1909
Lowne, Robert M., London, England. Engine	479,651	July 26	2484	618 619	60	524
Lowney, Walter M. (See Meigs, James L., assignor.)						
Lowrey, Bill, G., Blue Mountain, Miss. Transom-lifter	474,298	May 3	643	162	59	761
Lowrey, Bill, G., Blue Mountain, Miss. Sash-fastener	474,299	May 3	644	163	59	762
Lowrey, Bill, G., Blue Mountain, Miss. Latch and lock combined	476,663	June 7	656	159	59	1567
Lowrey, Grosvenor P. (See Bradley, Charles S., assignor.)						
Lowrey, Grosvenor P. (See Hulin, Léon, assignor.)						
Lowrey, Mark B., Memphis, Tenn. Money-changer	469,088	Feb. 16	1854	474	58	907
Lowry, Edward S. (See Ray, Alexander, assignor.)						
Lowry, George, Northampton, England. Stone-crusher	475,330	May 24	2297	590 591	59	1126
Löwry, George A., Des Moines, Iowa. Nippers for twine-making machines	474,580	May 10	1123	287	59	864
Löwry, George A., Chicago, Ill. Antomafic feeder for twine-making machines	480,873	Aug. 16	1789	448	60	954
Löwry, George A., Des Moines, Iowa, assignor, by mesne assignments, to Warder, Bushnell & Glessner Company, Springfield, Ohio, and Walter A. Wood Mowing and Reaping Machine Company, Hoosick Falls, N. Y. Nippers	470,643	Mar. 8	1563	406	58	1409
Loy, Irvin W., and R. O'Poole, Mechanicstown, Md. Circuit-closer for railway-crossing signal mechanisms	483,231	Sept. 27	2128	538	60	1791
Loyd, Alexander T., Chicago, Ill. Lamp-pipe	478,700	July 12	960	238	60	207
Loyd, Alexander T., Chicago, Ill. Car-truck	485,286	Nov. 1	197	56	61	613
Loyd, William F., Canal Dover, Ohio. Fire-escape and fireman's ladder	476,885	June 14	1016	246	59	1653
Lubbers, John H., Jeannette, assignor of one-tenth to Dixon-Woods Company, Pittsburg, Pa. Glass-annealing leer	469,790	Mar. 1	196	51, 52	58	1139
Lucas, Austin H., assignor of two-thirds to G. P. Shane, Pittsburg, and E. G. Miller, Wilkinsburg, Pa. Support for lamps	473,846	Apr. 26	2922	735	59	605
Lucas, Austin H., assignor of two-thirds to G. P. Shane, Pittsburg, and E. G. Miller, Wilkinsburg, Pa. Support for lamps	483,071	Sept. 20	1866	473	60	1729
Lucas, Charles E. (See Godfrey, Leake, and Lucas.)						
Lucas, Christian E., and A. A. Wood, Atlanta, Ga. Ventilator refrigerator-car	466,715	Jan. 5	651	167 168	58	124
Lucas, John M., Cadiz, Ohio. Bouquet-holder	475,220	May 17	2126	538	59	1075
Lucas, John T., Gallivan, Ohio. Fence	484,158	Oct. 11	952	244 245	61	209
Lucas, Olevor T. (See Smith and Lucas.)						
Lucas, William, and T. A. Garrett, London, England. Employé's time-recorder	470,810	Mar. 15	1827	469 470	58	1469
Luce, A. Charles, et al. (See McNally, Richard J., assignor.)						
Luce, Bartlett P., Boston, Mass. Lamp-burner	481,729	Aug. 30	3218	785	60	1254
Luce, Bartlett P., Boston, Mass. Lamp-burner	487,020	Nov. 29	2976	766	61	1234
Luce, Charles J. (See Cutter, William T., assignor.)						
Luce, Charles K. (See Chapman, Stanley L., assignor.)						
Luce, Letitia V., New Orleans, La. Sunshade for vehicles	483,933	Oct. 4	611	155	61	126
Luce, William B., Brookline, Mass. Electric-arc lamp	474,091	May 3	332	79, 80	59	701
Lucht, Carl C. L., Colberg, Germany. Grinding-mill	482,873	Sept. 20	1554	388	60	1666
Lucius, Charles W., Hartwell, Ohio. Toy cannon	484,805	Oct. 25	2005	515	61	445
Luckenbach, Marcus A., Denver, Colo. Treating wood to prevent decay	473,705	Apr. 26	2710	682	59	563
Lucksinger, John, Ballwin, Mo. Brake for hay-wagons	486,786	Nov. 22	2556	666 667	61	1135
Lucock, John S. (See Hunter and Lucock.)						
Ludde, Elard, Maspeth, N. Y. Taper for night-lights	484,210	Oct. 11	1035	263	61	224
Lüddeckens, Ernest, Liegnitz, Germany. Opera or field glass	480,370	Aug. 9	1002	252	60	784
Lüddecke, Ernest T. (See Lees, John, Jr., assignor.)						
Ludlow Manufacturing Company. (See Ludlow, William E., assignor.)						
Ludlow, Rodney F., Springfield, Ohio. Car-coupling	473,938	May 3	87	19, 20	59	653
Ludlow, Rodney F., Springfield, Ohio. Car-coupling	478,445	July 5	590	144	60	116
Ludlow, Rodney F., Springfield, Ohio. Car-coupling	478,446	July 5	592	144	60	117
Ludlow, Rodney F., Springfield, Ohio. Car-coupling	488,769	Dec. 27	2506	623 624	61	1868
Ludlow, William E., Toledo, Ohio. Means for dumping cars	483,360	Sept. 27	2343	589	60	1831
Ludlow, William E., Toledo, assignor to Ludlow Manufacturing Company, Cleveland, Ohio. Automatic trip for dumping-buckets	476,284	June 7	78	17	59	1453
Ludlow, William E., Toledo, assignor to Ludlow Manufacturing Company, Cleveland, Ohio. Dumping-bucket	476,285	June 7	79	18	59	1453
Ludw. Loewe & Company Commandit-Gesellschaft auf Actien. (See Laumann, Josef, assignor.)						
Ludwig, Carl P. (See Smith and Ludwig.)						
Ludwig, Dan J., New York, N. Y. Combined telegraph key and sounder	482,129	Sept. 6	335	80	60	1400
Ludwig, Friedrich A., Chemnitz, Germany. Needle-rail for Cotton's knitting-frames	476,959	June 14	1142	275	59	1678

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Ludwig, Friedrich A., Chemnitz, Germany. Driving mechanism for the spindles of circular winding-machines.	481,329	Aug. 23	2570	631	60	1114
Ludwig, William, Evansville, Ind. Barrel-press.	468,463	Feb. 9	865	219	58	702
Lueneburg, John C., Lakefield, Minn. Motor.	485,419	Nov. 1	418	112	61	658
Lufkin, Edward T. (See Bellows, Benjamin F., assignor.)						
Lugenbell, J. S., et al. (See Lugenbell, Peter, assignor.)						
Lugenbell, Peter, Greensburg, Ind., assignor of one-half to J. S. Lugenbell, Delaware, Ohio. Storm-curtain for vehicle-tops.	479,910	Aug. 2	199	50	60	621
Lugenbell, Peter, Greensburg, Ind., assignor of three-fourths to J. S. Lugenbell, J. W., L. K., and G. B. Donovan, Delaware, Ohio. Fifth-wheel.	472,894	Apr. 12	1341	344	59	268
Luger, John, Sr., North St. Paul, Minn. Glue-heater.	484,032	Oct. 11	771	194	61	173
Luger, John, Sr., and L., North St. Paul, Minn. Glue-applying apparatus.	484,031	Oct. 11	769	194	61	172
Luger, Joseph, Lausung, Mich. Windmill-tower.	484,103	Oct. 11	864	220	61	191
Luger, Louis. (See Luger, John, Sr. and L.)						
Luger, Louis, North St. Paul, Minn. Lock-case.	468,017	Feb. 2	167	41	58	557
Luger, Louis, North St. Paul, Minn. Woodworking-machine.	475,782	May 31	3014	764	59	1276
Lührig, Carl, Dresden, Germany, assignor to Lührig Coal and Ore Dressing Appliances, Limited, of England. Separating and cleaning coal and other minerals.	474,022	May 3	219	52, 53	59	680
Lührig, Carl, Dresden, Germany, assignor to Lührig Coal and Ore Dressing Appliances, Limited, of England. Apparatus for washing, separating, and concentrating ores of different specific gravity.	474,023	May 3	221	53	59	680
Lührig Coal and Ore Dressing Appliances. (See Lührig, Carl, assignor.)						
Lukens, Benjamin, Anderson, Ind. Breast-strap attachment.	468,669	Feb. 9	1192	304	58	767
Lukens, David W. (See Beckeman and Lukens.)						
Lukens, Richard L., Peoria, Ill. Harrow and pulverizer blade.	484,969	Oct. 25	2275	587	61	498
Lum, George E. (See McManes and Lum.)						
Lumaghi, Octavio, St. Louis, Mo. Zinc-furnace.	483,934	Oct. 4	612	155	61	126
Lumis, Thomas J., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Type setting and distributing machine.	467,640	Jan. 26	2171	552	58	436
Lumis, Thomas J., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Belt-driving mechanism.	468,078	Feb. 2	254	62	58	574
Lumis, Thomas J., Hartford, Conn., assignor to Thorne Type Setting Machine Company, Jersey City, N. J. Type setting and distributing machine.	468,570	Feb. 9	1045	266	58	737
Lumley, Edwin J., S. D. Webb, and G. T. Jacobs, Washington, D. C., assignors to National Cork Extractor Company, of West Virginia. Device for removing corks from bottles.	471,057	Mar. 15	2193	564	58	1541
Lumley, William, Chicago, Ill. File-holder.	474,478	May 10	955	246	59	831
Lumms, William W., Lynn, Mass. Fire-escape.	479,436	July 26	2145	535 536	60	460
Lund, Charles M. (See Henderson and Lund.)						
Lund, John, Woodstock, Canada. Harvester-binder.	485,956	Nov. 8	1229	324	61	840
Lundahl, Johan F., Homestead, Pa. Charging-machine for furnaces.	479,437	July 26	2148	536	60	461
Lundberg, Andreas P., London, England. Electric switch.	479,821	Aug. 2	71	17	60	596
Lundberg, Gustave, Logan, Utah Ter. Weighing and price scale.	486,787	Nov. 22	2557	667	61	1136
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Field-magnet for dynamos and motors.	468,953	Feb. 16	1641	418	58	864
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Electro-magnetic machine.	469,862	Mar. 1	316	81	58	1162
Lundell, Robert, Brooklyn, assignor of two-thirds to E. H. Johnson, New York, N. Y. Electric motor or dynamo-electric machine.	481,701	Aug. 30	3162	772 773	60	1244
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Governing electric motors.	486,213	Nov. 15	1646	435 436	61	941
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Governing electric motors.	486,214	Nov. 15	1649	436	61	941
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Double snap-switch.	486,215	Nov. 15	1651	436 437	61	941
Lundell, Robert, assignor of one-half to E. H. Johnson, New York, N. Y. Armature for electro-magnetic machines.	482,755	Dec. 13	851	217	61	1507
Lundstedt, Olof E., Brooklyn, N. Y., assignor, by mesne assignments, to New York Electrical Device Company, of Virginia. Electro-magnetic valve-controller.	472,461	Apr. 5	707	180	59	134
Lundstedt, Olof E., Brooklyn, N. Y., assignor, by mesne assignments, to New York Electrical Device Company, of Virginia. Electro-magnetic valve-controller.	472,579	Apr. 12	883	227	59	182
Lundstedt, Olof E., Brooklyn, N. Y., assignor to J. M. Glover, St. Louis, Mo. Postal date and time stamping machine.	472,951	Apr. 12	1425	364 365	59	285
Lundstrom, Carl J., Little Falls, N. Y. Drawing-instrument for scrolls.	467,580	Jan. 26	2088	529	58	421
Lundwall, Nelson, Brooklyn, N. Y. Horseshoe.	474,751	May 10	1387	350	59	915
Lundy, Everett B., Boston, Mass. Automatic liquid-distributing machine.	480,598	Aug. 9	1359	338	60	853
Lundy, Joseph, Rancocas, N. J. Potato-coverer.	486,534	Nov. 22	2143	566	61	1054
Lunge, George, Zurich, Switzerland. Apparatus for treating liquids with gases.	485,126	Oct. 25	2512	646	61	546
Lunge, George, Zurich, Switzerland, and J. Dewar, Cambridge, England. Recovering sulphur, carbonate of soda, and iron oxide.	480,109	Aug. 2	553	-----	60	688
Lungen, Adam, assignor to himself and R. Edwards, New York, N. Y. Push-button.	467,875	Jan. 26	2548	646	58	507
Lungren, Charles M., Brooklyn, N. Y. Atmospheric gas-burner.	474,063	May 3	289	70	59	693
Lungren, Charles M., Bayonne, N. J. Pneumatic tire.	482,182	Sept. 6	430	102 103	60	1419
Lunkenheimer, Edmund, Cincinnati, Ohio. Steam-whistle.	476,472	June 7	375	87	59	1510
Lunneam, August H. (See Fries, Richardson, and Hackett, assignors.)						
Luppert, George, Williamsport, Pa. Swing cut-off saw.	469,156	Feb. 16	1941	497	58	925
Lupton, David D., Philadelphia, Pa. Metallic shingle.	484,211	Oct. 11	1036	263	61	225
Luraschi, Carlo, Milan, Italy. Sewing-machine.	476,664	June 7	657	159 160	59	1567
Lurker, Edward P., Evansville, Ind. Construction of bureaus, &c.	484,662	Oct. 18	1767	449	61	382
Lusby, William, Cincinnati, Ohio. Account-book.	466,527	Jan. 5	200	51	60	41
Luscombe, Henry H., Boston, Mass. Hanger for electric wires.	472,220	Apr. 5	335	87	59	63
Luscombe, Thomas T., Carthage, Mo., and W. O. Luscombe, Chicago, Ill. Filter.	485,551	Nov. 1	607	162	61	697
Luscombe, William O. (See Luscombe, Thomas T. and W. O.)						
Luse, Henry H., San Francisco, Cal. Filtering-faucet.	470,004	Mar. 1	543	135	58	1204
Lusk, Lewis N., Kalamazoo, Mich. Detachable bail and ear therefor.	472,130	Apr. 5	193	51	59	36
Lussier, John, assignor of one-half to J. E. Bonin, Cambridge, Mass. Device for sharpening horseshoe-calks.	469,707	Mar. 1	54	16	58	1109
Lustig, Adolphus J., Newark, N. J. Watchcase-spring.	466,527	Jan. 5	350	87	58	68
Lustig, Albert, Corsicana, Tex. Vest and drawers holder.	483,462	Sept. 27	2484	625	60	1859
Lustig, Theodor, Chicago, Ill. Smoke-burner.	478,447	July 5	594	144	60	117
Lütke, Carl, Jr., Berlin, Germany. Exciting-fluid for galvanic batteries.	474,454	May 10	929	-----	59	826
Lutgen, James K., Winlock, assignor of one-half to C. A. Sturm, Castle Rock, Wash. Boiler.	479,288	July 19	1881	471	60	394

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Luther, Areons B., assignor of one-half to J. C. Foster, Tennessee City, Tenn. Car-compiling	478,620	July 12	854	210	60	185
Luther, Benjamin G., Worcester, Mass. Sawing-machine	468,882	Feb. 16	1518	387	58	840
Luther, Benjamin G., Worcester, Mass. Gluing attachment for matching-machines	474,092	May 3	334	80	59	701
Luther, Henry R., assignor to Barbour, Stockwell & Co., Cambridge, Mass. Frog	483,964	Oct. 4	662	166	61	137
Luther, James D., Brooklyn, N. Y. Lighting and heating apparatus	482,874	Sept. 20	1535	388	60	1666
Luther, James D., Brooklyn, assignor to Luther & Lederhos, New York, N. Y. Wick-tube.	479,519	July 26	2297	574	60	489
Luther & Lederhos. (See Luther, James D., assignor.)						
Luther, Martin A., U. S. Army. Intrenching-tool	484,806	Oct. 25	2006	515	61	445
Luther, Powell, et al. (See McConnell, Frances S., assignor.)						
Luthman, Carl G., Altoona, Pa. Spark-arrester	477,058	June 14	1293	314	59	1709
Lutton, William J., Paterson, N. J. Swivel-loom	467,262	Jan. 19	1568	399	58	315
				400		
Lutz, George, Lancaster, Ohio. Saw-setting device	473,515	Apr. 26	2397	607	59	503
Lutz, Martin. (See McArthur and Lutz.)						
Lybe, Daniel I., and W. O. Nickles, Sidney, Iowa; said Nickles assignor to said Lybe.						
Velocipede.	466,893	Jan. 12	960	245	58	192
Lycan, Albert E., Paris, Ill. Swinging gate	476,399	June 7	274	64	59	1491
Lycan, William S., assignor to himself, H. V. Gard, and H. M. Janney, Marshall, Ill. Rotary engine	470,064	Mar. 1	629	156	58	1221
Lyddon, Henry A., Brainerd, Minn. Railway-rail fastening	479,289	July 19	1882	471	60	394
Lydon, John F., Des Moines, and W. Stacy, Iowa Falls, Iowa. Finger-bar for reaping and mowing machines	471,560	Mar. 29	2949	751	58	1706
Lye, John, Glasgow, Scotland. Glove-fastening	479,800	Aug. 2	177	43	60	616
Lyford, Charles C., Minneapolis, Minn. Veterinary impregnator	473,632	Apr. 26	2600	654	59	542
Lyford, Francis, Augusta, Me. Trunk	479,438	July 26	2149	536	60	461
				537		
Lyford, H. B. (See Austin, Frank F., assignor.)						
Lyle, Robert W. (See Strusholm, Anders M., assignor.)						
Lyle, Robert W., New York, N. Y., assignor of one-half to A. M. Strusholm, Woodbridge, N. J. Pulverizer or mixer	486,937	Nov. 29	2847	737	61	1210
Lyman, Adelyn B., Cleveland, Ohio. Electric annunciator	488,567	Dec. 27	2197	543	61	1807
Lyman, Fordyce A., Cleveland, Ohio. Combined wheel lift and washer	474,394	May 10	821	214	59	806
Lyman, J. Chester. (See Milliken, William H., assignor.)						
Lyman, John C. (See Ackerman, Rudolph B., assignor.)						
Lyman, Thomas, Bloomington, Ill. Feed-water heater	469,405	Feb. 23	2342	602	58	1008
Lyman, Ferdinand L., Chicago, Ill. Handle for bicycles	466,500	Jan. 5	309	78	58	59
Lynch, Bernard F., Brooklyn, N. Y. Shoe-lace fastener	484,899	Oct. 25	2163	556	61	476
Lynch, George D., Providence, assignor to Holmes Manufacturing Company, Auburn, R. I. Vaporizer	485,127	Oct. 25	2515	646	61	546
Lynch, Henry H., San Francisco, Cal. Cable-grip-adjusting device	468,064	Feb. 2	236	58	58	570
Lynch, John. (See Emerson and Midgley, assignors.)						
Lynch, John, Jamestown, N. D. Train signaling device	470,065	Mar. 1	630	156	58	1221
Lynch, John F., Philadelphia, Pa. Packing-tool	473,008	Apr. 19	1535	391	59	319
Lynch, John H., New York, N. Y. Paper-fastener	470,383	Mar. 8	1182	303	58	1334
Lynch, Patrick, Jr., Superior, Wis. Fire-escape	483,463	Sept. 27	2485	625	60	1859
Lynch, Robert L., Leepport, Ky. Safety attachment for cars	488,477	Dec. 20	2051	510	61	1763
Lynch, Vernon T., Chicago, Ill. Alarm-gong	466,696	Jan. 5	605	157	58	117
Lynch, William and E. Tremper, Walkill, N. Y. Motor spring-fork for bicycles	480,599	Aug. 9	1360	389	60	853
Lynch, William H., Denison, Tex. Sash-fastener	473,557	Apr. 26	2466	624	59	517
Lynn Lasting Machine Company. (See Patten, Enos, assignor.)						
Lynn, Michael J., Rochester, N. Y. Automatic smoke-consuming furnace	475,876	May 31	3181	807	59	1209
Lyons, Addison J., Mount Vernon, N. Y. Key-fastener	478,448	July 5	595	145	60	117
Lyons, Alvin S., Lowell, Mass. Apparatus for skein-dyeing	476,286	June 7	80	18, 19	59	1453
Lyons, Charles H., Ballance, near Ballan, Victoria. Method of and apparatus for lining water-channels	473,009	Apr. 19	1536	392	59	319
Lyons, Charles L. (See Williams, Harry J., assignor.)						
Lyons, George W., Chicago, Ill. Musical instrument	466,501	Jan. 5	310	78	58	59
Lyons & Healy. (See Peloubet, Jarvis, assignor.)						
Lyons, Henry A. (See Harris, William W., assignor.)						
Lyons, James W., Brooklyn, N. Y. Electrical switchboard	488,532	Dec. 20	2142	530	61	1780
Lyons, John B., Brooklyn, N. Y. Mold for the manufacture of electrical switchboards	479,891	Aug. 2	177	44	60	617
Lyons, Marcus E., assignor to W. H. and G. D. Chapman and E. H. Barnes, Middletown, Conn. Composing-stick	468,504	Feb. 9	938	238	58	716
				239		
Lyons, Philip, et al. (See Strayer, George D., assignor.)						
Lyons, Joel, Buffalo, N. Y. Boot-stretcher	485,331	Nov. 1	276	75	61	628
Lyons, Robert, Peiro, Iowa. Harrow for listed corn	481,634	Aug. 30	3058	746	60	1224
Lyte, Farnham M., London, England. Production of caustic alkalies and chlorine	481,407	Aug. 23	2691	661	60	1136
Lytle, Albert E., and B. K. Cowles, Chicago, Ill. Wheeled sounding toy	477,600	June 21	2179	540	59	1895
Lytle, Alton A., assignor of one-half to A. Allger, Grand Rapids, Mich. Pen and pencil holder	485,552	Nov. 1	608	162	61	697
Lytle, Andrew J., Hillsborough, Ohio. Pillow	484,441	Oct. 18	1413	360	61	310
M. C. Bullock Manufacturing Company. (See Douglass, Samuel W., assignor.)						
M. E. Page Confectionery Company. (See Hammill, Charles, assignor.)						
M. Ohmer's Sons' Company. (See Ohmer, Wilfred I., assignor.)						
M. Ohmer's Sons' Company. (See Ohmer and Wayne, assignors.)						
Maardt, Jørgen G., Copenhagen, Denmark. Artificial marble	483,565	Oct. 4	72		61	17
Mahee, William H., Eskridge, Kans. Washing-machine	464,070	Feb. 2	245	60	58	572
Mable, Langford C., assignor of one-half to E. J. Levy, Richmond, Va. Spark-arrester	473,847	Apr. 26	2923	736	59	605
MacCormack, John, Albany, N. Y. Steam-boiler	476,053	May 31	3454	871	59	1363
				872		
MacCormack, John, and H. L. Van Zile, Albany, assignors of one-third to O. E. Van Zile, Troy, N. Y. Apparatus for disintegrating vegetable substances	466,982	Jan. 12	1097	278	58	217
MacCollom, John, Ballston, N. Y. Automatic car-step	487,867	Dec. 13	1039	260	61	1544
MacDonald, David L., Fairview, N. J. Apparatus for displaying signs	487,394	Dec. 6	253	69	61	1371
MacDonald, James, assignor of one-half to M. MacDonald, Los Angeles, Cal. Water circulator and purifier for steam-boilers	482,183	Sept. 6	432	103	60	1419
MacDonald, James, assignor of one-half to M. MacDonald, Los Angeles, Cal. Feed-water heater and purifier	488,524	Dec. 20	2131	527	61	1778
MacDonald, John W., Pittsburg, Pa. Ink-well	483,072	Sept. 20	1868	473	60	1729
MacDonald, Mary. (See MacDonald, James, assignor.)						
MacFarland, Henry, Brooklyn, N. Y. Transom-lifter	468,954	Feb. 16	1643	418	58	864
MacFarlane, James, Malden, Mass. Machine for making hollow cylinders of strips of sheet material and process thereof	483,742	Oct. 4	328	83	61	69

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
MacFarlane, Robert, Magog, Canada. Tubular water-grate	488,170	Dec. 13	1547	388	61	1647
MacHaffie, Jehn, Schenectady, N. Y. Screw-propeller	483,158	Sept. 27	2013	508 509	60	1769
MacKay, Charles D., Toronto, Canada. Dress-stay	473,161	Apr. 19	1787	450 451	59	364
MacKay, William H., Roanoke, Va. Electric-lighting system	485,287	Nov. 1	199	56	61	613
MacKellar, Malcolm, and G. D. Weaver, Reading, Pa. Electric self-winding clock	479,520	July 26	2298	574	60	489
MacKinnon, Duncan T. H. (See Little, Orton C., assignor.)						
MacLachlan, William E., New York, N. Y. Blind-stop	478,262	July 5	324	78	60	65
MacMahon, William O., agent, <i>et al.</i> (See Lavallet, Joseph G., assignor.)						
MacNaughton, James. (See Rossi, Auguste J., assignor.)						
MacNeil, William. (See Oulton, James W., assignor.)						
MacPherson, John G., McKeesport, Pa. Coin-controlled vending apparatus	482,875	Sept. 20	1556	389	60	1666
Coin-controlled vending apparatus, assignor of one-tenth to H. L. Christy, Pittsburg, Pa. }	468,724	Feb. 9	1275	324 325	58	784
MacWaters, David G., Saginaw, Mich. Ware-exhibitor	473,403	Apr. 19	2208	554	59	446
MacCarthy, Henry, assignor to S. A. Hsley & Co., New York, N. Y. Label-holder for canisters	472,794	Apr. 12	1200	308	59	240
Macauley, Edwin W., Rochester, N. Y. Bicycle-lock	481,236	Aug. 23	2399	592	60	1084
Macauley, Matthew L., Glasgow, Scotland. Bottle-stoppering device	481,363	Aug. 23	2615	643	60	1122
Macbean, William M. (See Nelson, Elihu, assignor.)						
Macbeth, James. (See Hunt, John, assignor.)						
Macbrair, Charles C., <i>et al.</i> (See Sauerston, George E., assignor.)						
Macdonald, Alexander N., <i>et al.</i> (See Jones, David A., assignor.)						
Macdonald, Duncan C. (See Alteman and Macdonald.)						
Macdonald, George S., Detroit, Mich., assignor to Trousers Stretcher Company. Trousers-stretcher	480,199	Aug. 2	702	177	60	715
Macdonald, Theodore H., O. R. Williams, and L. D. Hitzeroth, San Francisco, Cal. Rope-driving apparatus	478,875	July 12	1234	306	60	260
Macdonald, Thomas A., Paterson, N. J. Toy wheel	488,944	Dec. 27	2791	688	61	1928
Macdonald, W. A. (See Reynolds, Charles J., assignor.)						
Macdonald, William R., Allegheny, Pa. Generator	488,824	Dec. 27	2592	643	61	1886
Macdonell, Allan G., and W. Y. Gambee, New York, N. Y. Window-screen	474,668	May 10	1258	322	59	890
Macfarlane, Thomas, Ottawa, Canada. Extracting nickel from ores	484,033	Oct. 11	772		61	173
Macintosh & Company, Charles. (See Golding, William, assignor.)						
Macintosh, Robert M., Boston, Mass. Machine for making wax-ends	479,093	July 19	1580	396	60	336
Macintosh, Robert M., Boston, Mass. Apparatus for forming a knotless thread	484,212	Oct. 11	1037	263 264	61	225
Macintosh, Robert M., Boston, Mass. Apparatus for forming knotless thread. (Reissue)	11,296	Dec. 27	2839	700	61	1930
Mack, Albert G., Rochester, N. Y., assignor of one-half to C. E. Felton, Chicago, Ill. Fish-hook	479,194	July 19	1743	437	60	366
Mack, Andrew C., Portland, Oreg. Key-fastener	480,330	Aug. 9	938	238	60	772
Mack, Hugo S., <i>et al.</i> (See Appleton, Charles J., assignor.)						
Mack, John J. (See Wall and Mack.)						
Mack, Stephen, <i>et al.</i> (See Rogers, Hamilton, assignor.)						
Mack, William B., Boston, Mass. Boiler	487,535	Dec. 6	496	130	61	1419
Mackay, William H. (See Cooke and Mackay.)						
Mackay, William M., Newark, N. J., assignor to Richardson & Boynton Company, New York, N. Y. Sectional steam-boiler	476,804	June 14	878	216 217	59	1625
Mackaye, James S. (See Aze, Emile, assignor.)						
Mackenzie, Cosmo T., <i>et al.</i> (See Jervis, Oliver P., assignor.)						
Mackenzie, Donald. (See Anderson, John A., assignor.)						
Mackenzie-Hughes, Edward W., Erictane, Helensburgh, Scotland. Car-coupling	467,172	Jan. 19	1434	365	58	288
Mackenzie-Hughes, Edward W., Erictane, Helensburgh, Scotland. Car-coupling	467,173	Jan. 19	1435	365	58	289
Mackenzie-Hughes, Edward W., Erictane, Helensburgh, Scotland. Car-coupling	467,174	Jan. 19	1436	365	58	289
Mackenzie-Hughes, Edward W., assignor to Fox Solid Pressed Steel Company, Chicago, Ill. Cylinder-casing	473,409	Apr. 26	2323	587	59	490
Mackenzie, Thomas, <i>et al.</i> (See Jervis, Oliver P., assignor.)						
Mackey, Isaac, Hollansburg, Ohio. Hand corn-planter	487,849	Dec. 13	1007	254	61	1539
Mackey, John, New York, N. Y. Street-sweeping machine	467,555	Jan. 26	2057	519 520	58	414
Mackie, William A. (See Houston and Mackie.)						
Mackinney, Herbert G., Newark, N. J. Envelope for mailing packages	471,846	Mar. 29	3400	867	58	1789
Mackinney, William C., assignor to H. W. Butterworth & Sons Company, Philadelphia, Pa. Friction-clutch	466,611	Jan. 5	483	124	58	93
Macleod, Malcolm, Los Angeles, Cal. Agricultural implement	479,094	July 19	1583	396	60	337
Macleod, William A., <i>et al.</i> (See Miller, George E., assignor.)						
Macneal, Charles B., Philadelphia, Pa. Umbrella or parasol frame	473,470	Apr. 26	2323	587	59	490
Macneal, Charles B., Philadelphia, Pa. Metallic railway-tie	482,967	Sept. 20	1710	431	60	1695
Macomber, Zebedee, Bedford, assignor to Union Manufacturing Company, Battle Creek, Mich. Thrashing-machine tooth	472,131	Apr. 5	193	52	59	36
Macon, Gideon T. (See Lee, Joseph G., assignor.)						
Macphail, James, Rockford, Ill. Horse hay-rake	470,300	Mar. 8	1029	263	58	1308
Macphail, Neil, assignor to A. C. Whyte, Glasgow, Scotland. Envelope-gun moistener	475,693	May 24	2870	726	59	1235
Macquern, William N., Baltimore, Md. Oyster-washing machine	477,134	June 14	1414	344	59	1732
Macquern, William N., Baltimore, Md. Canning apparatus	485,957	Nov. 8	1232	325	61	841
Macrae, Roderick. (See Donaldson and Macrae.)						
Macy, George J., <i>et al.</i> (See Slawson, John C., assignor.)						
Macy, Josiah H. (See Amend and Macy.)						
Madaras, L. W., <i>et al.</i> (See Vogt, August G., assignor.)						
Madden, Albert F., Newark, N. J. Finishing grids for secondary batteries	485,128	Oct. 25	2516	647	61	516
Madden, Albert F., Newark, N. J., assignor to J. M. Pendleton, New Brighton, N. Y. Machine for casting grids for secondary batteries	471,527	Mar. 22	2903	739	58	1689
Madden, Dutton, Mechanicsburg, Pa. Wheeled conveyance	470,841	Mar. 15	1882	482	58	1479
Madden, Joseph, Providence, R. I. Graining mechanism	474,093	May 3	335	80	59	702
Madden, Oscar E. (See McGovern, Bernard, assignor.)						
Maddock, William H., Pittsburg, Pa., assignor of one-half to Riverside Iron Works, Wheeling, W. Va. Mill appliance	480,200	Aug. 2	703	178 179 180	60	715
Maddox, Jacob, Jr., Auxvasse, Mo. Bridle-bit	485,638	Nov. 8	740	194	61	740
Maddox, James M., Birmingham, Ala. Transom-lifter	479,567	July 26	2364	590	60	502
Maddox, R. E. (See Turner, Ephraim M., assignor.)						
Maddux, Thomas H., Baker, La. Vaginal syringe	485,107	Oct. 25	2487	639	61	541

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Mader, Frederick W., Bucyrus, Ohio. Dice-box	470,498	Mar. 8	1362	{ 354 355 }	58	1367
Mader, Theodore, Corpus Christie, Tex. Mechanical calculator	469,579	Feb. 23	2612	670	58	1060
Mader, Robert. (See Wallis and Mader.)						
Madsen, William, Chicago, Ill. Exercising apparatus	478,166	July 5	145	38	60	31
Maercklein, Bernhard G., Milwaukee, Wis. Railway-rail	474,094	May 3	336	80	59	702
Maertens, Emile, Providence, R. I. Let-off and take-up mechanism for looms	467,036	Jan. 12	1179	{ 298 299 }	58	232
Maffett, Samuel, and R. Weir, Muskegon, Mich. Machine for sawing up slabs, &c.	482,799	Sept. 20	1445	358	60	1643
Magee, Edward A., Brooklyn, N. Y. Steam-generator	479,009	July 19	1452	{ 360 361 }	60	312
Magee, John K., Toledo, Ohio. Convertible atomizer and sprayer	482,407	Sept. 13	820	197	60	1509
Magee, Richard N., administrator. (See Magee, William L.)						
Magee, William L., deceased; R. N. Magee administrator, Golden, Tex. Nut-lock	466,793	Jan. 12	784	204	58	159
Magenis, James P., North Adams, Mass. Telephonograph	476,054	May 31	3456	872	59	1363
Magenis, John, Liverpool, England. Velocipede driving-gear	480,600	Aug. 9	1362	339	60	853
Magic Freezer Company. (See Burt, Carl A., assignor.)						
Magic Introduction Company. (See Booth, Charles P., assignor.)						
Magic Introduction Company. (See McKeuney, William W., assignor.)						
Magill, Zephaniah F., Troy, N. Y. Portable head-rest	468,505	Feb. 9	939	239	58	716
Magney, Joseph P., San Francisco, Cal. Sash-balance	476,287	June 7	84	30	59	1454
Magney, Joseph P., Oakland, assignor to Magney Sash Balance Company, San Francisco, Cal. Sash-balance	481,145	Aug. 16	2245	553	60	1040
Magney Sash Balance Company. (See Magney, Joseph P., assignor.)						
Magoon, Egbert R. (See Magoon, Marius L., assignor.)						
Magoon, Marius L., assignor to E. R. Magoon, Malone, N. Y. Horse-feeding device	484,442	Oct. 18	1414	361	61	311
Magoris, Anthony E., Binghamton, N. Y. Combined syringe and speculum	471,647	Mar. 29	3074	781	58	1728
Magruder, Thomas J., Marion, Ohio. Harness	467,037	Jan. 12	1183	299	58	213
Magruder, Thomas J., Marion, Ohio. Strap-attaching device for harness	478,876	July 12	1235	306	60	260
Maguire, Patrick J., Salem, assignor to American Soda Fountain Company, Boston, Mass. Carbonic-acid-gas generator	467,673	Jan. 26	2224	566	58	446
Maguire, Patrick J., Salem, assignor to American Soda Fountain Company, Boston, Mass. Carbonic-acid-gas generator	478,198	July 5	202	51	60	41
Mahaffey, James B., Baltimore, Md. Cable system	473,233	Apr. 19	1921	{ 483 484 }	59	389
Mahaffey, James B., assignor of one-half to E. B. Hunting, Baltimore, Md. Cable railway	483,965	Oct. 4	663	166	61	138
Mahan, John H., Michaelsville, assignor of one-half to M. H. Ould, Baltimore, Md. Hinge	471,981	Mar. 29	3583	914	58	1825
Mahan, Thomas F., Phillips, Wis. Sand-pump	474,843	May 17	1547	395	59	960
Mahan, William R. (See Dean, James C. A., assignor.)						
Mahana, John B., Freewater, Oreg. Locomotive	471,009	Mar. 15	2129	546	58	1528
Mahannah, Frank, assignor of one-half to J. E. Mahannah, Omaha, Nebr. Alarm-lock	479,374	July 19	2029	506	60	423
Mahannah, John E. (See Mahannah, Frank, assignor.)						
Mahle, Albert W. (See McBride, Edward H., assignor.)						
Mahler, Frank C. (See Feldt and Mahler.)						
Mahon, Terrence P., Philadelphia, Pa. Furnace	488,171	Dec. 13	1548	{ 388 389 }	61	1647
Mahon, William L. (See Ward, Alexander F., assignor.)						
Mahoney, E. J., et al. (See Taylor, Alfred, assignor.)						
Mahoney, James T., Philadelphia, Pa., assignor, by mesne assignments, to E. W. Bruen-ghausen, New York, N. Y. Bottle-stopper	486,261	Nov. 15	1737	457	61	960
Mahony, Michael, Troy, N. Y. Boiler	480,331	Aug. 9	939	238	60	773
Maier, Gottlieb, Jr., assignor to Carter, Sloan & Co., Newark, N. J. Eyeglass-holder	471,734	Mar. 29	3224	820	58	1755
Maier, John, St. Louis, Mo. Supporting device for electric-arc lamps	480,470	Aug. 9	1166	294	60	815
Maigne, Oscar J., New York, N. Y. Printers' roller-mold	466,568	Jan. 5	416	107	58	80
Maigne, Oscar J., New York, N. Y. Apparatus for casting printers' rollers	466,569	Jan. 5	418	107	58	80
Maillard, Louis, Galt, Canada. Dental drill	482,558	Sept. 13	1077	261	60	1559
Mailliard, Joseph, San Geronimo, and J. H. Jones, San Francisco, Cal. Device for support- ing and carrying vessels	482,643	Sept. 13	1192	288	60	1581
Mailloux, Cyprien O., New York, N. Y. Carbon-brush holder	467,542	Jan. 26	2025	513	58	409
Mailloux, Cyprien O., New York, N. Y. Apparatus for charging secondary batteries	467,543	Jan. 26	2027	513	58	410
Mailloux, Cyprien O., New York, N. Y. Apparatus for charging secondary batteries	467,544	Jan. 26	2029	514	58	410
Mailloux, Cyprien O., New York, N. Y. Charging secondary batteries	467,545	Jan. 26	2034	515	58	411
Mailloux, Cyprien O., New York, N. Y. Apparatus for charging secondary batteries	467,546	Jan. 26	2036	515	58	411
Mailloux, Cyprien O., New York, N. Y. Apparatus for charging secondary batteries	467,547	Jan. 26	2041	516	58	411
Mailloux, Cyprien O., New York, N. Y. System of electrical distribution	475,877	May 31	3184	{ 807 808 }	59	1309
Mailloux, Cyprien O., New York, N. Y. Automatic electric cut-out	482,374	Sept. 13	771	{ 185 186 }	60	1500
Maiman, Albert, Liverpool, Canada. Car-coupling	475,331	May 24	2309	591	59	1127
Maim, Leonidas H., and C. McMahan, Spirit Lake, Iowa. Automatic brake for cars	467,508	Jan. 26	1962	499	58	397
Majo, Marvin D., assignor of one-half to E. B. Glen, Cortland, N. Y. Milk-cooler	467,576	Jan. 26	2550	646	58	508
Maim, William, Brooklyn, N. Y. Secondary battery	485,013	Oct. 25	2349	605	61	512
Majne, Charles, Three Rivers, Canada. Copying-machine	478,119	July 5	63	16, 17	60	15
Maime, David F., assignor of one-half to N. S. Reed, Mansfield, Ohio. Harness-saddle	481,765	Aug. 30	3287	800	60	1269
Maines, John B., Providence, R. I. Car-coupling	480,110	Aug. 2	555	139	60	688
Mains, John F., assignor to Mains Patent Mail Catcher and Deliverer Company, Indian- apolis, Ind. Mail-bag-catching fork	468,811	Feb. 16	1410	357	58	819
Mains Patent Mail Catcher and Deliverer Company. (See Mains, John F., assignor.)						
Mains, Samuel C., Glendon, Iowa. Carpet-stretcher	474,176	May 3	450	109	59	725
Maisch, Friedrich, Naples, Italy. Glove-fastener	480,874	Aug. 16	1791	448	60	954
Maitland, George, et al. (See Osborn, Francis C., assignor.)						
Majert, Wilhelm, assignor to Chemische Fabrik auf Actien, (vormals E. Schering,) Berlin, Germany. Making piperazin	471,520	Mar. 22	2893		58	1687
Major, Edmund, Terraville, S. D. Guide for stamp-mills	469,157	Feb. 16	1942	497	58	925
Malcolm, William B., Toronto, Canada. Flushing-tank	468,725	Feb. 9	1278	325	58	784
Malden Machine Company. (See Porter, Lemuel, assignor.)						
Malekar, John, Marinette, Wis. Washboard	468,410	Feb. 9	790	196	58	6-7
Malin & Company. (See Brown, Irving A., assignor.)						
Malin, Jesse S., I. D. and J. H. Wiest, Portland, Ind. Game for amusement	482,747	Sept. 20	1368	338	60	1627
Maling, Charles, Chicago, Ill., assignor, by mesne assignments, to American Patents Com- pany, Philadelphia, Pa. Tennis-racket	472,659	Apr. 12	997	258	59	203
Malke, Frederick E. R., Chrisney, Ind. Gate	477,667	June 28	2311	578	59	1938

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Mallard, William S., Darien, Ga. Station-indicator	471,874	Mar. 29	3436	877	58	1796
Mallén, Rafael, Mexico, Mexico. Recoil-operated magazine-gun	472,377	Apr. 5	581	149	59	109
Mallery, James G., and E. J. Youngs, Flint, Mich. Land-roller	471,820	Mar. 29	3365	857	58	1782
Mallery, James G., and E. J. Youngs, Flint, assignors to Gale Manufacturing Company, Albion, Mich. Cultivator	482,746	Sept. 20	1366	338	60	1627
Mallet, Edmund R., assignor of one-half to J. Baumann, San Francisco, Cal. Swimming apparatus	468,989	Feb. 16	1713	436	58	879
Mallison, Harvey P., Philadelphia, Pa. Drop-box mechanism for looms	478,621	July 12	854	210 211	60	185
Mallon, James, New Orleans, La. Circular-knife grinder	468,535	Feb. 9	992	254	58	727
Mallon, James, New Orleans, La. Neck-yoke	474,749	May 10	1384	350	59	915
Mallory, James L., et al. (See Hill, Edward A., assignor.)						
Malloy, J. J., et al. (See Williams, Sanford R., assignor.)						
Malloy, John, Escanaba, Mich. Spittoon	466,354	Jan. 5	68	17, 18	58	15
Malloy, Susie, et al. (See Williams, Sanford R., assignor.)						
Malm, Alexander, New York, N. Y. Paper-cutter	474,341	May 3	735	192	59	778
Malm, Alexander, assignor to T. W. & C. B. Sheridan, New York, N. Y. Paper-cutting machine	483,935	Oct. 4	614	155	61	127
Malm, Louis L., Cleveland, Ohio. Lubricator	476,866	June 14	1017	246	59	1653
Malmberg, Ernst R. (See Martindale and Malmberg.)						
Malmberg, Ernst R., St. Louis, Mo., assignor, by mesne assignments, to New York Electrical Device Company, of Virginia. Compensation-pendulum	472,624	Apr. 12	956	248	59	195
Malmström, Peter E., New York, N. Y. Apparatus for carbonating and dispensing beverages	475,128	May 17	1990	504	59	1048
Maloney, Thomas J., Jersey City, N. J. Tobacco wrapper and package	477,015	June 14	1222	296	59	1695
Malony, Michael. (See Burr and Malony.)						
Maltby, Clark O., Philadelphia, Pa. Type-writing machine	474,395	May 10	822	215	59	807
Maltby, William J. (See Terry and Maltby.)						
Maltby, William J., and A. Belcher, New Orleans, La. Device for cleaning cisterns, &c.	477,908	June 28	2696	675	59	2012
Malzen, Henry C., Chicago, Ill. Store-shelving	469,422	Feb. 23	2369	608	58	1013
Manahan, George M. D., New York, N. Y. Roll-paper holder and cutter	468,203	Feb. 2	446	111	58	612
Manchester, Frederic H., Providence, R. I. Incandescent lamp	469,422	Feb. 23	2468	633	59	1032
Manchester, Frederic H., Providence, R. I. Incandescent lamp	469,423	Feb. 23	2469	633	58	1032
Manchester, Isaac A., Fall River, Mass. Portable ice-run	482,080	Dec. 13	1402	348	61	1619
Manchester, Isaac A., Fall River, Mass. Wagon-body	478,081	Dec. 13	1404	348	61	1619
Mancini, Louis A., Mont Clair, N. J. Harness-saddle	474,752	May 10	1388	350	59	916
Manderfield, George J., Royer's Ford, Pa., assignor of one-half to J. M. and S. Lewin, W. S. G. Finkbinder, and A. R. Saylor. Stop-motion for knitting-machines	479,763	July 26	2690	668 669	60	562
Mandigo, Elmer E. M., Nashua, N. H. Sign having ornamental letters or designs in relief formed of a composite material and making the same	480,371	Aug. 9	1003	252	60	785
Mandigo, Elwood P., Brooklyn, N. Y. Feed-water filter and separator	468,670	Feb. 9	1193	304	58	767
Mandt, Targe G., Stoughton, Wis. Sled-runner	470,248	Mar. 8	925	229	58	1288
Mandt, Targe G., Stoughton, Wis. Running-gear for vehicles	486,677	Nov. 23	2380	622	61	1100
Mandt, Targe G., Stoughton, assignor of one-half to J. A. Johnson, Madison, Wis. Axle-skein	467,819	Jan. 26	2450	624	58	491
Manecke, Albert, Cerro Gordo, Ill. Grinding and polishing machine	479,822	Aug. 2	72	17	60	596
Manewal, George. (See Brown, William Z., assignor.)						
Mangan, Thomas, New Orleans, La. Automatic electric change-maker and check-receiver	478,011	June 28	2255	714 715	59	2044
Manger, Frederick W., and O. H. Huebel, Brooklyn, N. Y. Contact-post for electric bells	475,783	May 31	3015	764	59	1276
Manggang, George, assignor to Syracuse Specialty Manufacturing Company, Syracuse, N. Y. Shoe-clasp	474,914	May 17	1646	426	59	982
Mangin, Anna M., Woodside, N. Y. Pastry-fork	470,005	Mar. 1	544	135	58	1204
Manhattan Brass Company. (See Hipwell, Thomas, assignor.)						
Manhattan Brass Company. (See Jehle, Gottlieb, assignor.)						
Manhes, Pierre, Lyons, France. Treating copper matte	470,384	Mar. 8	1183	407	58	1334
Manhes, Pierre, Lyons, France. Converter for copper ores	470,444	Mar. 8	1564	407	58	1409
Manhes, Pierre, Lyons, France. Treating nickel-matte	479,290	July 19	1883	472	60	395
Manifold, Richard G., San Francisco, Cal. Governor for steam-engines	472,378	Apr. 5	584	149	59	110
Manley, Liston B., Duluth, Minn. Inkstand	469,158	Feb. 16	1944	498	58	925
Manley, Liston B., Duluth, Minn. Inkstand	481,408	Aug. 23	2692	661	60	1136
Manlove, Joseph W., Foster, Mo. Letter-box	475,694	May 24	2871	726	59	1235
Manly, John A., et al. (See Lincoln, David B., assignor.)						
Mann, Albert W., et al. (See Dearborn, Wyman, assignor.)						
Mann, Charles, New York, N. Y. Oil-extracting apparatus	482,581	Sept. 13	1104	267	60	1565
Mann, Charles L., Colma Station, Cal. Pruning implement	472,304	Apr. 5	467	120	59	88
Mann, Emil. (See Hoos and Mann.)						
Mann, Franklin W. (See Farrington, Clarence H., assignor.)						
Mann, Frederick C., et al. (See Koerper, Michael B., assignor.)						
Mann, Henry F., Allegheny, Pa. Railway-velocipede	468,671	Feb. 9	1194	304	58	767
Mann, Henry F., Allegheny, Pa. Railway-velocipede	468,672	Feb. 9	1197	305	58	768
Mann, Henry F., Allegheny, Pa. Railway-velocipede	468,673	Feb. 9	1198	305	58	768
Mann, Henry F., Allegheny, Pa. Railway-velocipede	468,674	Feb. 9	1200	305	58	768
Mann, Henry F., Allegheny, Pa. Car-wheel	468,675	Feb. 9	1202	305	58	769
Mann, Henry F., Allegheny, Pa. Car-wheel	468,676	Feb. 9	1203	306	58	769
Mann, Henry L., Minneapolis, Minn. Adjustable mandrel for wabbling saws	474,844	May 17	1547	395	59	960
Mann, J. M., et al. (See Berg, George F., assignor.)						
Mann, John J., Salford, England. Apparatus for cutting pile fabrics	472,515	July 5	696	169	60	138
Maun, John J., Salford, England. Machine for cutting the pile of fustians or other pile fabrics	486,050	Nov. 8	1378	366	61	870
Maun, John J., Manchester, and J. H. Smith, Eccles, England. Machine for cutting fustians or other weft-pile fabrics	485,958	Nov. 8	1234	326	61	841
Mann, Kate E., Baltimore, Md. Slop-pail	468,571	Feb. 9	1047	266	58	737
Mann, William, Cleveland, Ohio. Vise	484,213	Oct. 11	1041	264	61	226
Mann, William H., et al. (See Cartwright, Edward, assignor.)						
Mann, William R., Earlville, Ill. Horse hay-rake	471,648	Mar. 29	3075	782	58	1728
Mann, William R., Earlville, Ill. Horse hay-rake	481,501	Aug. 23	2842	698	60	1166
Mannebach, Caspar, Detroit, Mich. Measuring and drafting device for garments	482,748	Sept. 20	1368	339	60	1628
Mannheim, Joseph, New York, N. Y. Safety fire-escape	487,395	Dec. 6	254	69	61	1371
Manning, Bowman & Co. (See Manning and Seips, assignors.)						
Manning, Charles W., Graham, Va. Box and fastening	475,129	May 17	1991	504	59	1048
Manning, Edward B., and M. Seips, assignors to Manning, Bowman & Co., Meriden, Conn. Attachment of covers to tea or coffee pots or other vessels	488,793	Dec. 27	2548	632	61	1877
Manning, Fred P., Turner, Ill. Grain-purifier	477,668	June 28	2312	578	59	1938

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. et.	Vol.	Page.
Manning, Harry G., Watertown, N. Y., assignor to New York Air Brake Company. Fluid-pressure valve.....	479,439	July 26	2151	537	60	461
Manning, John J., New York, N. Y. Machine for cutting and trimming paper	480,111	Aug. 2	555	140	60	688
Manning, Middleton J. (See Nagele, John, assignor.)						
Manning, Reuben A. (See Zempter, Manning, and Overall.)						
Manning, Thomas, Denver, Colo. Garment-supporter	480,820	Aug. 16	1715	428	60	938
Mannlicher, Ferdinand, Vienna, Austria-Hungary. Repeating firearm	472,795	Apr. 12	1201	{ 308 309 }	59	240
Mannock, Thomas. (See Smith, Goddard, Higginbottom, and Mannock.)						
Manny, Eugène S., Montreal, Canada. Hot-water furnace	475,878	May 31	3193	808	59	1310
Mansfield, Frank, New York, N. Y. Street-car door	472,737	Apr. 12	1119	287	59	224
Mansfield, Frank, New York, N. Y. Electric railway	478,346	July 5	445	110	60	89
Mansfield, Frank, New York, N. Y. Closed conduit for electric railways	488,738	Dec. 27	2462	612	61	1860
Mansfield, William, Ashville, Pa. Nut-lock	473,193	Apr. 19	1855	467	59	376
Manship, Edward A., Minneapolis, Minn. Automatic electric cut-out	471,997	Mar. 29	3603	920	58	1829
Mautey, Henry, Orizava, Mexico. Edge-runner or vertical millstone	487,930	Dec. 13	1142	285	61	1564
Mautey, Henry, assignor to Grusonwerk, Magdeburg, Germany. Edge-runner or vertical millstone	488,146	Dec. 13	1497	376	61	1637
Manton, Herbert L., Melbourne, Victoria. Train-indicator	481,364	Aug. 23	2616	{ 643 644 }	60	1122
Manton, Joseph P., Providence, R. I. Means for towing vessels	473,471	Apr. 26	2324	588	59	490
Manville, Edward. (See Waller and Manville.)						
Manwaren, Albert H., Philadelphia, Pa. Device for testing arc-light circuits	476,156	May 31	3624	917	59	1397
Manypenny, Gustavus B. (See Weaver and Manypenny.)						
Mapp, Mary E., Milledgeville, Ga. Dough-raiser	467,820	Jan. 26	2460	{ 624 625 }	58	491
Maquaire, Frédéric V., Paris, France. Electric-arc lamp	477,427	June 21	1900	{ 468 469 }	59	1840
Marangos, Apostolos, Marseilles, France. Grain-elevator	483,566	Oct. 4	74	18, 19	61	17
Maranville, Franklin, Clinton, Ohio. Oil-can	473,516	Apr. 26	2398	607	59	503
Marble, Albert D., Winfield, Kans. Reaping-machine	477,189	June 14	1503	368	59	1751
Marble, Albert D., Winfield, Kans. Mower and header	480,730	Aug. 16	1575	394	60	910
Marble, Edwin H. (See Marble, Edwin T. and E. H.)						
Marble, Edwin T. and E. H., Worcester, Mass. Machine for finishing velvets and other pile fabrics	474,396	May 10	823	215	59	807
Marble, Edwin T. and E. H., Worcester, Mass. Machine for waxing velvets, &c.	478,236	July 5	275	68	60	56
Marble, Edwin T. and E. H., Worcester, Mass. Cloth-napping machine	486,115	Nov. 15	1503	{ 396 397 }	61	913
Marble, James E., assignor, by mesne assignments, of one-half to J. W. Fuller, Albany, N. Y. Coupling for flexible steam-pipes	480,875	Aug. 16	1792	448	60	954
Marble, James E., Albany, N. Y., assignor, by mesne assignments, of one-half to J. W. Fuller. Air-brake coupling	484,034	Oct. 11	773	195	61	173
Marceau, Joseph O. (See Tourangeau, Napoleon, assignor.)						
Marcee, John, U. S. Army. Field-range	479,652	July 26	2487	{ 619 620 }	60	524
Marcee, John, U. S. Army. Cooking-stove	485,049	Oct. 25	2406	619	61	523
March, George E., and H. A. Wolff, Muskegon, Mich. Piano-stool	470,066	Mar. 1	633	157	58	1222
March, John, White Oak Springs, Wis., assignor to John March Company, of Wisconsin. Suppressing horns in cattle	478,377	July 12	1236		60	260
Marchand, Louis, Jr., Allegheny, Pa. Railway-switch	480,601	Aug. 9	1364	339	60	854
Marchetti, Giulio, Halifax, and H. Crossley, London, England. Machine for printing yarns	471,561	Mar. 29	2949	{ 751 752 }	58	1706
Marchetti, Giulio, and H. N. Mellor, Halifax, England. Method of and means for lubricating the wires in looms for weaving pile fabrics	483,073	Sept. 20	1870	{ 473 474 }	60	1730
Marcotte, Tellis, assignor of one-half to C. W. Chamberlin, Worcester, Mass. Lumber-measuring machine	484,555	Oct. 18	1588	403	61	346
Marcy, Joseph E. (See Jones and Marcy.)						
Maret, James, Mount Vernon, Ky., and W. L. De Graff, Homer, Mich. Telegraph-sounder	486,051	Nov. 8	1379	366	61	871
Marga, Uldarique, Brussels, Belgium. Cartridge for firearms	483,656	Oct. 4	204	51	61	42
Marinovitch, Bézizaire, and G. Szarvady, Paris, France. Telephone system	476,887	June 14	1018	247	59	1653
Marion, Barney, Vicksburg, Miss. Device for setting semaphore-signals	488,825	Dec. 27	2533	643	61	1886
Marion Cycle Company. (See Halladay, Lewis P., assignor.)						
Mariou Manufacturing Company. (See Johnson, Sidney N., assignor.)						
Mariosa, José, assignor of one-half to J. P. Telyrica, San Paulo, Brazil. Preserving meat	474,581	May 10	1124		59	864
Maris, Henry J., Philadelphia, Pa. Syringe	470,811	Mar. 15	1830	470	58	1470
Maris, Jared, Cincinnati, Ohio. Point-hand and dust-cap for hubs	469,484	Feb. 23	2470	633	58	1032
Maris, Jared, Cincinnati, Ohio. Cover for the ends of hub-hands	470,895	Mar. 15	1952	500	58	1494
Maris, Jared, Cincinnati, Ohio. Dust and mud cap for vehicle-hubs	487,189	Nov. 29	3240	829	61	1287
Mark, Charlie E., Cleveland, Ohio. Rail-chair	481,575	Aug. 30	2969	729	60	1207
Mark, Charlie E., Cleveland, Ohio. Railway-rail joint	481,576	Aug. 30	2969	729	60	1207
Mark, Charlie E., Cleveland, Ohio. Shaking-grate	482,452	Sept. 13	895	217	60	1523
Mark, Henry J., assignor of one-half to H. Gaus, Jr., St. Louis, Mo. Bottle-wrapper	472,462	Apr. 5	708	181	59	134
Mark, Henry J., assignor of one-half to H. Gaus, Jr., St. Louis, Mo. Bottle-wrapper	472,463	Apr. 5	710	181	59	135
Markee, Renel T., Philadelphia, Pa. Brake-beam	474,669	May 10	1260	322	59	891
Markee, Renel T., Philadelphia, Pa. Spider for wheels	488,319	Dec. 20	1791	450	61	1711
Marker, Stephen A., Newark, N. J. Harness-saddle	468,943	Feb. 16	1617	{ 409 410 }	58	859
Markham, De Witt C., Collinsville, assignor, by mesne assignments, to W. M. Brinkerhoff, Auburn, N. Y. Spring-tooth harrow	488,714	Dec. 27	2428	602	61	1852
Markham, Hiram L., Greenleaf, Kans. Listing-plow-cultivator attachment	485,959	Nov. 8	1236	326	61	842
Markham, William F., Plymouth, Mich. Spring air-gun	473,633	Apr. 26	2601	654	59	542
Markham, William F., Plymouth, Mich. Spring air-gun	483,159	Sept. 27	2016	509	60	1769
Markhof, Ludwig M. von, Vienna, Austria-Hungary. Instrument for determining the angle of lead in gunnery	467,256	Jan. 19	1558	397	58	313
Markhof, Ludwig M. von, Vienna, Austria-Hungary. Appliance for sighting guns	470,942	Mar. 15	2022	518	58	1507
Markoe, Frederick. (See Stillman and Markoe.)						
Marks, David. (See Smith, Marks, and Watson.)						
Marks, George E., New York, N. Y. Artificial limb	470,431	Mar. 8	1263	324	58	1349
Marks, John, Brighton, England. Latch	469,863	Mar. 1	318	81	58	1163
Marks, Solomon, Cincinnati, Ohio, assignor to T. Kane & Co. Double slate	473,404	Apr. 19	2210	555	59	446
Markward, Charles L. T. (See Stange, Sebastian A., assignor.)						
Marley, Henry, Paignton, England. Machine for winding ribbons, &c.	469,524	Feb. 23	2528	{ 649 650 }	58	1043
Marlin, Jesse M. (See Carlin, William P., assignor.)						
Marlin, John M., New Haven, Conn. Magazine for firearms	469,819	Mar. 1	249	63, 64	58	1149

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Marlitt, Charles A., Portland, Oreg. Steam-power stamp	480,332	Aug. 9	940	{ 238 239 }	{ 60 60 }	773
Mareske, Reinhold, St. Louis, Mo. Miter-box	469,159	Feb. 16	1946	498	58	926
Marquard, Charles F., Cleveland, Ohio. Mitering-machine	486,724	Nov. 22	2451	639	61	1115
Marquardt, Fred, Milwaukee, Wis. Hobby-horse	468,572	Feb. 9	1048	266	58	737
Marquart, Friedrich, Cleveland, Ohio. Cooking stove or range	477,216	June 21	1566	385	59	1776
Marquis, Joseph E., Utley, Ohio. Folding coop	482,644	Sept. 13	1193	289	60	1581
Marrin, Thomas, <i>et al.</i> (See Stuart, James A., assignor.)						
Marriott, Thomas A., Newberry, Mich. Car-brake	487,868	Dec. 13	1040	261	61	1545
Marriott, William, Norfolk, England. Car-spring	485,553	Nov. 1	609	{ 162 163 }	{ 61 61 }	697
Marrs, Paul J. (See Cunnock and Marrs.)						
Mars, Charles P., assignor of one-half to J. P. Edie, Rockford, Ill. Drive-chain	480,853	Aug. 16	1763	441	60	948
Marsden, Luther H., Droylsden, and J. H. Frost, Eccles, England. Woven fabric	484,537	Oct. 18	1564	398	61	340
Marsden, Mark W., Philadelphia, Pa. Advertising or business cabinet	483,849	Oct. 4	492	122	61	102
Marsden, Mark W., assignor of one-half to R. A. Rockhill, Philadelphia, and E. A. Corbin, Rosemont, Pa. Puzzle	478,799	July 12	1135	279	60	240
Marsden, Martha J., <i>et al.</i> (See Dreyer, Charles M., assignor.)						
Marsh, Edward A., Waltham, Mass. Machine for curving the ends of mainsprings for watches	467,703	Jan. 26	2275	{ 577 578 }	{ 58 58 }	455
Marsh, Elon A., Battle Creek, Mich. Check-valve	468,448	Feb. 9	840	212	58	697
Marsh, George A., Jr., Sandusky, Ohio. Apparatus for grinding and polishing glass	477,303	June 21	1716	{ 420 421 }	{ 59 59 }	1803
Marsh, George A., Jr., Sandusky, Ohio. Apparatus for placing plate-glass on grinding and polishing tables	477,304	June 21	1720	421	59	1804
Marsh, George A., Jr., Sandusky, Ohio. Glass grinding or polishing table	477,305	June 21	1721	421	59	1805
Marsh, George A., Jr., Sandusky, Ohio. Table for holding plate-glass	477,306	June 21	1723	422	59	1805
Marsh, George A., Jr., Sandusky, Ohio. Grinding, smoothing, and polishing glass	488,925	Dec. 27	2756	680	61	1920
Marsh, George H., San Francisco, Cal. Feed-roll	477,428	June 21	1905	469	59	1840
Marsh, Harvey S., Bass River, Canada, assignor of one-half to D. Johnson, Boston, Mass. Dowel	475,407	May 24	2421	618	59	1148
Marsh, Hiram F., Gouverneur, N. Y. Cash-recorder	468,464	Feb. 9	865	{ 219 220 }	{ 58 58 }	702
Marsh, James P., assignor to O. R. Barnett, trustee, Chicago, Ill. Carpet-sweeper	473,766	Apr. 26	2794	703	59	580
Marsh, John Q., Erie, Pa. Dead-pulley rigging	473,765	Apr. 26	2792	{ 702 703 }	{ 59 59 }	580
Marsh, Joseph A., <i>et al.</i> (See Osborn, Francis C., assignor.)						
Marsh, Joseph W. (See Bennett, Frederick M., assignor.)						
Marsh, Joseph W. (See O'Conner and Marsh.)						
Marsh, Joseph W., assignor to Standard Underground Cable Company, Pittsburg, Pa. Joint for electric conductors	483,074	Sept. 20	1873	475	60	1730
Marsh, Pickens B., assignor of one-half to W. O. Tatum, Graniteville, S. C. Cotton-press	478,755	July 12	1051	259	60	224
Marsh, Riverius, New Brunswick, N. J. Faucet and bung	482,408	Sept. 13	820	197	60	1510
Marsh, Spencer S., Atlanta, Ga. Hydraulic motor	470,291	July 19	1885	472	60	395
Marsh, William A. (See Cutter, Solomon M., assignor.)						
Marsh, William L., and J. E. Phillips, Summerfield, La. Fence	467,919	Feb. 2	123	30	58	547
Marshall, Anderson C., Corunna, Mich. Thill-tug	488,021	Dec. 13	1291	322	61	1594
Marshall, Charles, Camden, N. J. Knob attachment	473,262	Apr. 19	1967	493	59	398
Marshall, Charles H., Wood River, Nebr. Nose-ringing tool	467,422	Jan. 19	1806	461	58	359
Marshall, Edgar Y., Garden City, Kans. Railway-rail-straightening machine	485,768	Nov. 8	940	252	61	782
Marshall, Edward R., assignor of one-half to F. J. Marshall, Turner's Falls, Mass. Pulp beating and refining engine	475,063	May 17	1889	479	59	1027
Marshall, Francis F. and L. F., New York, N. Y. Lock	478,754	July 12	1050	258	60	224
Marshall, Frank J. (See Marshall, Edward R., assignor.)						
Marshall, George A., <i>et al.</i> (See Burton, Augustus G., assignor.)						
Marshall, George M., Kilbourn City, Wis. Potato-digger	469,160	Feb. 16	1946	498	58	926
Marshall, Herbert E., Brooklyn, N. Y., assignor to himself, and W. Burtis, New Egypt, N. J. Cash register and indicator	482,375	Sept. 13	773	186	60	1500
Marshall, Ianthus E., Martinez, Cal. Portable stacker	474,963	May 17	1730	440	59	998
Marshall Improv'd Window Furniture Company. (See Johnson, Axel, assignor.)						
Marshall, James, Fall River, Mass. Hat-blocking machine	485,349	Nov. 1	310	82, F3	61	635
Marshall, James, Plains, assignor of one-half to W. J. Parnelle, Wilkes-Barre, Pa. Furnace	475,984	May 31	3357	846	59	1342
Marshall, John L. (See Andersen, Richard C., assignor.)						
Marshall, John W. (See Powell and Marshall.)						
Marshall, Louisa F. (See Marshall, Francis F. and L. F.)						
Marshall, Oliver. (See Marshall, William P. and O.)						
Marshall, Richard A., Russellville, Ky. Clevis	472,132	Apr. 5	195	52	59	36
Marshall, Thomas B., Sidney, Ohio. Bicycle-support	478,878	July 12	1237	397	60	260
Marshall, Thomas F., Yankton, S. D. Barrel-stand	471,010	Mar. 15	2131	547	58	1529
Marshall, Waldo H., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Slack-adjuster for cars	484,858	Oct. 25	2092	{ 538 539 }	{ 61 61 }	461
Marshall, Waldo H., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Slack-adjuster for car-brakes	484,859	Oct. 25	2093	539	61	462
Marshall, Waldo H., assignor to Consolidated Brake Adjuster Company, Chicago, Ill. Slack-adjuster for car-brakes	484,860	Oct. 25	2095	540	61	462
Marshall, William, New York, N. Y. System of electrical distribution	472,193	Apr. 5	287	75	59	54
Marshall, William, New York, N. Y. Production and distribution of electricity	472,379	Apr. 5	586	149	59	110
Marshall, William M., assignor of three-fourths to S. W. and H. L. Dunn and J. Shreeve, Philadelphia, Pa. Mat	482,980	Sept. 20	1730	437	60	1700
Marshall, William P. and O., Dayton, Ohio. Tobacco-hiller	483,567	Oct. 4	76	19	61	18
Marshall, Winfield S., Centralia, Ill. Saddle-bags and hand-case	476,545	June 7	481	114	59	1533
Marshfield, Maggie, Chicago, Ill. Preserving fruit	467,641	Jan. 26	2173	553	58	436
Marshfield, Maggie, Chicago, Ill. Culinary apparatus	484,599	Oct. 18	1650	419	61	358
Marsters, Cordelia L., Kansas City, Mo. Ear-ring	468,883	Feb. 16	1520	388	58	840
Marston, Frank D., Tom's River, N. J. Signal-torch	478,623	July 12	857	211	60	186
Marston, Lewis R. (See Wells, William F., assignor.)						
Marston, Nathaniel B., Lebanon, N. H., and W. M. Kimball, Barre, Vt. Car-mover	480,333	Aug. 9	941	239	60	773
Marston, Norman, Hampton, N. H. Piano	477,669	June 28	2314	578	59	1939
Martel, Louis. (See Landen and Martel.)						
Martens, George. (See Del Valle, Eliseo, assignor.)						
Marth, Oscar, Berlin, Germany. Rotary plow	469,046	Feb. 16	1797	459	58	895
Marthaler, John, Jersey City, N. J. Hinge	473,194	Apr. 19	1856	467	59	376
Marthens, Allen, Pittsburg, Pa. Bicycle attachment	487,577	Dec. 6	553	142	61	1431
Martin, Albert D., assignor of one-half to Fish & Kronenberg, Hamburg, Germany. Hot-air furnace	466,920	Jan. 12	1001	256	58	199

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Martin, Alexander C., Chicago, Ill. Car-coupling.....	472,580	Apr. 12	885	227	59	182
Martin, Alexander C., Chicago, Ill. Car-coupling.....	472,581	Apr. 12	886	228	59	183
Martin, Alexander C., Chicago, Ill. Car-coupling.....	472,582	Apr. 12	887	228	59	183
Martin, Arthur H., Toledo, Ohio. Index or directory.....	474,479	May 10	957	{ 246 247 }	59	832
Martin, Arthur T. (See Dodd and Martin.)						
Martin, Betsey J., assignor of one-third to W. D. Bagby, Pomona, Kans. Fireproof garment.....	438,148	Dec. 13	1500	377	61	1638
Martin, Carl, assignor to Grusonwerk, Magdeburg, Germany. Apparatus for pointing guns.....	472,895	Apr. 12	1342	{ 344 345 }	59	269
Martin, Charles. (See Berger, Cornet, and Martin.)						
Martin, Charles B., Waupun, Wis. Car-coupling.....	488,339	Dec. 20	1828	457	61	1718
Martin, Charles C., Denver, Colo. Box-fastener.....	484,373	Oct. 11	1294	330	61	276
Martin, Charles C., Denver, Colo. Box-fastener.....	484,663	Oct. 16	1769	450	61	3e2
Martin, Charles E. (See Price, Martin, and Purser.)						
Martin, Charles R., assignor of one-half to J. Smith, Annapolis, Md. Bung.....	471,011	Mar. 15	2132	547	58	1529
Martin, Charles W., Chicago, Ill. Stub-holder.....	470,690	Mar. 15	1634	424	58	1432
Martin, Edwin, et al. (See Martin, Thomas J., assignor.)						
Martin, Forest J. (See Bradford, Charles W., assignor.)						
Martin, Frances I. (See Martin, Herman W., assignor.)						
Martin, Francis P., Easton, and J. T. Martin, Scranton, Pa. Rod-packing.....	470,301	Mar. 8	1030	264	58	1308
Martin, Francis P., Easton, and J. T. Martin, Scranton, Pa. Rod-packing.....	470,302	Mar. 8	1036	264	58	1309
Martin, Francis P., Easton, and J. T. Martin, Scranton, Pa. Rod-packing.....	470,303	Mar. 8	1038	265	58	1309
Martin, Francis P., Easton, and J. T. Martin, Scranton, Pa. Rod-packing.....	470,304	Mar. 8	1042	265	58	1310
Martin, Francis P., Easton, and J. T. Martin, Scranton, Pa. Rod-packing.....	470,305	Mar. 8	1045	266	58	1310
Martin, Frank, Cincinnati, Ohio. Joiner's clamp.....	484,104	Oct. 11	865	220	61	191
Martin, Frank, assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Floor-clamp.....	488,147	Dec. 13	1499	377	61	1638
Martin, Gaston H. (See Gnerre and Martin.)						
Martin, Georg, Berlin, Germany. Horseshoe.....	480,731	Aug. 16	1579	395	60	911
Martin, George E. (See Levey, John, assignor.)						
Martin, Henri, Sotteville, near Rouen, France. Boiler.....	486,116	Nov. 15	1506	{ 397 398 399 }	61	913
Martin, Henry, Chicago, Ill. Fruit-can filler and holder.....	466,724	Jan. 5	668	171	58	127
Martin, Herman W., assignor to F. I. Martin, Ilion, N. Y. Fishing-reel.....	479,440	July 26	2152	537	60	462
Martin, Isaac A., and C. T. Hammon, Ouray, Colo. Water-closet attachment.....	485,960	Nov. 8	1236	326	61	842
Martin, James, Toronto, Canada. Car-ventilator.....	471,649	Mar. 29	3076	782	58	1728
Martin, James A., Faunsdale, Ala. Cultivator.....	483,075	Sept. 20	1875	475	60	1730
Martin, James B., Grand Rapids, Mich. Combined scalper and grader.....	473,425	Apr. 19	2240	563	59	452
Martin, James G., Parkville, near Melbourne, Victoria. Binder attachment for self-binding harvesters.....	466,528	Jan. 5	351	{ 87 88 89 }	58	68
Martin, James W., et al. (See Shoemaker, Milton, assignor.)						
Martin, Jerome W., Kansas City, Mo., and M. Cahill, Hays City, Kans. Hand fence-machine.....	456,487	Nov. 22	2079	550	61	1042
Martin, Joel W., Hartford, Conn. Apparatus for boiling soap.....	475,784	May 31	3017	765	59	1276
Martin, John C., Hammersmith, England. Paint.....	462,402	Feb. 9	782	.....	58	685
Martin, John T. (See Martin, Francis P. and J. T.)						
Martin, Joseph C., Florence, Mass. Cash-carrier apparatus.....	475,879	May 31	3193	{ 808 809 }	59	1311
Martin, Joseph H., Springfield, Ohio. Table.....	471,676	Mar. 29	3122	795	58	1737
Martin, Joseph J., Bellevue, and W. H. Brownfield, Dayton, assignors of one-third to L. K. Marty, Newport, Ky. Device for drawing tie-bands around bales.....	481,184	Aug. 23	2310	569	60	1066
Martin, Joseph J., Bellevue, and W. H. Brownfield, assignors of one-third to L. K. Marty, Newport, Ky. Lubricator.....	482,559	Sept. 13	1078	261	60	1559
Martin, Knott P., et al. (See Pope, Frederick W., assignor.)						
Martin, Lazarus C., Greencastle, Pa. Car-coupling.....	485,829	Nov. 8	1018	273	61	797
Martin, Marshall, Walla Walla, Wash. Combined wheel-wrench and bolt-clipper.....	469,580	Feb. 23	2613	{ 670 671 }	58	1060
Martin, Morris, Malden, Mass. Thermostatic instrument.....	471,130	Mar. 22	3315	594	58	1577
Martin, Morris, Malden, Mass., assignor, by mesne assignments, to J. F. Nielson, Elizabeth, N. J. Automatic fire-alarm.....	474,670	May 10	1260	{ 322 323 }	59	891
Martin, Morris, Malden, Mass., assignor to Automatic Time Stamp and Register Company, Portland, Me. Workmen's time-recorder.....	475,457	May 24	2504	{ 638 639 }	59	1164
Martin, Morris, Malden, Mass., assignor to Automatic Time Stamp and Register Company, Portland, Me. Workmen's time-recorder.....	475,458	May 24	2506	639	59	1164
Martin, Morris, Malden, assignor to J. C. Wilson, Boston, Mass. Key-controller and signal-transmitter.....	479,715	July 26	2603	647	60	545
Martin, Morris, Malden, Mass., assignor to Municipal Signal Company, Portland, Me. Electric signaling apparatus.....	487,676	Dec. 6	709	{ 180 181 }	61	1461
Martin, Phillip E. (See Smith, Nathaniel E., assignor.)						
Martin, Richard. (See Boyd and Martin.)						
Martin, Robert, Pittsburg, Pa. Broiler or toaster.....	486,880	Nov. 29	2716	708	61	1184
Martin, Robert, Philadelphia, Pa. Guide for use in gaining stair-stringers.....	487,889	Dec. 13	1073	369	61	1551
Martin, Samuel H. (See Ziegler, Adam J., assignor.)						
Martin, Samuel M., Sidney, Ohio. Horseshoeing-rack.....	487,190	Nov. 29	3241	829	61	1287
Martin, Samuel Z., Lock Haven, Pa. Poul-air ventilator.....	483,631	Oct. 4	169	42, 43	61	35
Martin, Taylor, Fairmont, W. Va. Embalming.....	488,338	Dec. 30	1827	456	61	1718
Martin, Thomas E., Des Moines, Iowa. Furnace.....	484,600	Oct. 18	1652	419	61	359
Martin, Thomas J., assignor of two-thirds to E. and W. L. Martin, Philadelphia, Pa. Machine for printing fabrics.....	488,897	Dec. 27	2702	669	61	1910
Martin, Thomas M., assignor of one-half to W. H. Law, Toronto, Canada. Burglar-proof safe.....	469,971	Mar. 1	497	123	58	1194
Martin, Vanbrun, and M. Hanna, Clinton, Mo. Sawmill-dog.....	494,332	Oct. 11	1238	315	61	264
Martin, Walter T., Dover, N. H. Counter for boots or shoes.....	469,258	Feb. 23	2107	541	58	963
Martin, Walter T., Dover, N. H. Shoe-upper.....	469,259	Feb. 23	2107	542	58	963
Martin, William H., Covington, Ky. Brick-kiln furnace.....	472,738	Apr. 12	1122	287	59	225
Martin, William H., Providence, R. I., assignor to Accurate Time Stamp Company. Time-stamp.....	485,639	Nov. 8	740	195	61	740
Martin, William L., et al. (See Martin, Thomas J., assignor.)						
Martindale, Ambrose B. (See Alexander and Martindale.)						
Martindale, Crystal, assignor to H. Cresap, Wichita, Kans. Kraut-cutter.....	477,377	June 21	1832	{ 449 450 }	59	1825
Martindale, Warren B., Kenosha, Wis., and E. R. Malmberg, St. Louis, Mo., assignors, by mesne assignments, to New York Electrical Device Company, of Virginia. Calendar-clock.....	472,952	Apr. 12	1433	366	59	286

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Martinet, Gustave, Lausanne, Switzerland. Churn.....	469,970	Mar. 1	496	122	58	1194
Martinez, Augustin, Philadelphia, Pa. Cable car.....	466,355	Jan. 5	69	18	58	16
Martinez, Richard P., Jersey City, N. J. Elastic vehicle-tire.....	470,249	Mar. 8	926	229	58	1288
Martinez, Richard P., Brooklyn, N. Y. Elastic vehicle-tire.....	486,230	Nov. 15	1676	443	61	946
Martini, Alphonse, <i>et al.</i> (See Barcis, Albert, assignor.)						
Martini, Alphonse, <i>et al.</i> (See Johnson, John, assignor.)						
Martini, Anna, <i>et al.</i> (See Barcis, Albert, assignor.)						
Martini, Anna, <i>et al.</i> (See Johnson, John, assignor.)						
Martini, Frederick W., Brooklyn, N. Y. Lining for jewelry-exhibitors.....	488,568	Dec. 27	2198	543	61	1807
Martinson, Henning, South Park, assignor of one-half to E. P. Caldwell, Minneapolis, Minn. Carpet-stretcher.....	466,829	Jan. 12	837	215	58	169
Marty, Frank, Anniston, Ala., assignor of two-thirds to L. E. Morrell, Columbus, Ohio, and J. K. Dimmick, Newport, Ky. Chill-plate for flasks.....	478,622	July 12	857	211	60	185
Marty, George, Cleveland, Ohio. Steam-injector.....	473,010	Apr. 19	1538	392	59	319
Marty, Louis K. (See Martin and Brownfield, assignors.)						
Martyn, Arthur, London, England, assignor to G. J. B. Rodwell, Buffalo, N. Y. Frame for mirrors, &c.....	473,706	Apr. 26	2711	682	59	563
Martyn, Arthur, London, England, assignor to Rodwell Manufacturing Company, Buffalo, N. Y. Advertising-sign.....	477,429	June 21	1906	470	59	1840
Martyn, Edward. (See Kuehnle, John, assignor.)						
Martz, George O., <i>et al.</i> (See Edgar and Rohrbach, assignors.)						
Martz, John G., Big Rapids, Mich. Door-catch.....	470,203	Mar. 8	861	213	58	1275
Marvel, Theodore L., assignor to W. H. Phillips, Taunton, Mass. Conveyor.....	483,232	Sept. 27	2131	539	60	1792
Marvick, Frederick N., assignor of one-half to D. S. Tingley and S. J. Wells, San Mateo, Fla. Tile.....	479,442	July 26	2157	538	60	463
Marvick, Frederick N., San Mateo, and J. Walter, Winter Haven, Fla. Tile.....	479,441	July 26	2155	538	60	462
Marvin Electric Drill Company. (See Marvin, Harry N., assignor.)						
Marvin, Frank W., and G. B. Essex, assignors to Michigan Lubricator Company, Detroit, Mich. Lubricator.....	479,911	Aug. 2	200	50	60	621
Marvin, George L. (See Huber and Marvin.)						
Marvin, Harry N., Schenectady, N. Y. Pulsating-current generator.....	479,951	Aug. 2	275	67	60	634
Marvin, Harry N., assignor to Marvin Electric Drill Company, Syracuse, N. Y. Electric reciprocating tool.....	466,541	Jan. 5	369	92	58	71
Marvin, Harry N., assignor to Marvin Electric Drill Company, Syracuse, N. Y. Electric-drill system.....	467,509	Jan. 26	1964	500	58	398
Marvin, Harry N., assignor to Marvin Electric Drill Company, Syracuse, N. Y. Electric-drill system.....	467,510	Jan. 26	1966	500	58	398
Marvin, John A., Lansing, Mich. Truss.....	480,775	Aug. 16	1642	411	60	924
Marx, Julius, Naunheim, Germany. Safety device for electrical conductors.....	471,302	Mar. 22	2575	654	58	1626
Maschmeyer, Charles H., assignor to Hartford Silver Plate Company, Hartford, Conn. Handle.....	485,846	Nov. 8	1044	279	61	803
Masel, Theodore. (See Unzieker and Masel.)						
Maskelyne, John N., Jr., London, England. Type-writing machine.....	484,035	Oct. 11	774	195	61	173
Maslin, John, Jersey City, N. J. Steam-pump.....	417,949	June 28	2759	691	59	2025
Mason, Alfred T., Meriden, Conn. Cuff-link.....	469,885	Mar. 1	352	89	58	1169
Mason, Arthur J., Kansas City, Mo. Trench-excavator.....	482,260	Sept. 6	552	131 132	60	1442
Mason, Charles F., Akron, Ohio. Inkstand.....	476,288	June 7	87	20	59	1455
Mason, Charles H. (See Kindle, Andrew H., assignor.)						
Mason, Charles H. (See Staley, George, assignor.)						
Mason & Co., Edmund T. (See Gehrich, Hermann, assignor.)						
Mason, David, assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway trolley.....	488,022	Dec. 13	1291	322 323	61	1595
Mason, David, assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric-railway trolley.....	488,023	Dec. 13	1293	323	61	1595
Mason, Edgar T., and M. H. Moskovits, Kansas City, Mo. Making artificial honey cells and combs.....	481,578	Aug. 30	2971	729	60	1208
Mason, Frank H., Akron, Ohio. Bicycle tire.....	475,785	May 31	3018	765	59	1276
Mason, George H., Rochester, N. Y. Rail-brace.....	474,560	May 10	1096	279	59	859
Mason, George S., <i>et al.</i> (See Abbott, George F., assignor.)						
Mason, George W., Sharon, Pa. Chopping-machine.....	481,766	Aug. 30	3288	800	60	1269
Mason, George W., Eau Claire, Wis. Car-coupling.....	487,536	Dec. 6	497	130	61	1419
Mason & Hamlin Organ and Piano Company. (See Richardson and Dyer, assignors.)						
Mason, Harry R., Chicago, Ill. Valve device for air-brakes.....	466,502	Jan. 5	312	79	58	59
Mason, Harry R., Chicago, Ill. Quick-release valve for air-brakes.....	467,038	Jan. 12	1184	299 300	58	233
Mason, Harry R., Chicago, Ill. Quick-release valve for air-brakes.....	467,111	Jan. 12	1325	335	58	261
Mason, Harry R., Chicago, Ill. Train signaling apparatus.....	483,256	Sept. 27	2196	552 553	60	1804
Mason, Harry R., Chicago, Ill. Train signaling apparatus.....	483,257	Sept. 27	2199	553	60	1804
Mason, Harry W., <i>et al.</i> (See Krepps, Virgil A., assignor.)						
Mason, Herbert E. N., Birmingham, England. Lamp.....	476,055	May 31	3458	872 873	59	1364
Mason, Jabez F., Brooklyn, N. Y. Umbrella-runner.....	482,130	Sept. 6	335	80	60	1401
Mason, James, Chicago, Ill. Machine for cutting rosettes in corner casing-blocks for door-frames, bookcases, or other articles.....	466,963	Jan. 12	1064	270	58	211
Mason, James H., Chicago, Ill. Steam drop-press.....	488,128	Dec. 13	1472	371	61	1633
Mason, John, New York, N. Y. Ordnance.....	473,939	May 3	89	20	59	654
Mason, John, New York, N. Y. Pump.....	473,940	May 3	91	20	59	654
Mason, John, assignor to W. B. Darling, Providence, R. I. Car-coupling.....	485,466	Nov. 1	489	130	61	672
Mason, John F., Des Moines, Iowa. Tool for cutting off pipes.....	479,892	Aug. 2	179	44	60	617
Mason, John L., Brooklyn, N. Y. Furnace-grate.....	480,951	Aug. 16	1916	479 480	60	978
Mason, John L., Brooklyn, N. Y. Furnace-grate.....	480,952	Aug. 16	1918	480	60	978
Mason, John R. (See Whiton, Walter F., assignor.)						
Mason, John W., Cleveland, Ohio. Machine for cleaning and polishing boots or shoes.....	480,821	Aug. 16	1716	428 429	60	939
Mason, Jonathan and J., London, and W. S. Codner, Stoke Newington, Middlesex, England. Tread for stairs, &c.....	481,702	Aug. 30	3164	773	60	1244
Mason, Joseph. (See Mason and Codner.)						
Mason, Joseph, London, England. Coin-freed machine for giving electric shocks.....	468,955	Feb. 16	1644	418 419	58	864
Mason, Joseph, New York, N. Y., and S. Shoup, Philadelphia, Pa., said Mason assignor to said Shoup. Adding and printing machine.....	468,250	Feb. 2	513	127 128	58	625

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Mason, Lewis D., Buffalo, N. Y. Folding camp-stool	476,805	June 14	884	217	59	1627
Mason, Lowell. (See Colgate, Arthur E., assignor.)						
Mason Regulator Company. (See Mason, William B., assignor.)						
Mason, Robert B. (See Meyer, Julius W., assignor.)						
Mason, Samuel, Jr., Manchester, England. Apparatus for purifying and refining alcoholic liquors and other liquids	499,018	Sept. 6	159	38	60	1366
Mason, Thomas, Topeka, Kans. Elevator	481,577	Aug. 30	2970	729	60	1207
Mason, Thomas J., Green Bay, Iowa. Corn-shocker	479,124	July 19	1633	408	60	345
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably uniting gun-barrels to the stocks	487,486	Dec. 6	418	108	61	1404
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably attaching gun-barrels to the stocks	487,487	Dec. 6	420	108	61	1404
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably attaching gun-barrels to the stocks	487,488	Dec. 6	422	109	61	1404
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for separably attaching gun-barrels to the stocks	487,489	Dec. 6	424	109	61	1405
Mason, William, assignor to Winchester Repeating Arms Company, New Haven, Conn. Means for attaching magazines to firearms	487,677	Dec. 6	712	182	61	1462
Mason, William B., assignor to Mason Regulator Company, Boston, Mass. Fluid-pressure regulator	481,579	Aug. 30	2972	730	60	1208
Mason, William H., East Monroe, Ohio. Fence-machine	470,581	Mar. 8	1473	383	58	1391
Massam, Walter K. (See Grove and Massam.)						
Massie, William H., Los Angeles, Cal. Catamenial appliance	480,876	Aug. 16	1793	449	60	955
Massey, Albert P., Watertown, N. Y., assignor to New York Air Brake Company. Car-brake	472,929	Apr. 12	1393	357	59	279
Massey, Albert P., Watertown, N. Y., assignor to New York Air Brake Company. Engineer's valve	475,695	May 24	2873	726	59	1235
Massey, Arthur C., Woodville, assignor of one-half to L. N. Spencer, Grand Rapids, Mich. Rein-guard	478,800	July 12	1135	280	60	240
Massey, Gideon B., deceased; S. R. Massey and S. A. Bryant, Mamaroneck, administrators, and assignors of two-fifths to A. B. Darling, New York, N. Y. Adding attachment for cash-registering machines	477,563	June 21	2122	{ 527 528 }	59	1884
Massey-Harris Company. (See Jones and Wedlake, assignors.)						
Massey, Sarah R., et al., administrators. (See Massey, Gideon B.)						
Massie, James, Toronto, Canada. Cot-bedstead	477,430	June 21	1907	470	59	1841
Massignon, Jules, assignor to Société Anonyme des Parfums Naturels de Cannes, Paris, France. Purification of fatty substances	481,502	Aug. 23	2844	699	60	1167
Masson, John, Haslach, Baden, Germany. Bottle-washing machine	474,397	May 10	825	216	59	807
Maste, Hermann A. A., Arnsberg, assignor to Verein für Zellstoffindustrie Actiengesellschaft, Dresden, Germany. Preparing cellulose from wood	480,334	Aug. 9	942		60	773
Master, James W., Charleston, Ill. Well or cistern cleaner	484,214	Oct. 11	1042	264	61	226
Masters, George A., Chicago, Ill. School-desk	473,074	Apr. 19	1639	417	59	337
Masters, William, et al. (See Livengood, Winfield S., assignor.)						
Masterson, Herbert, assignor to himself and J. A. Linhardt, Jefferson City, Mo. Skiving-machine	488,212	Dec. 20	1623	405	61	1679
Masury, James R., Providence, R. I., assignor of one-half to L. J. McCarty, Boston, Mass. Rheostat	472,062	Apr. 5	78	21	59	17
Matchett, Albert R. (See Mueller, Matchett, and Eggers.)						
Mather, Alonzo C., Chicago, Ill. Glove-fastening	466,503	Jan. 5	315	79	58	60
Mather, Alonzo C., Chicago, Ill. Water-power	473,941	May 3	92	21	59	654
Mather, John L., Lanark, Ill. Clothes-drier	481,365	Aug. 23	2617	644	60	1122
Mather Manufacturing Company. (See Rettich, Frank D., assignor.)						
Matheson, Johan, Christiania, Norway. Knob attachment	467,039	Jan. 12	1186	300	58	233
Mathews, George, et al. (See Schenck, John D. P., assignor.)						
Mathews, George B. (See Bond, Nathan O., assignor.)						
Mathews, Stephen M., Rat Portage, Ontario, Canada. Electric alarm	477,950	June 28	2760	691	59	2025
Mathews, William G., et al. (See Deardorff, Benton, assignor.)						
Mathewson, Edward P., Pueblo, Colo. Furnace-tap	483,936	Oct. 4	615	155	61	127
Mathewson, Nathan F., Providence, R. I. Thrill-tug	479,603	July 26	2412	602	60	511
Mathewson, Nathan F., Providence, R. I., assignor, by mesne assignments, to Little Gem Manufacturing Company, of New Jersey. Pocket-lamp or lighting device	479,222	July 19	1783	447	60	374
Mathey, Henry, South Riverside, Cal. Reverberatory smelting-furnace	481,703	Aug. 30	3165	773	60	1244
Mathias, David H., et al. (See Van Derzee, Cornelius, assignor.)						
Mathie, Charles, and E. A. Fletcher, Toronto, Canada. Nut-lock	471,875	Mar. 29	3440	878	58	1797
Mathieu, Adrien. (See Lehuicher and Mathieu.)						
Mathis, William B. (See Haines and Mathis.)						
Mathison, James, et al. (See Cook, Theodore A., assignor.)						
Mathison, Joseph, Somerville, Mass. Machine for making sheet-metal buttons	479,823	Aug. 2	73	{ 17 18 19 }	60	596
Mathison, Joseph, Somerville, Mass. Button-setting tool	479,824	Aug. 2	78	19, 20	60	597
Mathison, Joseph, Somerville, Mass. Attaching buttons	484,105	Oct. 11	866	220	61	192
Mathison, Walter, et al. (See Cook, Theodore A., assignor.)						
Matlock, David B., San José, Cal. Fruit-gatherer	467,687	Jan. 26	2245	571	58	449
Matrix Manufacturing Company. (See Beckwith and Street, assignors.)						
Matson, Anders, Moline, Ill. Seed-planter	476,056	May 31	3460	873	59	1364
Matson, David B., Buffalo, N. Y. Hanger for electric lamps	467,511	Jan. 26	1967	500	58	398
Matson, Jephtha L., Dunbarton, Wis. Car-coupling	486,193	Nov. 15	1615	429	61	935
Mattes, Henry. (See Gabele and Mattes.)						
Matteson, Elias L., Randolph, N. Y. Belt-fastener	487,021	Nov. 29	2976	766	61	1235
Matteson, James A., River Point, assignor of one-third to F. W. Greene, Warwick, R. I. Stop-motion for engines	469,326	Feb. 23	2220	{ 569 570 }	58	984
Mathew, Ulysses G., New City, Ill. Beehive	470,789	Mar. 15	1786	460	58	1462
Mathews, Adaline M. (See Matthews, Hannah E. and A. M.)						
Mathews, Ambrose T., Worcester, Mass. Sheet-metal knob	475,880	May 31	3200	809	59	1312
Mathews, Edward P., Indianapolis, Ind. Exhibiting-case	488,715	Dec. 27	2430	602	61	1853
Mathews, Edwin S., assignor of one-half to J. L. Haven, Cincinnati, Ohio. Elevator-controller	469,655	Feb. 23	2710	697	58	1082
Mathews, Edwin S., assignor of one-half to J. L. Haven, Cincinnati, Ohio. Controller for elevators	472,930	Apr. 12	1394	357	59	279
Mathews, Edwin S., assignor of one-half to J. L. Haven, Cincinnati, Ohio. Safety device for elevators	476,289	June 7	88	20	59	1455
Mathews, Edwin S., assignor of one-half to J. L. Haven, Cincinnati, Ohio. Elevator-controlling mechanism	481,580	Aug. 30	2975	730	60	1208

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Matthews, Hannah E. and A. M., Grand Rapids, Mich. Shoulder-brace.....	468,425	Feb. 9	809	203	58	691
Matthews, James, Collins Centre, N. Y. Platform.....	483,233	Sept. 27	2132	539	60	1792
Matthews, Jeremiah H., South Bend, Ind. Door-securer.....	485,205	Nov. 1	79	25	61	588
Matthews, Nellie P. (See Fickett, William S., assignor.)						
Matthews & Willard Manufacturing Company. (See Miller, John C., assignor.)						
Matthews, William H., Zanesville, Ohio. Axle.....	479,223	July 19	1785	447	60	374
Matthies, Henry W., New York, N. Y. Check-receptacle.....	476,888	June 14	1020	247	59	1653
Matthiessen, Conrad H., Odell, Ill. Car-seat.....	484,215	Oct. 11	1044	264	61	224
Matthiessen, Franz O., Irvington, N. Y. Refining raw sugar.....	477,670	June 28	2316	59	1939	
Mattijetz, Andreas, Giddings, Tex. Baling-press.....	471,012	Mar. 15	2133	547	58	1529
Mattijetz, Andreas, Giddings, Tex. Metallic railway-tie.....	487,952	Dec. 13	1173	293	61	1570
Mattison, James D., Saginaw, Mich. One-wheeled cycle.....	475,130	May 17	1994	505	59	1048
Mattison, James D., East Saginaw, Mich. Railway-switch.....	478,879	July 12	1238	307	60	260
Mattison, James D., Saginaw, Mich. Monocycle.....	479,825	Aug. 2	80	20, 21	60	597
Mattson, John E., Duluth, Minn. Mail-bag projector.....	470,645	Mar. 8	1565	407	58	1410
Mattson, W. Harry. (See Grantland, John W., assignor.)						
Mattson, William H., Philadelphia, Pa. Railway-rail.....	466,612	Jan. 5	484	125	58	93
Mattson, William H., Philadelphia, Pa. Railway-rail chair.....	469,485	Feb. 23	2471	634	58	1032
Mattson, William H., Philadelphia, Pa. Rail-fastening.....	476,943	Mar. 15	2026	518	58	1508
Mattson, William H., Philadelphia, Pa. Bath'er's appliance.....	486,348	Nov. 15	1867	491	61	985
Mauerhofer, John, New York, N. Y. Picture-frame.....	480,953	Aug. 16	1919	480	60	978
Mauger, Philip J., Danvers, Ill. Gate.....	467,771	Jan. 26	2382	605	58	476
Maui, Benjamin F. (See Jones, Sylvanus H., assignor.)						
Maule, Francis I., Philadelphia, Pa. Long-joint coupling.....	485,961	Nov. 8	1238	327	61	842
Maurer, Alexander C. (See Maurer, Joseph W. and A. C.)						
Maurer, Joseph W. and A. C., assignors to F. W. Maurer & Sons, Philadelphia, Pa. Loom.....	488,569	Dec. 27	2199	544	61	1808
Maurer & Sons, F. W. (See Maurer, Joseph W. and A. C., assignors.)						
Mauro, Philip, administrator. (See White, William.)						
Mausser, Alfous, Oberndorf, Germany. Surface-gage.....	476,806	June 14	885	{ 217 218 }	59	1627
Mausser, Alfous, Oberndorf, Germany. Hat and brush therefor.....	485,640	Nov. 8	742	195	61	740
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Germany. Shell-extractor for bolt-guns.....	467,180	Jan. 19	1443	368	58	290
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Germany. Cartridge-stop for magazine-guns.....	476,290	June 7	91	21	59	1456
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Germany. Shell-extractor for bolt-guns.....	477,671	June 28	2317	579	59	1939
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf-on-the-Neckar, Germany. Cartridge-holder for magazine-guns.....	482,376	Sept. 13	778	187	60	1501
Mausser, Paul, assignor to Waffenfabrik Mauser, Oberndorf, Germany. Safety-trigger for breech-loading bolt-guns.....	488,694	Dec. 27	2402	595	61	1847
Maussner, Friedrich, Nuremberg, assignor to F. Ochs, Fuerth, Germany. Sanitary mattresses.....	468,353	Feb. 9	703	174	58	669
Maver, William, Jr., New York, N. Y. Telegraph-relay.....	482,440	Sept. 13	877	210	60	1519
Mawby, Thomas. (See Clarke and Mawby.)						
Maxfield, Morgan E. (See Wellstein and Maxfield.)						
Maxfield, William C., assignor of one-half to J. W. Champion, Columbus, Ohio. Rain-water cut-off.....	481,635	Aug. 30	3059	747	60	1224
Maxheimer, John H., New York, N. Y., and G. C. Beresford, Sound Beach, Conn. Neck-lace-clasp.....	468,677	Feb. 9	1205	306	58	769
Maxim, Abraham L., et al. (See Gunn, John A., assignor.)						
Maxim, Abraham L., Omaha, Nebr. Miter-machine.....	478,449	July 5	596	145	60	117
Maxim, Hiram S., London, England. Apparatus for the manufacture of explosives.....	474,561	May 10	1096	{ 279 280 }	59	859
Maxim, Hiram S., assignor to Gas Lighting Improvement Company, Limited, London, England. Method of and apparatus for carbureting gas.....	485,283	Nov. 1	200	57	61	614
Maxim, Hosea F., and J. M. Price, Norfolk, Va. Thermal alarm.....	478,701	July 12	961	259	60	207
Maxim, Hudson, assignor to Columbia Powder Manufacturing Company, New York, N. Y. Making nitro-cellulose.....	474,778	May 10	1431	363	59	925
Maxim, Hudson, assignor to Columbia Powder Manufacturing Company, New York, N. Y. Restoring nitrating acids.....	479,988	Aug. 2	357	88	60	649
Maximilian, Ferdinand K., New York, N. Y. Glass-polishing machine.....	477,135	June 14	1416	{ 344 345 }	59	1733
Maximilian, Ferdinand K., New York, N. Y. Stand for sideboards, &c.....	477,564	June 21	2124	528	59	1885
Maxon, Thomas, Dayton, Ohio. Disk harrow.....	472,710	Apr. 12	1085	278	59	218
Maxwell, C. L. (See Van Pelt, Ada H., assignor.)						
Maxwell, Carrie N. and N. H., Cincinnati, Ohio. Game apparatus.....	479,195	July 19	1744	438	60	366
Maxwell, David, assignor to D. Maxwell & Sons, St. Mary's, Canada. Root-cutter.....	483,743	Oct. 4	330	83	61	69
Maxwell, David E., et al. (See Beal, William C., assignor.)						
Maxwell, Evan B., Pinckneyville, Ill. Fence.....	485,641	Nov. 8	743	195	61	741
Maxwell, George S., and J. Clark, Jr., Louisville, Ky. Automatic railway-switch.....	472,063	Apr. 5	80	22	59	17
Maxwell, Jacob B., Middletown, Del. Gravity-railway.....	477,059	June 14	1294	314	59	1709
Maxwell, James R., Cincinnati, Ohio. Valve and valve-support.....	487,408	Dec. 6	296	77	61	1379
Maxwell, Jesse W., Fair River, Miss. Wagon-tongue.....	474,582	May 10	1125	287	59	864
Maxwell, John S. (See O'Lalor, John J., assignor.)						
Maxwell, Nathaniel H. (See Maxwell, Carrie N. and N. H.)						
Maxwell, R. C. (See Hasten, Emery A., assignor.)						
Maxwell & Sons, David. (See Maxwell, David, assignor.)						
Maxwell, Thomas S., Cleveland, Ohio. Attachment-holder for sewing-machines.....	468,153	Feb. 2	370	92	58	597
Maxwell, W. W., et al. (See Carter, Joseph J., assignor.)						
Maxwell, William W., Champaign, Ill. Account-keeping device.....	487,953	Dec. 13	1174	293	61	1570
May, E. F. (See Curtis, Winfield, assignor.)						
May, Henry, Scranton, Pa. Watchman's time-recorder.....	472,896	Apr. 12	1343	345	59	269
May, Robert G., Grand View, Ind. Kitchen-cabinet.....	487,629	Dec. 6	630	102	61	1446
May, Rudolph A., Akron, Ohio. Draft-regulator for heating-furnaces.....	472,305	Apr. 5	468	120	59	88
May, Simon, and L. M. Aron, Brooklyn, N. Y. Souvenir medallion or plaque.....	488,826	Dec. 27	2595	614	61	1887
May, William E., London, England. Apparatus for use in casting and working metals.....	481,799	Aug. 30	3339	816	60	1278
Mayell, Tenbroeck B., Albany, N. Y. Safety-loop for harness-checks.....	474,845	May 17	1549	395	59	960
Mayer, Albert, San Francisco, Cal. Stirrup.....	473,075	Apr. 19	1640	417	59	337
Mayer, Anton, assignor to R. J. Meiser, Cincinnati, Ohio. Self-closing faucet.....	478,199	July 5	205	52	60	42
Mayer, Edward L., Chicago, Ill. Dress-form.....	483,618	Oct. 4	153	38	61	32
Mayer & Grammelspacher. (See Wich, Johann, assignor.)						
Mayer, John B., assignor of one-half to J. Meier, Newark, N. J. Electric switchboard.....	473,848	Apr. 26	2927	737	59	606
Mayers, Henry, San Francisco, Cal. Ice-cream freezer.....	487,370	Dec. 6	217	60	61	1363

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Mayes, Thomas, deceased, Albany, N. Y.; D. Muhlfelder, administrator. Folding support for head-rests, &c.	480,822	Aug. 16	1718	429	60	939
Mayfield, Daniel D., Sullivan, Ind. Weather-strip	483,076	Sept. 20	1876	475	60	1730
Mayfield, Edward S. (See Spaulding, Frank M., assignor.)						
Mayhall, William A., assignor of one-half to H. L. Van Norman, Gloster, Miss. Car-coupling.	475,696	May 24	2875	727	59	1235
Mayhew, Christopher J., Walmer, England. Tap-socket for barrels, &c.	476,665	June 7	659	160	59	1567
Mayhew, Frederick W. (See Smith and Mayhew.)						
Mayhew, George S., assignor to C. A. Smith, Minneapolis, Minn. Cove	468,354	Feb. 9	704	175	58	669
Mayhew, George S., assignor to C. A. Smith, Minneapolis, Minn. Composition material	468,355	Feb. 9	705	175	58	670
Mayhew, J. Erwin, Hartford, Conn. Ink-eraser	486,976	Nov. 29	2907	750	61	1222
Mayloy, Edward C., assignor of one-half to A. J. Bevier, Rochester, N. Y. Fountain-ink-stand	484,106	Oct. 11	866	220	61	192
Maynes, Alexander W. (See Ransom and Maynes.)						
Mayo, George D. (See Mayo, William H. and G. D.)						
Mayo, James, Pottstown, Pa. Damper	475,131	May 17	1995	505	59	1049
Mayo, L. U. (See Oliver, Gaston, assignor.)						
Mayo, Samuel P., Richmond, and G. A. Peple, Manchester, assignors to Mayo Tobacco Drying and Ordering Company, Richmond, Va. Apparatus for ordering tobacco	478,801	July 12	1136	280	60	240
Mayo, Thaddens, <i>et al.</i> (See Smith, William D. C., assignor.)						
Mayo Tobacco Drying and Ordering Company. (See Mayo and Peple, assignors.)						
Mayo, Vaughn M. (See Lawrence, Charles D., assignor.)						
Mayo, Walter E., Gloucester, Mass. Blind-hinge	475,332	May 24	2301	591	59	1127
Mayo, William H. and G. D., Franklin, N. H. Knitting-machine	474,671	May 10	1264	323 324	59	891
Mayrhofer, Joseph C., assignor to American Automatic Spray Perfume Company, New York, N. Y. Apparatus for dispensing liquids	471,821	Mar. 29	3366	857	58	1782
Mays, Roseanna, Strasburg, Ohio. Fruit-picker	487,931	Dec. 13	1144	286	61	1564
Mayson, Thomas W., Ponsonby, assignor to J. P. Campbell, Auckland, New Zealand. Optical instrument for measuring angles or distances	467,895	Jan. 26	2553	654 655	58	513
Mazza, Ralph, Niles, Cal. Horse-taming apparatus	484,216	Oct. 11	1045	265	61	296
McAdam, Alexander J., San Francisco, Cal. Hydraulic elevator	469,585	Feb. 23	2632	673	58	1062
McAdam, Alexander J., San Francisco, Cal. Wick-adjuster for lamps	476,477	June 7	391	90	59	1512
McAdam, Alexander J., San Francisco, Cal. Elevator-controlling mechanism	482,131	Sept. 6	376	80	60	1401
McAdam, Alexander J., San Francisco, Cal. Auxiliary valve for elevators	484,223	Oct. 11	1054	268	61	229
McAdams, John, New York, N. Y. Valve for hydraulic elevators	467,705	Jan. 26	2279	579	58	456
McAdams, John, New York, N. Y. Valve for hydraulic elevators	476,023	May 31	3406	859 860	59	1353
McAdams, John, Brooklyn, N. Y. Feeding apparatus for ruling and printing machines	476,476	June 7	388	89, 90	59	1512
McAdams, John, Brooklyn, N. Y. Ruling-machine	477,380	June 21	1836	451	59	1826
McAdams, John S., Ashland, Pa. Railway-frog	487,957	Dec. 13	1179	294	61	1571
McAdams, William A., Brooklyn, N. Y. Insect-catcher	483,079	Sept. 20	1879	476	60	1731
McAleenan, William J., Peoria, Ill. Steam-boiler	475,409	May 24	2424	619	59	1149
McAlister, George W., Jake's Prairie, Mo. Horse-detacher	477,775	June 28	2478	620	59	1971
McAlister, James R., and T. W. Waddell, Clinton, Ark. Cotton-scraper	477,691	June 28	2347	587	59	1947
McAlister, Arthur W., administrator. (See Williams, Charles A. and L. K.)						
McAllister, Joseph R. C. (See Brooks, Bartholomew, assignor.)						
McAlpine, Adam H. (See Gold and McAlpine.)						
McAlpine, Charles A., Marathon, N. Y., assignor to Climax Road Machine Company. Road-scraper	471,800	Mar. 29	3336	849 850	58	1776
McAlpine, Clarence H., Hillsborough, N. H. Fire and water proof paint	467,106	Jan. 12	1315		58	259
McAnaney, John S., Oklahoma, Oklahoma Ter. Rope-clamp	468,819	Feb. 16	1424	362	58	822
McAulis, James D., and H. E. Fleming, Beaver Falls, Pa. Electric clock	485,645	Nov. 8	747	196 197	61	742
McArdle, Frank J., and J. B. Furay, Omaha, Neb. Label-holder	471,223	Mar. 22	2463	625	58	1604
McArthur, Alexander W., San Francisco, assignor of one-half to J. B. McArthur, Winter, Cal. Game apparatus	470,765	Mar. 15	1747	450	58	1454
McArthur, James, assignor of one-half to C. J. Wichman, Rochester, N. Y. Car-brake	467,257	Jan. 19	1562	397 398	58	314
McArthur, James B. (See McArthur, Alexander W., assignor.)						
McArthur, Neil, and M. Lutz, Detroit, Mich. Screw-purchase power for raising sunken vessels	467,515	Jan. 26	1973	501 502	58	399
McArthur, Thomas J., assignor to L. Shave, New York, N. Y. Coin-sorting and change-delivering machine	470,812	Mar. 15	1831	470 471	58	1470
McArthur, Warren, Chicago, Ill., assignor to Steam Gauge and Lantern Company, Syracuse, and R. E. Dietz Company, New York, N. Y. Tubular lantern	476,478	June 7	392	90	59	1513
McAuley, Columbus E., Erin, Tenn. Post or pile driver	470,232	Mar. 8	930	231	58	1288
McAuliff, Edward, <i>et al.</i> (See Kates, Wilber H., assignor.)						
McBarron, Michael. (See Brown, Samuel H., assignor.)						
McBean, Robert S. (See Miller, McBean, and McBurnett.)						
McBride, Charles H., Champlain, assignor of one-half to M. F. Stowe, Mooers, N. Y. Whiffletree	475,699	May 24	2878	727	59	1236
McBride, Edward H., Springfield, Mo. Horse-detacher	475,140	May 17	2008	507	59	1051
McBride, Edward H., Springfield, Mo., assignor of one-half to A. W. Mahle. Electrode for medicinal purposes	484,522	Oct. 18	1538	390	61	335
McBride, John J., Ridgefield Park, N. J., assignor to H. I. Coe, St. Louis, Mo. Hatch-door	467,185	Jan. 19	1450	370	58	292
McBride, John J., Ridgefield Park, N. J., assignor to H. I. Coe, St. Louis, Mo. Hatch-door	467,186	Jan. 19	1451	370	58	292
McBride, John J., Ridgefield Park, N. J., assignor to H. I. Coe, St. Louis, Mo. Elevator-hatchway	468,820	Feb. 16	1424	362	58	822
McBride, John J., Ridgefield Park, N. J., assignor to H. I. Coe, St. Louis, Mo. Hatchway-door-operating device	469,317	Feb. 23	2202	564 565	58	980
McBride, Thomas, Philadelphia, Pa., and E. Fisher, Kincardine, Canada. Excavating device	483,004	Sept. 20	1768	447	60	1707
McBride, Thomas, Philadelphia, Pa., and E. Fisher, Kincardine, Canada. Apparatus for the manufacture of gas	483,005	Sept. 20	1769	447 448	60	1708
McBride, Thomas, Philadelphia, Pa., and E. Fisher, Kincardine, Canada. Steam-generator	487,195	Nov. 29	3247	830 831	61	1288
McBroom, Henry C., Nashville, Tenn. Land-marker	482,062	Sept. 6	226	54	60	1379
McBurnett, John W. (See Miller, McBean and McBurnett.)						
McBurnett, Milford J., Wedowee, Ala. Plow	486,492	Nov. 22	2085	552	61	1043
McCabe, Bartholomew, Buffalo, N. Y. Tricycle	468,680	Feb. 9	1207	307	58	770
McCabe, Francis B., Lewistown, Pa. Carpet-stretcher	466,467	Jan. 5	251	64	58	48

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
McCabe, Junius D., Ceraopolis, Pa. Drawing-board	467,825	Jan. 26	2467	627	58	492
McCafferty, Henry M., Montrose, Colo. Combination-plow	478,884	July 12	1250	309	60	262
McCafferty, William M., Mount Sterling, Ohio. Calculating-machine	478,885	July 12	1252	310	60	263
McCaffrey, James, Philadelphia, Pa. Nailless horseshoe	478,453	July 5	602	147	60	119
McCaue, Frank K., Shell Rock, Iowa. Flour bin and sifter	485,210	Nov. 1	85	26	61	590
McCaun, Joseph, assignor to W. J. Edwards, Chicago, Ill. Spring-fork for bicycles	468,750	Feb. 9	1313	333	58	791
McCallip, William W., Columbus, Ohio. Tree-protector	472,137	Apr. 5	200	54	59	37
McCallum, Daniel W., Fort Worth, Tex. Feed-water heating and purifying apparatus	471,521	Mar. 22	2894	736	58	1687
McCallum, George L., Costello, Pa. Brake for railway-cars	460,338	Aug. 9	917	240	60	774
McCallum, Irving, Philadelphia, Pa. Woven fabric	475,466	May 24	2519	642	59	1167
McCallum, Irving, Philadelphia, Pa. Woven fabric	480,855	Aug. 16	1764	441	60	949
McCallum, Joseph B., Alfordville, N. C. Whiffletree	471,880	Mar. 29	3446	879	58	1799
McCallum, Peter, St. Paul, Minn. Circumference-indicator and tire-gage	480,870	Aug. 9	1372	311	60	856
McCamant, John G., <i>et al.</i> (See Rush, John T., assignor.)						
McCandless, Thomas A., Irving, Kans. Automatic brake	482,378	Sept. 13	780	187	60	1501
McCann, Edward. (See Hussey and McCann.)						
McCann, Henry F., <i>et al.</i> (See Hazard, Willet E., assignor.)						
McCann, Patrick, assignor of three-eighths to P. W. Hombach, St. Ignace, Mich. Straight- cner for switch-rail rods or braces	467,958	Dec. 13	1181	294	61	1572
McCardell, James R., C. H. West, and M. J. McDonald, Trenton, N. J. Running-gear	485,875	Nov. 8	1088	289	61	811
McCart, James, and A. G. Judkins, Trenton, Mich. Electric danger-signal for moving trains	485,473	Nov. 1	498	131	61	673
McCarter, Samuel, Norristown, Pa., assignor to International Pavement Company, Hart- ford, Conn. Brick-press	478,625	July 12	860	212	60	186
McCarter, Samuel, Norristown, Pa., assignor to International Pavement Company, Hart- ford, Conn. Forming asphalt blocks	478,626	July 12	862	212	60	187
McCarthy, Daniel, Earle, Colo. Power-transmitter	479,297	July 19	1295	474	60	396
McCarthy, Dennis P., <i>et al.</i> (See Beekwith, Theodore A., assignor.)						
McCarthy, James J., Austin, Ill. Roof	483,262	Sept. 27	2207	554	60	1805
McCarthy, John, Manistique, Mich. Saw-set	468,899	Feb. 16	1529	389	58	842
McCarthy, John, Manistique, Mich. Railway-crossing	479,829	Aug. 2	86	22	60	598
McCarthy, John, Syracuse, N. Y. Casket-handle	469,975	Mar. 1	503	124 125	58	1196
McCarthy, John, Syracuse, N. Y. Casket-handle	472,195	Apr. 5	290	76	59	55
McCarthy, John, Syracuse, N. Y. Casket-handle	478,168	July 5	156	39	60	33
McCarthy, Louis, Boston, Mass. Insulating-coupling	468,772	Feb. 9	1347	340	58	798
McCarthy, Louis, Boston, Mass. Insulating-coupling	468,773	Feb. 9	1347	340	58	798
McCarthy, Louis, Boston, Mass. Insulator	478,518	July 5	703	170	60	140
McCarty, Charles, Fall River, Mass. Shuttle-guard for looms	471,522	Mar. 22	2895	736	58	1688
McCarty, Lawrence J. (See Masury, James K., assignor.)						
McCaslin, George W., Montclair, N. J. Conveyor	486,749	Nov. 22	2560	667 668	61	1136
McCaslin, George W., Hoboken, N. J. Conveyor	486,809	Nov. 22	2592	675	61	1143
McCauley, Andrew J., Columbus, Ohio. Spring-binge	471,059	Mar. 15	2195	565	58	1541
McCauley, L. G. (See Hastings, James L., assignor.)						
McCauley, Reuben A., Baltimore, Md. Chute for coal-wagons	484,754	Oct. 18	1907	486	61	412
McChesney, Joseph B., Dane, Wis. Table for thrashing-machines	471,490	Mar. 22	2559	727	58	1680
McChesney, Reuben, Philadelphia, Pa., assignor to himself, and S. McChesney, Troy, N. Y. Adjustable T-square	483,499	Sept. 27	2533	637	60	1869
McChesnev, Sylvester. (See McChesney, Reuben, assignor.)						
McClain, Edward L., Greenfield, Ohio. Harness-pad	466,776	Jan. 12	788	204	58	160
McClain, Edward L., Greenfield, Ohio. Harness-pad	466,779	Nov. 22	2352	623	61	1161
McClaren, Alfred E., Joplin, Mo. Telegraph-key	480,475	Aug. 9	1173	295	60	816
McClarran, Robert C., Wooster, Ohio. Tension device for wire fences	486,385	Nov. 15	1918	508	61	997
McClave, William, Scranton, Pa. Steam-jet blower for furnaces	467,427	Jan. 19	1816	463 464	58	361
McClave, William, Scranton, Pa. Means for burning solid carbonaceous fuels	485,820	Nov. 8	999	268	61	794
McClave, William, Scranton, Pa. Compound steam-jet blower	485,821	Nov. 8	1003	269	61	794
McClellan, Charles H., New York, N. Y. Type-writing machine	487,761	Dec. 13	861	218 219	61	1509
McClellan, Charles W., Chicago, Ill. District alarm-box	485,351	Nov. 1	313	83, 84	61	636
McClellan, Edward J., New York, N. Y. Screw-machine	467,568	Jan. 26	2071	523	58	417
McClellan, Herman, Toronto, Canada. Brace for piano-key bottoms	477,566	June 21	2127	529	59	1885
McClellan, John, Greenbush, N. Y. Polishing-wheel	471,415	Aug. 23	2706	665	60	1139
McClellan, Michael A., Chicago, Ill. Combined sulky plow and harrow	478,627	July 12	864	213	60	187
McClellan, Oscar D. (See Parke, John H., assignor.)						
McClellan, Stephen, San Marcos, Tex. Sash-fastener	479,152	July 19	1674	418	60	353
McClelland, Robert E., Williamsville, Ill. Balance-scale	475,792	May 31	3030	768	59	1279
McClelland, Robert E., Williamsville, Ill. Weight-pan for balances	480,027	Aug. 2	433	109	60	664
McClintock, Charles E., Ozark, assignor of one-half to H. G. and R. A. Sadler, Paris, Ark. Bedstead	479,013	July 19	1459	363	60	313
McClintock, Charles T., Oil City, Pa. Penholder	474,644	May 10	1220	312	59	882
McClintock, Joseph, Indianapolis, Ind. Wire fence	472,555	Apr. 12	893	229	59	184
McClintock, Robert, J. F. Langhammer, and J. W. Lowell, Baltimore, Md. Cable railway	486,262	Nov. 15	1738	458	61	960
McCluskey, George M., Brooklyn, N. Y. Chimney cap or ventilator	482,905	Sept. 20	1616	404	60	1676
McClung, James S., Pueblo, Colo. Sponge-cup for school-desks	477,953	June 28	2764	692	59	2026
McClure, Charles W., Kansas City, Kans. Pocket grip-tester	468,154	Feb. 2	372	92	58	597
McClure, George W., assignor of one-half to C. Ansler, Pittsburg, Pa. Hot-blast stove	469,826	Mar. 1	259	67	58	1151
McClure, George W., and C. Ansler, Pittsburg, Pa. Regenerative hot-blast stove	469,820	Mar. 1	251	64	58	1150
McClure, Thomas G., <i>et al.</i> (See Abramams, John W., assignor.)						
McClurg, Henry C., Davenport, Iowa. Stocking	482,095	Sept. 6	280	68	60	1391
McClusky, Henry. (See Nickerson, Freeman, Jr., assignor.)						
McClymonds, Louis K., assignor to Peerless Manufacturing Company, Cleveland, Ohio. Tire for vehicle-wheels	485,110	Oct. 25	2491	640	61	542
McColl, Francis P. (See Kleinfeldt and McColl.)						
McCollan, William J., Paterson, N. J. Fire-escape	486,493	Nov. 22	2086	552	61	1043
McCollum, David A., Eagleville, Mo. Car-coupling	486,291	Nov. 15	1780	468	61	969
McCollum, James C., assignor of one-half to W. W. Murphy, Los Angeles, Cal. Milking- machine	484,505	Oct. 18	1513	384	61	330
McCombie, William, Chicago, Ill. Fire-box for boilers	478,628	July 12	866	213	60	187
McCombs, George F., Allegheny, assignor to Hand Stitch Broom Sewing Machine Com- pany, Limited, Pittsburg, Pa. Broom-sewing machine	487,196	Nov. 29	3251	831 832	61	1289
McCombs, George F., Allegheny, assignor to Hand Stitch Broom Sewing Machine Com- pany, Limited, Pittsburg, Pa. Broom-sewing machine	487,197	Nov. 29	3252	832	61	1289

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
McConalogue, Charles, Red Jacket, Mich. Compound cooker	472,384	Apr. 5	593	151	59	112
McConalogue, Charles, Cheboygan, Mich. Roaster and baker	475,946	May 31	3297	832	59	1330
McConaughy, Edwin L., Philadelphia, Pa. Game-board	479,569	July 26	2367	500	60	502
McConnel, Alcimus C., Allegheny, Pa. Electrical high and low water alarm	469,424	Feb. 23	2371	608	58	1014
McConnell, Ephraim, Daleville, Ind. Pneumatic conveyer	477,692	June 28	2348	587	59	1947
McConnell, Frances S., Altoona, assignor of one-half to G. P. Roeser, Baldwin township, and P. Luther, Pittsburg, Pa. Car-coupling	488,173	Dec. 13	1552	389	61	922
McConnell, Frank, Chicago, Ill. Damper for fireplace chimney-flues	475,985	May 31	3358	846	59	1342
McConnell, George W., Hale, Mo. Cistern-cleaner	477,567	June 21	2128	529	59	1885
McConnell, Virgil H., Buffalo, N. Y. Filter	469,450	Feb. 23	2408	617	58	1021
McConnell, W. C., <i>et al.</i> (See Edgar and Rohrbach, assignors.)	484,224	Oct. 11	1056	268	61	1648
McConnell, William H., Wilsonville, Ohio. Clutch						
McConway, William, (See Buboup, Henry C., assignor.)						
McConway, William, Pittsburg, Pa. Car-coupling	471,861	Mar. 29	3447	{ 879 880 }	58	1799
McCool, William A., Beaver Falls, Pa. Duplex drilling-machine	488,658	Dec. 27	2339	579	61	1835
McCool, William A., and W. G. Algeo, Beaver Falls, Pa. Machine for shearing metal bars	488,659	Dec. 27	2348	{ 579 580 }	61	1836
McCool, Gabriel W., St. Louis, Mo. Clothes-pin	486,954	Nov. 29	2877	743	61	1216
McCord, Alvin C., Minneapolis, Minn. Car-coupling. (Reissue)	11,220	Feb. 2	642	160	58	649
McCord, Alvin C., Chicago, Ill. Car-coupling	482,500	Sept. 13	977	237	60	1539
McCord, Benjamin A., <i>et al.</i> (See Davis, Henry J., assignor.)						
McCord, John, <i>et al.</i> (See Green, John, assignor.)						
McCord, Zachariah D., <i>et al.</i> (See Davis, Henry J., assignor.)						
McCorkle, John W., Lexington, Wash. Lubricator	486,292	Nov. 15	1782	468	61	969
McCormack, William, and R. M. Patton, Otwell, Ind. Wagon-lock	477,330	June 21	1755	{ 429 430 }	59	1812
McCormick, Charles H., <i>et al.</i> (See Wilson, William H., assignor.)						
McCormick, Charles W., Emporia, Kans. Store-service apparatus	482,646	Sept. 13	1195	{ 289 290 }	60	1581
McCormick Harvesting Machine Company. (See Baker, William R., assignor.)						
McCormick Harvesting Machine Company. (See Pridmore, Henry E., assignor.)						
McCormick, Isaac R., Logansport, Ind. Car-brake	488,695	Dec. 27	2404	595	61	1844
McCormick, John H., New Orleans, La. Cotton-seed-delinting machine	481,416	Aug. 23	2708	666	60	1140
McCormick, Marshall, <i>et al.</i> (See Fitzwater, William M., assignor.)						
McCormick, Seth T. (See Graff, George E., assignor.)						
McCormick, Thomas, Brooklyn, N. Y. Tricycle	474,096	May 3	338	81	59	702
McCormick, Willoughby M., Baltimore, Md. Bottle-filling machine	474,965	May 17	1733	{ 440 441 }	59	999
McCornack, Herbert, McQueen, Ill. Roof-scaffold bracket	482,066	Sept. 6	281	68	60	1391
McCourt, James, Salem, Oreg. Metric model	480,119	Aug. 2	571	145	60	691
McCowatt, David, Chicago, Ill. Furnace-damper	486,733	Nov. 22	2467	644	61	1118
McCoy, Alonzo B. (See Brown and McCoy.)						
McCoy, Elijah, Detroit, Mich. Lubricator	472,066	Apr. 5	85	23 24	59	18
McCoy, Elijah, Detroit, Mich., assignor to H. C. and C. C. Hodges. Lubricator	470,163	Mar. 1	778	193	58	1249
McCoy, Francis L., Eskridge, Kans. Churn-dasher	479,830	Aug. 2	87	22	60	599
McCoy, Henry J. (See Chadbourne, Belringer, and McCoy.)						
McCoy, John, Pasadena, Cal. Pocket perfume-case	477,217	June 21	1567	385	59	1776
McCoy, Richard, Creston, Iowa. Railway-ticket	469,586	Feb. 23	2623	673	58	1062
McCoy, William A., Beman, Kans. Weed-cutter	474,399	May 10	828	217	59	808
McCoy, William D., Orange, N. J. Saddle for velocipedes	476,479	June 7	393	90, 91	59	1513
McCracken, Thomas E., Washington, D. C. Saw-clamp	473,518	Apr. 26	2401	608	59	504
McCrancey, Moses S., Toronto, Canada. Dump-cart	468,359	Feb. 9	713	176	58	671
McCrea, George R. (See Harlan, Howard, assignor.)						
McCrea, Robert S., <i>et al.</i> (See Keizer, William H. H., assignor.)						
McCready, Charles H., West Bridgewater, Pa. Feathering paddle-wheel	482,455	Sept. 13	901	218	60	1523
McCready, William F., Homewood, Pa. Sanding device for locomotives	469,263	Feb. 23	2117	544	58	965
McCreary, John L., Lamar, Mo. Hay-loader	485,769	Nov. 8	941	252	61	782
McCreedy, James E., Arlington, Ill. Potato-digger	466,699	Jan. 5	608	158	58	118
McCrone, Charles W. (See Hull, Wayne J., assignor.)						
McCrone, John W., Kansas City, Mo. Letter-copying press	476,061	May 31	3470	875	59	1367
McCroxy, J. C., <i>et al.</i> (See Wood, William T., assignor.)						
McCroskey, Henry M. (See Chambers, Thomas R., assignor.)						
McCullers, Will H., Clayton, N. C. Combined cultivator and harrow	467,863	Jan. 26	2533	642	58	504
McCulloch, Alfred H., Boston, Mass., assignor, by mesne assignments, to Western Electric Company, of Illinois. Multiple-switchboard circuit	487,852	Dec. 13	1010	255	61	1539
McCulloch, George F. (See Nelson, Irenaeus P., assignor.)						
McCullough, Edward W. (See Watts, Julius R., assignor.)						
McCullough, Ernest, San Francisco, Cal. Spirit-level for measuring-tapes	479,521	July 26	2299	574	60	489
McCullum, William W., <i>et al.</i> (See Morrell, Robert, assignor.)						
McCully, William F. (See Smith, Harper F., assignor.)						
McCune, David, Ashland, Wis. Hose-spanner	469,487	Feb. 23	2474	634	58	1033
McCune, William A. (See McNelly, Mathias F., assignor.)						
McCutchan, John J., Lynn, Mass. Apparatus for cleaning ships' bottoms	487,198	Nov. 29	3253	832	61	1289
McCutchen, Charles W. (See Covert and McCutchen.)						
McDade, John J., San Francisco, Cal. Coin-operated opera-glass receptacle	483,939	Oct. 4	619	156	61	128
McDairmid, Norman. (See Pike and McDairmid.)						
McDaniel, John S., Philadelphia, Pa. Regulating-valve	478,939	July 12	1333	331	60	279
McDaniel, Mary E., Mineola, Tex. Cake-baking pan	466,617	Jan. 5	491	126	58	94
McDavitt, William H., Lawrence, assignor to G. Draper & Sons, Hopedale, Mass. Banding-machine	473,886	Apr. 26	2296	756	59	619
McDermott, George L., Neenah, Wis. Steam-boiler indicator	487,634	Dec. 6	639	164	61	1448
McDermott, James, assignor of one-fourth to D. A. Kellar, Louisville, Ky. Casting stove-linings	482,689	Sept. 13	1263	369	60	1595
McDermott, John J. (See O'Connor, James J., assignor.)						
McDonald, Alexander, Cambridge, Mass. Machine for cutting and dressing stone	473,850	Apr. 26	2930	738	59	666
McDonald, Alexander E., Brooklyn, N. Y. Implement for ironing hats	476,403	June 7	280	66	59	1493
McDonald, Alexander E., Brooklyn, N. Y. Cord-clasp for gloves	483,263	Sept. 27	2208	{ 551 555 }	60	1805
McDonald, Alexander E., Brooklyn, N. Y. Strap-holder for trunks	483,264	Sept. 27	2209	555	60	1806
McDonald, Ambrose S., <i>et al.</i> (See Doty, James, assignor.)						
McDonald, Charles. (See Edgar, Silas D., assignor.)						
McDonald, Donald, Louisville, Ky. Proportional fluid-meter	475,596	May 24	2724	690	59	1206

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
McDonald, Edward, and P. McHugh, Cincinnati, Ohio; said McHugh assignor to said McDonald. Device for flushing water-closets	467,516	Jan. 26	1975	502	58	400
McDonald, Evan, Rochester, N. Y. Shoe	482,456	Sept. 13	901	219	60	1524
McDonald, George, Troy, N. Y. Stone-dressing hammer	477,017	June 14	1224	297	59	1695
McDonald, George W. (See Rowe and McDonald.)						
McDonald, James, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
McDonald, James S., Chicago, Ill. Manifold receipt or order book	466,507	Jan. 5	321	80	58	61
McDonald, James S., Chicago, Ill. Manifold-book	467,582	Jan. 26	2091	529 530	58	421
McDonald, James S., Chicago, Ill. Carbon-sheet holder	469,748	Mar. 1	126	33	58	1124
McDonald, James S., Chicago, Ill. Combined book and carbon-sheet holder	479,014	July 19	1460	363	60	314
McDonald, James S., Chicago, Ill. Carbon-sheet holder	487,959	Dec. 13	1182	295	61	1572
McDonald, James S., Jr., Chicago, Ill. Order-holder	487,960	Dec. 13	1183	295	61	1572
McDonald, John, Tokio, Japan. Balanced-slide valve	477,307	June 21	1724	422	59	1805
McDonald, John A., Britton, S. D. Combined horseshoer's stool and cluncher	466,618	Jan. 5	492	127	58	95
McDonald, John J., Louisville, Ky. Knockdown box	472,797	Apr. 12	1204	309	59	240
McDonald, Lewis B. (See Rice and McDonald.)						
McDonald, Martin J. (See McCardell, West, and McDonald.)						
McDonald, Porter C. (See Cordry, Charles C., assignor.)						
McDonald, R. T., <i>et al.</i> (See Pauthonier, Casimir, assignor.)						
McDonald, Ronald, assignor of one-half to T. Tanner, Pictou, Canada. Boiler-flue cleaner	466,359	Jan. 5	76	20	58	17
McDonald, Van Buren, Coyote, Tenn. Car-coupling	485,969	Nov. 8	1247	329	61	844
McDonald, William A. C., <i>et al.</i> (See Dunn, Claudius A., assignor.)						
McDonald, William M. (See Wight, Ronell L. and H. F., assignors.)						
McDonnell, Romuald T. (See Loft, William F., assignor.)						
McDonough, Frank, Eau Claire, Wis. Band-saw mill	485,970	Nov. 8	1248	329 330	61	844
McDonough, James W., Chicago, Ill. Producing colored photographs	471,186	Mar. 22	2404		58	1593
McDonough, James W., Chicago, Ill. Producing colored photographs	471,187	Mar. 22	2405		58	1593
McDonough, James W., New York, N. Y. Telephone	485,876	Nov. 8	1090	290	61	812
McDonough, James W., New York, N. Y., assignor to Blackmer Bros. & Co., Chicago, Ill. Chair	481,582	Aug. 30	2979	731	60	1209
McDonough, Martin, Winchester, Ill. Gate	472,905	Apr. 12	1352	318	59	271
McDougall, Alexander, Duluth, Minn. Boring-machine	469,840	Mar. 1	278	72	58	1155
McDougall, Alexander, Duluth, Minn. Apparatus for raising sand	469,841	Mar. 1	280	73	58	1155
McDougall, Alexander, Duluth, Minn. Dead-light	469,913	Mar. 1	395	99	58	1177
McDougall, Alexander, Duluth, Minn. Covering for false bottoms of vessels	480,823	Aug. 16	1719	430	60	939
McDougall, Alexander, Duluth, Minn. Wrecking-boat	488,574	Dec. 27	2206	546	61	1810
McDougall, Archie, Salt Lake City, Utah Ter. Tricycle	477,140	June 14	1420	346	59	1734
McDougall, Isaac S. (See Smith, Hartley, and McDougall.)						
McDougall, James A., Pittston, Pa. Puzzle	471,706	Mar. 29	3166	807	58	1745
McDowell, Albert, assignor of one-half to J. A. Stroud, Selma, Cal. Refrigerator	487,199	Nov. 29	3255	833	61	1290
McDowell, Archibald, <i>et al.</i> (See Hollingsworth, Thomas H., assignor.)						
McDowell, Edward, Spartanburg, S. C. Wick-raiser for lamps	480,205	Aug. 2	711	182	60	717
McDowell, Ernest L., assignor of one-half to K. B. McDowell, Arkansas City, Kans. Bonquet-holder	484,602	Oct. 18	1655	420	61	359
McDowell, Gordon, Evanston, Ill. Smoke-consumer and fuel-saver	469,264	Feb. 23	2118	544 545	59	965
McDowell, Kittie B. (See McDowell, Ernest L., assignor.)						
McDowell, William L., Lower Merion, Pa. Cook-stove	478,807	July 12	1146	283 284	60	243
McEachran, Andrew, Fitchburg, Mass. Elevator	472,768	Apr. 12	1164	298	59	233
McEldowney, Morgan T., <i>et al.</i> (See Bromley, Daniel W., assignor.)						
McElfresh, Francis E., New Cumberland, W. Va. Brick-drier	482,690	Sept. 13	1264	309 310	60	1595
McElhenny, James V., Doylestown, Ohio. Copy-holder	471,224	Mar. 22	2464	626	58	1604
McElhenny, Harrison H., Nebraska City, Nebr. Flower-pot	470,437	Mar. 8	1272	326	58	1351
McElhenny, Harrison H., assignor to McElhenny Manufacturing Company, Nebraska City, Nebr. Caster	485,706	Nov. 8	853	229	61	764
McElhenny Manufacturing Company. (See McElhenny, Harrison H., assignor.)						
McElroy, James F., Albany, N. Y. Electric-lighting system	469,656	Feb. 23	2711	698	58	1082
McElroy, James F., Albany, N. Y. Temperature-regulator	471,523	Mar. 22	2896	737	58	1688
McElroy, James F., Albany, N. Y. Vestibule for cars	474,966	May 17	1736	441	59	999
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Temperature-regulator	469,526	Feb. 23	2533	651	58	1044
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Hot-water heating apparatus for railway-cars	469,864	Mar. 1	320	81	58	1163
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Car-heating apparatus	471,313	Mar. 22	2591	657	58	1628
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Temperature-regulator	471,314	Mar. 22	2592	658	58	1629
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Temperature-regulator	471,315	Mar. 22	2593	658	58	1629
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Street-car-heating apparatus	471,316	Mar. 22	2594	658	58	1629
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. System of charging car-heating apparatus with heating mediums	473,635	Apr. 26	2603	655 656	59	543
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Temperature-regulator	473,636	Apr. 26	2606	656	59	543
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Coupling for electric wires	473,637	Apr. 26	2607	656	59	544
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Temperature-regulator	473,513	May 24	2596	660	59	1181
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Electric car-lighting system	475,514	May 24	2597	660 661	59	1182
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Supply-station for car-heating systems	480,777	Aug. 16	1644	412	60	925
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Current-director	486,643	Nov. 22	2326	609	61	1090
McElroy, James F., Albany, N. Y., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Current-regulator	486,644	Nov. 22	2328	609	61	1090
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Car-heating apparatus	471,312	Mar. 22	2590	657	58	1628

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
McElroy, James F., assignor to Consolidated Car Heating Company, Albany, N. Y. Heating apparatus	478,203	July 5	210	53	60	43
McElroy, James F., assignor to Consolidated Car-Heating Company, Albany, N. Y. Apparatus for regulating the intensity of incandescent lights	484,110	Oct. 11	871	221	61	193
McElroy, James F., assignor to Consolidated Car-Heating Company, Albany, N. Y. Hose-coupling	486,118	Nov. 15	1510	100	61	914
McElroy, Patrick J., Cambridge, Mass. Making multiple-bore glass tubes	466,894	Jan. 12	962	215 } 246 }	58	192
McElroy, Patrick J., Cambridge, Mass. Multiplex glass tube	481,805	Aug. 30	3348	819	60	1280
McElwain, George, Englewood, Ill. Penholder	482,925	Sept. 20	1641	413	60	1681
McElwain, George, assignor of one-half to J. Kune, Chicago, Ill. Penholder	479,522	July 26	2300	574	60	489
McEnery, Henry C., New Orleans, La. Fare-box	466,797	Jan. 12	790	205	58	160
McEntarfer, Jeremiah M., et al. (See Sapp, Samuel M., assignor.)						
McEntarfer, John G., et al. (See Sapp, Samuel M., assignor.)						
McEntee, Frank J., et al. (See McKercher, George, assignor.)						
McEwan, Peter H., Windsor, Canada, assignor of one-fourth to F. M. Allman, Detroit, Mich. Cash register and indicator	486,119	Nov. 15	1512	400	61	914
McEwan, William W. (See Hull and McEwan.)						
McEwan, William W., Belvidere, N. J. Manufacture of paper-board tubs	481,239	Aug. 23	2404	593	60	1085
McEwen, James H., Ridgway, Pa. Coal-cutting machine	476,162	May 31	3638	921	59	1400
McEwen, Joseph C., Lochloosa, Fla. Box-making machine	478,456	July 5	603	147	60	119
McFarland, James M., Virginia City, Nev. Stamp-mill	467,187	Jan. 19	1452	370 } 371 }	58	293
McFarland, James M., Virginia City, Nev. Faucet	477,308	June 21	1726	422	59	1806
McFarland, Kelley, Clackamas, Oreg. Coupler for caps and fuses for giant-powder	468,890	Feb. 16	1531	389	58	842
McFarlane, Hugh. (See Cline and McFarlane.)						
McFarlane, John, Wicota, Wis. Car-coupling	487,424	Dec. 6	320	82	61	1381
McFarlane, Robert, assignor of one-half to W. E. Holmes, Minneapolis, Minn. Weighing and recording scale	483,675	Oct. 4	228	57	61	47
McFeely, Frederick P., Oakland, assignor to D. E. Barton, San Francisco, Cal. Beam for cultivators	467,296	Jan. 19	1621	413	58	324
McGahan, Frank W. (See Gray, George J., assignor.)						
McGahan, Fred L. (See Meyer, George, assignor.)						
McGahan, Fred L., Indianapolis, Ind. Locomotive feed-water supply	466,360	Jan. 5	77	20, 21	58	17
McGahan, Fred L., Indianapolis, Ind. Oil-burner	476,294	June 7	97	22	59	1457
McGall, William J., West Orange, N. J. Hat-curling machine	480,877	Aug. 16	1794	449	60	955
McGall, William J., West Orange, N. J. Hat-brim-ironing machine	483,746	Oct. 4	336	84	61	70
McGarrell, John L., Westfield, N. Y. Vine-holder	483,258	Oct. 4	503	125	61	104
McGee, Albert M. (See Newton, William H., assignor.)						
McGee, George W., Chicago, Ill. Treating gold and silver ores	487,579	Dec. 6	556		61	1432
McGee, Thomas J., Hattiesburg, Miss. Axle-bearing	481,911	Aug. 30	3525	862	60	1314
McGee, Joseph T., and R. W. Carr, Bryan, Tex. Poison-distributor	467,619	Jan. 26	2143	544	58	430
McGervey, James L., Xenia, Ohio. Check-book holder	467,263	Jan. 19	1572	400	58	316
McGervey, James L., Xenia, Ohio. Check-book holder	474,917	May 17	1651	422	59	982
McGeure, Patrick, et al. (See Knowlton, Ephraim H. B., assignor.)						
McGill, James W., Peoria, Ill. Car-coupling	477,438	June 21	1923	474 } 475 }	59	1843
McGill, Peter. (See Moffitt, John W., assignor.)						
McGillvray, Bernard, assignor of one-half to F. W. Ritter, Jr., Washington, D. C. Wrench	481,506	Aug. 23	2848	700	60	1168
McGinsey, Charles R., New York, N. Y. Illuminated advertising-sign	478,204	July 5	211	53	60	43
McGirr, Robert A. (See Sommer and McGirr.)						
McGlenen, Daniel W., Creston, Ohio. Tension device	485,770	Nov. 8	943	253	61	783
McGlinchey, Charles E., assignor to C. F. Stokes, Chicago, Ill. Velocipede saddle	468,998	Feb. 16	1725	439	58	881
McGoron, John R., Terrace Park, Ohio. Stovepipe-fastener	482,808	Sept. 20	1453	361	60	1645
McGovern, Bernard, Norwalk, assignor to O. E. Madden, Boston, Mass. Machine for setting tires	473,948	May 3	101	23, 24	59	656
McGovern, Stephen D., et al. (See Krogh, Emil C. C., assignor.)						
McGovern, Thomas, New York, N. Y. Casket-handle	471,771	Mar. 29	3276	836	58	1766
McGovern, Thomas A., Bolinas, Cal. Oil-gage for lamps	475,967	May 31	3330	840	59	1337
McGovern, Thomas B., et al. (See Krogh, Emil C. C., assignor.)						
McGowan, John H., Cincinnati, Ohio. Mechanism for raising water	473,949	May 3	104	24	59	657
McGowan, John H., Cincinnati, Ohio. Valve-seat	486,600	Nov. 22	2257	590	61	1075
McGown, George H., Lynn, Mass. Hammer	487,635	Dec. 6	640	164	61	1448
McGrail, John F., assignor to Winchester Repeating Arms Company, New Haven, Conn. Machine for swaging and creasing bullets	481,731	Aug. 30	3221	786	60	1255
McGrain, John, assignor of one-half to F. Lenthe, Cleveland, Ohio. Crutch	467,675	Jan. 26	2226	566	58	446
McGrath, Catharine A., et al., executors. (See Buehler, Rudolph R., assignor.)						
McGrath, Cyrus D., Anthony, Ohio. Inhaler	472,176	Apr. 5	258	68	59	49
McGrath, John T., Palmyra, Ill. Tank-heater	472,798	Apr. 12	1205	309	59	241
McGrath, Louis J., et al. (See Buehler, Rudolph R., assignor.)						
McGrath, Timothy W., Brooklyn, N. Y. Combination-lock	470,438	Mar. 8	1273	326	58	1351
McGraw, John H., Oswego, N. Y. Lathe-mandrel	480,435	Aug. 9	1105	277	60	802
McGraw, William T., Detroit, Mich. Cash indicator and recorder	482,132	Sept. 6	337	81	60	1401
McGray, Arthur, Yarmouth, Canada. Apparatus for shipping lobsters	485,422	Nov. 1	422	113	61	659
McGregor, Bradford, Covington, Ky., assignor of one-third to Wood & Boyd, Cincinnati, Ohio. Gas-burner	472,385	Apr. 5	595	151	59	112
McGregor, George L., Chicago, Ill. Boiler-lug and making the same	479,331	July 19	1938	484	60	405
McGrew, Alonzo H. (See Longhrey and McGrew.)						
McGrew, Jasper H., Chicago, Ill. Stereoscopic album	472,196	Apr. 5	290	76	59	55
McGriff, John C. F., Los Angeles, Cal. Fire-alarm	482,379	Sept. 13	781	188	60	1502
McGrory, Henry A., Detroit, Mich. Liquid-level-indicator system	480,736	Aug. 16	1556	397	60	912
McGuigan, Michael J., Ashland, Wis. Leggin	487,226	Nov. 29	3301	842	61	1298
McGuire, James P., Atchison, Kans. Railway fish-plate, set-screw, and nut-lock therefor	484,809	Oct. 25	2012	517	61	446
McGuire, William A., and M. G. Hubbard, Jr., Chicago, Ill. Motor-truck for cars	476,480	June 7	396	91, 92	59	1514
McGuire, William R., Fort Dodge, Iowa. Railway-gate	487,538	Dec. 6	500	131	61	1419
McHenry, David B., Grenada, Miss. Artificial tooth	475,141	May 17	2010	508	59	1051
McHenry, James W., Aspen, Colo. Weight-lifting attachment	468,681	Feb. 9	1209	307	58	770
McHugh, Michael J., Jersey City, N. J. Bottle-filling apparatus	479,298	July 19	1895	474	60	397
McHugh, Patrick. (See McDonald and McHugh.)						
McIlhenny, Richard J., Wilmington, N. C. Engine-governor	474,678	May 10	1281	326	59	894
McIlvain, John H., Camden, N. J., assignor to C. F. Bartlett, Philadelphia, Pa. Open fire-grate	479,916	Aug. 2	207	52	60	623
McIlwain, Henry C., Null's Mills, assignor of one-half to J. N. Huston, Connersville, Ind. Eyepiece for telescopes	488,506	Dec. 20	2096	520	61	1773

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
McIndoe, George F., assignor of one-half to J. W. McIndoe, Boston, Mass. Metal-planing machine	479,606	July 26	2416	603	60	511
McIndoe, James W. (See McIndoe, George F., assignor.)						
McIntire, Bartlett, assignor to Vulcan Iron Works, San Francisco, Cal. Clip for wire rope-ways	488,085	Dec. 13	1407	349	61	1620
McIntire, William C., Washington, D. C. Cushion-tire for bicycles	470,915	Mar. 15	1981	506	58	1499
McIntire, William L. (See Sockman, Bryant R., assignor.)						
McIntosh, Colm. (See Vogel and McIntosh.)						
McIntosh, George, Stonington, Conn. Electric signal	485,352	Nov. 1	315	84	61	636
McIntosh, George F., Gardiner, Me. Curling-iron holder	478,123	July 5	67	18	60	15
McIntosh, John, Port Elgin, assignor of one-half to M. Bricker, Listowel, Canada. Saw-set	476,235	May 31	3769	951	59	1424
McIntosh, Sarah E., Almond, N. Y. Flavoring-powder	477,141	June 14	1421		59	1734
McIntyre, D. Stuart. (See McIntyre, Duncan T., assignor.)						
McIntyre, David A., Newark, N. J. Check-book	472,067	Apr. 5	87	24	59	18
McIntyre, Duncan T., Mattoon, Ill., assignor to himself, and D. S. McIntyre, Knoxville, Tenn. Metallic riprap	486,885	Nov. 29	2726	711	61	1186
McIntyre, Frank, assignor to Eagle Pencil Company, New York, N. Y. Combined pencil-tip and calendar	467,379	Jan. 19	1746	446	58	348
McIntyre, Frank, assignor to Eagle Pencil Company, New York, N. Y. Combined pencil-tip and calendar	469,527	Feb. 23	2534	652	58	1045
McIntyre, John W., Philadelphia, Pa. Vise	472,311	Apr. 5	478	123	59	90
McIntyre, Joseph J., Brooklyn, N. Y. Projectile	484,802	Oct. 25	2098	540	61	463
McKay, Andrew B. (See Drader and McKay.)						
McKay, Andrew D., Liverpool, England. Medicinal food	473,331	Apr. 19	2023		59	422
McKay & Copeland Lasting Machine Company. (See Godfrey, Charles B., assignor.)						
McKay, George, Norwich, Conn. Braiding-machine	468,225	Feb. 2	474	117	58	618
McKay, George D., Anarera, Ill. Underwaist	474,679	May 16	1283	327	59	895
McKay, Gordon, et al. (See Ramsden and Ellis, assignors.)						
McKay, Henry S., Boston, Mass. Electric mechanism for reciprocating motion	475,410	May 24	2426	619	59	1149
McKay, Hiram, Boston, Mass. Toothpick-case	469,064	Feb. 16	1822	466	58	900
McKay, John E. (See Delaney, Alfred G., assignor.)						
McKay, Joseph, Troy, N. Y. Starching-machine	471,619	Mar. 29	3033	772 773	58	1721
McKay, Joseph, Troy, N. Y. Starching-machine	471,720	Mar. 29	3196	815 816	58	1750
McKay, William W., Dickinson, N. D. Fire-extinguisher	479,448	July 26	2165	541	60	465
McKean, Frank A. (See Eayrs, Winslow P., assignor.)						
McKean, John T., Santa Cruz, Cal. Opera-chair	475,019	May 17	1824	462 463	59	1015
McKee, Alexander, Stuart, Iowa. Draft-equalizer	480,339	Aug. 9	947	240	60	774
McKee, Alfred. (See Henry, Bolles, and McKee.)						
McKee, James A., and P. G. Hatchett, Alexander, Tex. Automatic brake	484,886	Nov. 29	2727	711	61	1186
McKee, James W., Brooklyn, N. Y. Latch and lock combined	477,142	June 14	1422	346	59	1734
McKee, Martin E., St. Paul, Minn. Automatic brake-adjuster	487,636	Dec. 6	641	164 165	61	1449
McKee, Thomas F., Bloomville, Ohio. Vehicle-spring	476,062	May 31	3471	876	59	1367
McKee, William, Chicago, Ill. Grain-drier	488,770	Dec. 27	2509	624	61	1869
McKee, Wood. (See Case, George, assignor.)						
McKeen, Thomas L., New York, N. Y., assignor to Thurmond Car Coupling Company, of West Virginia. Lifting device for twin-jaw car-couplings	472,627	Apr. 12	959	248 249	59	196
McKeen, Thomas L., New York, N. Y., assignor to Thurmond Car Coupling Company, of West Virginia. Car-coupling	472,799	Apr. 12	1206	310	59	241
McKeggie, James H., et al. (See Bunker, Harman, assignor.)						
McKeggie, John C., et al. (See Broker, Harman, assignor.)						
McKellar, John, San Francisco, Cal. Steam-trap	481,507	Aug. 23	2849	700	60	1168
McKelvey, Samuel P., Chicago, Ill. Mold for forming castings from cement	474,143	May 3	397	96	59	715
McKendree, Albert C., assignor of one-half to J. M. Glazier, Erie, Pa. Adjustable-platform ladder	471,245	Mar. 22	2491	632	58	1609
McKenna, Alexander G., Allegheny, Pa., and H. T. Weed, Brooklyn, N. Y. Electric meter	475,411	May 24	2430	620	59	1150
McKenna, John, Johnstown, Pa. Bed for metal-working machines	472,712	Apr. 12	1087	279	59	218
McKenna, Thomas E., Newark, N. J. Bicycle	474,400	May 10	828	217	59	808
McKenney, Franklin S., Detroit, Mich. Lacing for shoes or other articles	478,519	July 5	704	171	60	140
McKenney, Franklin S., Detroit, Mich. Hook and fastening for gloves, shoes, &c	478,520	July 5	705	171	60	140
McKenney, Franklin S., Detroit, Mich. Lacing-stud	478,521	July 5	706	171	60	140
McKenney, George F., Laconia, assignor to O. Twombly, Lakeport, N. H. Knitting-machine	488,575	Dec. 27	2208	546 547 548	61	1810
McKenney, Joel, Boston, Mass. Overdraw-checkrein	471,749	Mar. 29	3246	825	58	1759
McKenney, William W., New York, N. Y., assignor to Magic Introduction Company, of New Jersey. Pocket lighting device	480,206	Aug. 2	712	122	60	717
McKenney, William W., New York, N. Y., assignor to Magic Introduction Company, of New Jersey. Lighting device	480,207	Aug. 2	715	182	60	718
McKenzie, Angus G., Boston, Mass. Trial-frame for opticians	479,607	July 26	2419	603	60	512
McKenzie, Donald J., Chicago, Ill. Furnace	477,263	June 21	1650	403	59	1791
McKenzie, J. A., et al. (See Bailey, Frank M., assignor.)						
McKenzie, Robert, Sydney, New South Wales. Appliance for ventilating sewers, &c.	480,958	Aug. 16	1927	482	60	920
McKenzie, William D., et al. (See Cross, Jerome L., assignor.)						
McKeon, John H. (See Rockteacher and McKeon.)						
McKeown, Hugh J., Newport, Ky. Hoisting machinery	488,447	Dec. 20	2001	500	61	1753
McKercher, Edward, et al. (See McKercher, George, assignor.)						
McKercher, George, assignor of three-fourths to E. McKercher, W. S. Coleman, and F. J. McEntee, Jonesville, Mich. Pipe-wrench	474,300	May 3	644	163	59	762
McKerley, William J. (See Doig, Edwin M., assignor.)						
McKerlie, Alexander, Hamilton, Canada. Window-screen	484,540	Oct. 18	1568	399	61	341
McKesson & Robbins. (See Evans, William J., assignor.)						
McKesson & Robbins. (See Morehouse, Charles L., assignor.)						
McKiearnan, John M. (See Middlekautf, Ellsworth D., assignor.)						
McKiernan, Samuel G., Paterson, N. J. Rock-drill	488,269	Dec. 20	1712	431	61	1696
McKinn, David R., Gold Hill, Nev. Valve	468,029	Feb. 2	187	46	58	560
McKinless, James, Manchester, assignor to Mechanical Spirit Maturing Syndicate, Limited, London, England. Apparatus for maturing spirits or other liquors	471,707	Mar. 29	3167	807 808	58	1746
McKinley, Frederick E. (See De Mars, Joseph, assignor.)						
McKinnan, John, Colfax, Wash. Clothes-drier	477,439	June 21	1934	475	59	1844

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
McKinney, Robert, assignor of two-thirds to J. Miner and M. Keenan, Detroit, Mich. Making food compounds.	468,751	Feb. 9	1314	.....	58	791
McKinney, Samuel C., West Troy, assignor of one-half to W. S. Earl, W. and A. R. Wilson, and E. K. Betts. Folding-machine.	485,130	Oct. 25	2518	648	61	547
McKinnon, Hector, Eureka, Cal. Bag-lock.	477,331	June 21	1756	430	59	1812
McKinnon, Hector, Eureka, Cal. Lumber-elevator.	480,824	Aug. 16	1720	430	60	939
McKnight, Joseph, Middleport, Ohio. Windmill.	466,756	Jan. 5	715	185	58	136
McKnight, Thomas R., assignor to Western Wheel Scraper Company, Aurora, Ill. Road-scraper.	470,208	Mar. 8	868	215	58	1277
McKone, John T., <i>et al.</i> (See Smith, Samuel, assignor.)						
McLachlan, Duncan. (See Hiltz, George S., assignor.)						
McLain, Peter J., Denver, Colo. Illuminated badge.	485,748	Nov. 8	915	245	61	777
McLain, Ralph, La Grange, Ind. Grain-cleaning attachment for clover hullers and separators.	485,971	Nov. 8	1252	{ 330 331 }	61	845
McLam, Frank, <i>et al.</i> (See Fisher, James W., assignor.)						
McLam, Franklin C. (See Fisher, James W., assignor.)						
McLanahan, Samuel C., and W. F. Kirk, Hollidaysburg, Pa. Ore-washer.	479,587	Mar. 8	1481	385	58	1392
McLandsborough, Joseph, Station Fifteen, Ohio. Post-driver.	485,051	Oct. 25	2408	620	61	524
McLane, Edwin P., Mount Carmel, Conn. Game-board.	487,447	Dec. 6	364	95	61	1393
McLane, George D., assignor to Darling, Brown & Sharpe, Providence, R. I. Caliper-rule.	477,183	June 14	1494	365	59	1750
McLane, Raynes L., Blackheath, England. Car-axle.	483,470	Sept. 27	2494	628	60	1861
McLauchlan, Ann. (See McLauchlan, William and A.)						
McLauchlan, William and A., Manchester, England. Iron bucket.	470,947	Mar. 15	2033	520	58	1509
McLaughlin, Dennis W., San Leandro, Cal. Combined weighing and advertising device.	475,968	May 31	3331	840	59	1337
McLaughlin, Frank, Baker's Corner, Ind. Fifth-wheel.	482,457	Sept. 13	902	219	60	1524
McLaughlin, James F., Philadelphia, Pa. Mechanism for controlling the application of power.	467,297	Jan. 19	1621	{ 413 414 }	58	324
McLaughlin, James F., Philadelphia, Pa. Friction-clutch.	468,652	Feb. 9	1210	308	58	770
McLaughlin, James F., Philadelphia, Pa. Friction-clutch.	468,683	Feb. 9	1213	308	58	771
McLaughlin, James F., Philadelphia, Pa. Manufacture of electrodes for secondary batteries.	475,335	May 24	2310	593	59	1129
McLaughlin, Stillman W., <i>et al.</i> (See Devlin, James C., assignor.)						
McLay, John. (See Reed, James H., assignor.)						
McLean, Alexander, West Kensington, assignor of one-half to C. W. Wilson, London, England. Apparatus for making slabs, &c.	478,757	July 12	1054	{ 259 260 261 }	60	225
McLean, Donald D. (See Bochncko and McLean.)						
McLean, Frank W. (See Crary, Thomas F., assignor.)						
McLean, Robert B., Mullins, S. C. Fertilizer-distributor.	470,588	Mar. 8	1482	386	58	1393
McLellan, Charles T., Easton, Pa. Sectional steam-boiler.	485,556	Nov. 1	613	164	61	698
McLellan, Michael. (See Morrison and McLellan.)						
McLeod, Alfred, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
McLeod, Charlie M., and J. T. Garrett, Cooper, Tex. Animal-trap.	472,386	Apr. 5	596	152	59	112
McLeod, John D., Milwaukee, Wis. Cable junction-box.	477,218	June 21	1567	385	59	1776
McLeod, Peter R. (See Prentice, McLeod, Crane, and Pilkington.)						
McLeran, Thomas G. (See Munson, Anson L., assignor.)						
McLewee, William S., New York, N. Y. Lamp.	471,822	Mar. 29	3367	857	58	1782
McLewee, William S., New York, N. Y. Lamp.	471,823	Mar. 29	3368	857	58	1783
McLoughlin Brothers. (See Gist, Grant G. G., assignor.)						
McLoughlin, John E., Utica, N. Y. Cap.	473,427	Apr. 19	2242	564	59	452
McMahan, Cornelius. (See Main and McMahan.)						
McMahon, Josiah C. (See Snyder and McMahon.)						
McMahon, Patrick P., and G. M. Wilcoxson, Chattanooga, Tenn. Spring-box for car-couplings.	470,071	Mar. 1	641	159	58	1223
McManes, William, and G. E. Lum, Summit, N. J. Metallic railway cross-tie.	476,404	June 7	280	66	59	1493
McManus, Robert D., Hartford, Conn. Shoe-black holder and rest.	481,265	Aug. 23	2459	605	60	1095
McManus, William S. (See Hock, Henry W., assignor.)						
McManus, William S., South Chester, assignor to J. D. Potts, trustee, Philadelphia, Pa. Making metal pipes or tubes.	479,952	Aug. 2	277	68	60	634
McMartin, Martin A., assignor to himself and J. R. Givens, Raton, N. Mex. Ter. Music-leaf turner.	469,587	Feb. 23	2625	673	58	1063
McMaster, Arthur H., Fowler, Colo. Connection for steam-engines.	485,557	Nov. 1	615	164	61	699
McMasters, David M., <i>et al.</i> (See Graff, Edward E., assignor.)						
McMasters, William P., Munball, Pa. Door-hinge.	471,133	Mar. 22	2318	595	58	1577
McMenimen, George A., East Cambridge, Mass. Tramway-switch.	472,381	Apr. 5	589	150	59	111
McMichael, George C., St. Paul, Minn., assignor to Eureka Coupler and Buffer Company, of West Virginia. Car-coupling.	485,211	Nov. 1	286	26, 27	61	590
McMillan, Charles M., Red Cloud, Nebr. Toe-weight.	479,831	Aug. 2	88	22	60	599
McMillan, Duncan, assignor to Midland Manufacturing Company, Cincinnati, Ohio. Hame-tug.	471,395	Mar. 22	2717	693	58	1654
McMillan, Frederick R., Jacksonville, Ill. Cross water-tube steam-boiler.	475,947	May 31	3298	832	59	1331
McMillan, John, and G. H. Taylor, Philadelphia, Pa.; said Taylor assignor to said McMillan. Electric alarm-clock.	482,133	Sept. 6	339	81	60	1402
McMullan, James H. (See Morgan and McMullan.)						
McMullen, Peter, Buffalo, N. Y. Car-brake.	487,681	Dec. 6	721	184	61	1463
McMullin, Charnick W., and W. C. De Graffenried, Jasper, Fla. Mechanism for operating pumps.	468,821	Feb. 16	1425	363	58	822
McMunn, Llewellyn D., Cromwell, N. D., assignor of one-half to M. R. Utley, Minneapolis, Minn. Electric cut-out and switch-box.	483,235	Sept. 27	2137	541	60	1793
McMurray, John P., San Francisco, Cal. Wall or ceiling covering.	480,120	Aug. 2	573	145	60	691
McNab, Robert, Paterson, N. J. Clothes-line support.	481,806	Aug. 30	3549	820	60	1280
McNabb, John B., Salem, Ohio. Closure for vessels.	483,575	Oct. 4	86	23	61	20
McNabb, William J. (See Barton and McNabb.)						
McNally, Edward P. (See Tomlinson, Jonas, assignor.)						
McNally, Richard J., assignor to A. C. Luce and R. R. Gibbs, Utica, N. Y. Manufacturing turned shoes.	473,851	Apr. 26	2932	738	59	607
McNamar, Julius J. D., Newark, Ohio. Traction-engine.	475,597	May 24	2726	690	59	1207
McNamara, Daniel, Kansas City, Mo. Adjustable railway-crossing.	480,608	Aug. 9	1374	341	60	856
McNamara, James. (See Clinton and McNamara.)						
McNamara, James E., <i>et al.</i> (See Cole, John J., assignor.)						
McNamara, John F. (See O'Connor and McNamara.)						
McNaney, John, Elmira, N. Y. Wagon-box.	469,167	Feb. 16	1956	500	58	927
McNany, John. (See Van Why, Joseph M., assignor.)						
McNary, Thomas T., Hailey, Idaho. Ore-concentrator.	485,972	Nov. 8	1254	331	61	846

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
McNaughton, James. (See Porter, John W., assignor.)						
McNanll, William D., Ronceverte, W. Va. Radial drilling-machine	472,546	Apr. 12	842	215	59	173
McNeil, Chester, Chicago, Ill., assignor to Union Special Sewing Machine Company, of Illinois. Machine for sewing long lengths of fabrics	468,457	Feb. 9	853	216	58	699
McNeil, James, San Francisco, Cal. Templet for boiler-holes	467,298	Jan. 19	1626	414	58	325
McNeil, Murdock, Boston, Mass. Steam-pressure gage	486,839	Nov. 22	2647	691	61	1155
McNeill, James W., Fayetteville, N. C. Harness attachment	478,124	July 5	68	18	60	15
McNeill, John S. (See Stone, Edward H., assignor.)						
McNellis, Charles, Chicago, Ill. Carbon-rod contact for arc lamps	477,219	June 21	1569	386	59	1776
McNelly, Mathias F., assignor of one-half to W. A. McCune, Sterling, Ill. Coal-auger post	468,058	Feb. 2	226	55	58	568
McNichol, Edgar, West Jonesport, Me. Stringed instrument	468,114	Feb. 2	310	75	53	581
McNicol, Archie, Norwich, Conn. Rein-support	484,444	Oct. 18	1417	361	61	311
McNulta, Herbert, Cleveland, Ohio. Air-brake	471,801	Mar. 29	3338	850	58	1777
McNutt, John F., and H. F. Grimessey, assignors of one-third to O. R. Grimessey, Warren, Ohio. Flue-cleaner	475,733	May 24	2936	745	59	1246
McNutt, Lester J., Warren, Pa. Hydrocarbon-gas-black machine	481,240	Aug. 23	2404	503 594	60	1085
McOuat, Eugene, Boston, Mass. Incandescent electric light	481,047	Aug. 16	2063	515	60	1007
McPartland, John, Wakefield, R. I. Vehicle-seat	474,097	May 3	340	81	59	703
McPartland, John, Wakefield, R. I. Vehicle-spring	488,795	Dec. 27	2551	633	61	1877
McPherson, Daniel W. (See Knight and O'wulny, assignors.)						
McPherson, Donald H., Le Roy, N. Y. Steering mechanism for bicycles	475,142	May 17	2011	508	59	1051
McPherson, Donald H., Le Roy, N. Y. Book-support	477,018	June 14	1225	297	59	1695
McPherson, Horace, Crete, Ill. Side-delivery horse hay-rake	476,961	June 14	1144	276	59	1678
McPherson, James A., et al. (See Robertson, William, assignor.)						
McPherson, Thomas C., Beaver Falls, Pa. Wire mat	475,598	May 24	2727	691	59	1207
McPherson, Thomas C., Beaver Falls, Pa. Wire mat	475,598	May 24	2728	691	59	1207
McQuaid, James W., Calloway county, Ky. Floor-clamp	474,180	May 3	455	110	59	726
McQuarrie, James L., Boston, Mass. assignor, by mesne assignments, to Western Electric Company, of Illinois. Multiple-switchboard busy-test circuit and apparatus	487,853	Dec. 13	1015	255	61	1540
McQuarrie, James L., Boston, Mass., assignor, by mesne assignments, to Western Electric Company, of Illinois. Busy-test apparatus for multiple switchboards	487,854	Dec. 13	1020	256	61	1540
McQuarry, Hector, Barrie, Canada, assignor of one-fifth to J. C. Hudson, Detroit, Mich. Axle-gage	467,470	Jan. 19	1896	481	58	376
McQueen, John, and W. Moores, Manchester, England. Driving-belt	467,765	Jan. 26	2374	603	58	474
McQuillin, James C., Industry, Pa. Nut-lock	481,417	Aug. 23	2709	666	60	1140
McQuillan, John, Hecker, Ill. Extensible ladder	473,852	Apr. 26	2933	739	59	607
McQuillan, John, Hecker, Ill. Attachment for straw-carriers	474,181	May 3	456	110	59	726
McQuown, Thomas H., Biggsville, Ill. Skate	467,047	Jan. 12	1206	304	58	237
McRae, John D., Baldwinsville, N. Y. Dredging-pump	479,765	July 26	2695	670 671	60	563
McRoberts, Charles H., St. Louis, Mo. Dumping-wagon	485,294	Nov. 1	209	60	61	615
McShane, Augustus, New Orleans, La. Surgical instrument	467,198	Jan. 19	1455	371	58	293
McShea, James, Philadelphia, Pa. Prie-dien	477,440	June 21	1925	475	59	1844
McSherry, Edward, et al. (See Winlund, Nicholas J., assignor.)						
McTammany, Alexander. (See McTammany, John, assignor.)						
McTammany, John, Worcester, Mass., assignor to A. McTammany, Akron, Ohio. Pneumatic registering ballot-box	482,691	Sept. 13	1265	310 311	60	1595
McTighe, Thomas J. (See Hoeveler and McTighe.) (Reissue.)						
McTighe, Thomas J., New York, N. Y. Trolley-wire hanger	471,491	Mar. 22	9860	727	58	1681
McTighe, Thomas J., New York, N. Y. Electric rail-bond	478,629	July 12	867	213	60	187
McVicar, Robert, Jr., Denver, Colo. Oil-can	471,085	Mar. 15	2239	575	58	1550
McVickar, Matthew, et al. (See Stewart, James, assignor.)						
McWane, Charles P., Graham, Va. Hillside-plow	484,043	Oct. 11	785	198	61	175
McWilliam, James E., Hubbardston, Mass. Condenser for wool-carding machines	472,740	Apr. 12	1125	299	59	225
McWilliams, C. Q., et al. (See Edgar and Rohrbach, assignors.)						
Meachem, T. W. (See Benedict, Heman A., assignor.)						
Mead, Albert G., Boston, Mass. Dovetail-cutter	479,075	July 19	1551	387	60	331
Mead, Albert G., Boston, Mass., assignor to W. B. H. Dowse, trustee. Buckle	478,120	July 5	64	17	60	15
Mead, Albert G., Boston, assignor to W. B. H. Dowse, trustee, Newton, Mass. Glove-fastener	484,807	Oct. 25	2007	515	61	445
Mead, Archibald F., Philadelphia, Pa. Pattern for drafting trousers	485,014	Oct. 25	2155	605	61	513
Mead, Arthur F., New York, N. Y. Steam-generator	468,884	Feb. 16	1521	388	58	841
Mead, Henry W., Quincy, Ill. Brick-machine	471,677	Mar. 29	3124	796 797	59	1738
Mead, Theodore H., et al. (See Crowell, Luther C., assignor.)						
Mead, Theodore H., et al. (See Scott, Walter, assignor.)						
Meador, Charles C., Montpelier, Vt. Gutter or valley on roofs	480,602	Aug. 9	1366	339	60	854
Meador, Wilber F., et al. (See Hunter, Joseph, assignor.)						
Meadley, Jabez B., Davenport, Iowa. Car-brake	480,503	Aug. 9	1215	303	60	825
Meadley, Jabez B., Davenport, Iowa. Car-coupling	480,504	Aug. 9	1216	304	60	825
Meador, Robert L., et al. (See Gordon, Thomas J., assignor.)						
Meadows, Charles A., Yonkers, N. Y. Reflector	480,301	Aug. 2	707	190	60	716
Meagher, John. (See Taylor, Kenner, assignor.)						
Meagher, Michael, Eau Claire, Wis. Tool for setting, gaging, and jointing saws	466,697	Jan. 5	606	157	58	117
Meagher, William E., and A. Howarth, Providence, R. I. Switch attachment for cars	483,744	Oct. 4	332	84	61	70
Meaher, Dennis A. (See Hamblin, Gideon D., assignor.)						
Meaker, John W., assignor to Meaker Manufacturing Company, Chicago, Ill. Fare-register	478,167	July 5	147	38, 39	60	32
Meaker, John W., assignor to Meaker Manufacturing Company, Chicago, Ill. Operating device for fare-registers	480,732	Aug. 16	1579	395	60	911
Meaker Manufacturing Company. (See Meaker, John W., assignor.)						
Mealer, James A., Lampasas, Tex. Hay-press	484,504	Oct. 18	1512	384	61	330
Means, John R., Saybrook, Ill. Farm-gate	470,067	Mar. 1	634	157	58	1222
Mears, Robert S., Newton, Kans. Electric body-wear	476,473	June 7	378	88	59	1510
Mease, Ezra W., Philadelphia, Pa. Bag for bicycles	470,878	Mar. 15	1933	494	58	1490
Mecham, Joseph. (See De La Mare and Mecham.)						
Mechanical Novelty Company. (See Hamrick, Harry M., assignor.)						
Mechanical Spirit Maturing Syndicate. (See McKinless, James, assignor.)						
Mechanics Milling and Amalgamating Company. (See Pearce, Jacob A., assignor.)						
Mechwart, Andreas, Buda-Pesth, Austria-Hungary. Axial-flow double-wheel turbine	484,601	Oct. 18	1653	419 420	61	359
Meeke, William J., Camden, N. J. Walking-stilt	469,641	Feb. 23	2688	692	58	1076
Medart, Frederick, St. Louis, Mo. Jumping-stand	468,625	Feb. 9	1123	286	58	752

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Medart, Frederick, St. Louis, Mo. Horizontal-bar exercising apparatus.	475,697	May 24	2876	727	59	1236
Medcraft, George E. (See O'Connell and Medcraft.)						
Medley, Granville E., Hopkinsville, Ky. Fishing-reel.	481,330	Aug. 23	2571	631	60	1114
Medley, John R. (See Cook, John W., assignor.)						
Meech, Harrison B., Chicago, Ill. Incandescent electric lamp.	475,698	May 24	2877	727	59	1236
Meech, Harrison B., Chicago, Ill. Apparatus for treating ores.	484,861	Oct. 25	2097	540	61	463
Meehan, James. (See Talbot, Benjamin, assignor.)						
Meek, George W. (See Meek, James H. and G. W.)						
Meek, James H. and G. W., Denison, Tex. Cradle.	478,450	July 5	597	145	60	118
Meeker Bros. (See Comes, Keros L., assignor.)						
Meeker, Randolph B., Detroit, Mich. Tackle-block.	485,504	Nov. 1	538	142	61	682
Meeker, Stephen J., Newark, N. J., assignor to Smillie Coupler and Manufacturing Company, of New Jersey. Car-coupling.	469,327	Feb. 23	2221	570	58	984
Meeks, Samuel J. (See Bond, Nathan O., assignor.)						
Meem, James C., Buena Vista, Va. Game apparatus.	470,691	Mar. 15	1635	424	58	1432
Mefford, David M., Toledo, Ohio. Shaded lamp-chimney.	487,850	Dec. 13	1008	254	61	1539
Megson, Richard, Cambridge, Mass. Baker's and confectioner's depositing apparatus.	484,937	Oct. 25	2232	575	61	489
Mehling, John A., assignor of one-half to S. D. Dodge, Cleveland, Ohio. Street-car.	481,800	Aug. 30	3341	817	60	1279
Mehring, William M., York Road, Md. Cow-milker.	488,282	Dec. 20	1734	436	61	1700
Mehrtens, John H., assignor to E. J. Köster, Harkorten, near Haspe, Germany. Fire-grate.	481,237	Aug. 23	2400	592	60	1084
Meier, Beat, and L. E. Frische, Minneapolis, Minn. Process of and apparatus for dampening grain preparatory to grinding.	477,909	June 28	2696	675	59	2012
Meier, Emil, New York, N. Y. Attachment for printing-presses.	485,704	Nov. 8	851	228	61	764
Meier, Frederick, Battle Creek, Mich. Clod-crusher.	466,356	Jan. 5	73	19	58	16
Meier, Joseph. (See Mayer, John B., assignor.)						
Meier, Joseph, Newark, N. J. Pulley for transmitting power.	486,585	Nov. 22	2233	586	61	1071
Meier, Silvan, assignor to Gerstle & Löffler, Munich, Germany. Corset.	472,931	Apr. 12	1396	358	59	280
Meigs, Bertrand H., et al. (See Meigs, Herman O., assignor.)						
Meigs, Charlotte G., et al. (See Meigs, Herman O., assignor.)						
Meigs, George W., Reading, Pa. Spectacles.	468,885	Feb. 16	1522	388	58	841
Meigs, George W., Reading, Pa. Spectacles.	468,886	Feb. 16	1525	389	58	841
Meigs, George W., and J. W., Reading, Pa. Spectacle-lens.	474,024	May 3	222	54	59	681
Meigs, George W., and E. Leyden, Reading, Pa. Crank mechanism.	473,942	May 3	93	21, 22	59	655
Meigs, George W., and J. G. Ziegler, Reading, Pa. Elastic tire.	466,613	Jan. 5	485	125	58	93
Meigs, George W., and J. G. Ziegler, Reading; said Meigs assignor to E. E. Ziegler, Philadelphia, Pa. Bicycle.	474,327	May 3	703	182	59	772
Meigs, Herman O., Arkansas City, Kans., assignor to C. G. Meigs, Jacksonville, Fla., and B. H. Meigs, Arkansas City, Kans. Reclining-chair.	469,357	Feb. 23	2264	581	58	993
Meigs, James L., assignor to W. M. Lowney, Boston, Mass. Elevated-railway structure.	488,283	Dec. 20	1736	437	61	1700
Meigs, John W. (See Meigs, George W. and J. W.)						
Meigs, John W. (See Temple and Meigs.)						
Meikle, Thomas, Cleveland, Ohio. Heating-boiler.	475,459	May 24	2509	639 640	59	1165
Meinberg, Alfred. (See Lee, Charles E., assignor.)						
Meinel, Ottomar, New York, N. Y. Harmonica.	483,160	Sept. 27	2017	510	60	1770
Meinhard, Henry, Chicago, Ill. Bottle-filling device.	485,803	Nov. 8	980	263	61	790
Meinicke, Carl A. E., Clausthal, Germany. Feeding device for ore-washing machines.	482,582	Sept. 13	1106	268	60	1565
Meinicke, Carl A. E., Clausthal, Germany. Ore-separator.	485,962	Nov. 8	1238	327	61	842
Meiring, Bernard. (See Hill and Meiring.)						
Meisel, Francis, Boston, Mass. Sheet-delivery apparatus for printing-machines.	478,347	July 5	452	111	60	90
Meiser, Rudolph J. (See Mayer, Anton, assignor.)						
Meissner, William E., Rockaway, N. Y. Roundabout.	473,177	Apr. 19	1827	460	59	370
Meissner, William O., Chicago, Ill. Electric-arc lamp.	486,488	Nov. 22	2080	551	61	1042
Meister, Christian A., Allentown, Pa. Rubber-dam clamp.	485,963	Nov. 8	1240	327	61	843
Meister, Erwin J., New York, N. Y. Apparatus for piston propulsion.	472,380	Apr. 5	587	150	59	110
Meixner, Franz, Hernal, near Vienna, Austria-Hungary. Manufacture of gun-barrels.	477,763	June 28	2461	615	59	1968
Melcher, Charles L. (See Huebner, George, assignor.)						
Melchior, Alfred, Sydney, New South Wales. Sheep-shearing machine.	478,286	July 5	357	87	60	72
Melick, George F., Metuchen, N. J., assignor to Edison General Electric Company, New York, N. Y. Incandescent electric lamp.	480,954	Aug. 16	1920	480	60	979
Melius, Jacob A., Lansing, Mich. Sporting-trap.	488,827	Dec. 27	2505	644	61	1887
Melius, Walter, Albany, N. Y. Brush.	485,816	Nov. 8	995	267	61	793
Melius, Walter, Albany, assignor to Empire Portable Forge Company, Lansingburg, N. Y. Brush.	485,642	Nov. 8	744	196	61	741
Mellen, Arnold A., assignor to H. Bederman, Canton, Ohio. Building-block.	485,289	Nov. 1	202	57	61	614
Mellen, Daniel W., et al. (See Cross, Jerome L., assignor.)						
Mellen, Edwin D., Cambridge, Mass. Machine for wrapping soap.	467,040	Jan. 12	1187	300 301	58	233
Mellor, Edwin. (See Ratcliffe, Hilton, and Mellor.)						
Mellor, George, Newcastle-upon-Tyne, England. Ear appliance or instrument for use of teachers of music, &c.	486,725	Nov. 22	2452	639	61	1115
Mellor, Henry N. (See Marchetti and Mellor.)						
Mellor, James M. (See Mellor, John R. and J. M.)						
Mellor, John R. and J. M., Clifton Heights, Pa. Wool-drier.	470,582	Mar. 8	1475	384	58	1391
Mellott, Benjamin F., assignor of one-half to M. Lee, Springfield, Mo. Ironing-table.	467,944	Feb. 2	62	14	58	537
Melms, Gustav J. (See Brown and Melms.)						
Meloney, George R., and J. T. Criswell, Philadelphia, Pa. Butter-box.	481,801	Aug. 30	3342	818	60	1279
Melotte, George W., Ithaca, N. Y. Blowpipe-pad.	480,024	Aug. 2	430	109	60	663
Melotte, George W., Ithaca, N. Y. Dental moistening-pad.	480,471	Aug. 9	1167	294	60	815
Melotte, George W., Ithaca, N. Y. Steam rubber-heater.	480,472	Aug. 9	1168	294	60	815
Melotte, George W., and C. M. Clinton, Ithaca, N. Y.; said Clinton assignor to said Melotte. Bench-block for dentists, jewelers, and others.	482,453	Sept. 13	896	217	60	1523
Melrose, Marshall H., Plano, Ill. Harvester.	482,968	Sept. 20	1711	432	60	1696
Melvin, George W., Deptford, England. Fire-escape and scaling-ladder.	482,441	Sept. 13	878	210 211	60	1519
Meminger, Herman. (See Hirsch, Robert, assignor.)						
Meminger, Herman. (See Hirsch and Meminger.)						
Mende, Carl F. (See Snow, Henry E., assignor.) (Reissue.)						
Mendel, Alfred, Strehlen, near Dresden, Germany. Harness.	477,378	June 21	1834	450	59	1826
Mendelson, David, Eureka, Utah Ter. Watchmakers' pliers.	474,257	May 3	571	140	59	749
Mendelson, David, Eureka, Utah Ter. Jeweler's forceps.	476,754	June 7	790	194	59	1595
Mendelson, David, New York, N. Y. Pendant set screw-driver.	485,420	Nov. 1	420	112	61	658
Mendelson, David, New York, N. Y. Ear-wire-forming device.	485,964	Nov. 8	1241	328	61	843
Mendelson, David, New York, N. Y. Window-washer.	486,726	Nov. 22	2453	640	61	1116

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volum.		Official Gazette.	
			Spec.	Dr'gt	Vol.	Page.
Mendenhall, Allen, Earlham, Iowa. Mechanism for operating washing-machines, &c.....	474,915	May 17	1617	420	59	982
Mendenhall, Hiram. (See Ping and Mendenhall.)						
Mendenhall, Hiram, and J. M. Hite, Audubon, Iowa. Post-hole auger.....	468,812	Feb. 16	1411	353	58	820
Mendenhall, James E., Springfield, Ohio, assignor of one-half to C. E. Funk, Chicago, Ill. Apparatus for carbureting air.....	483,003	Sept. 20	1766	446	60	1707
Mendenhall, Walter S., Covington, Ky., assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Inkstand.....	487,630	Dec. 6	632	162	61	1447
Mendenhall, Walter S., Covington, Ky., assignor to Samuel C. Tatum Company, Cincinnati, Ohio. Roll-paper cutter.....	488,129	Dec. 13	1474	372	61	1633
Menecely, Charles D., Albany, N. Y. Making tubular rollers.....	473,943	May 3	85	22	59	655
Menefee, James F., Warrensburg, Mo. Display-rack.....	467,628	Jan. 26	2152	547	58	432
Menegay, Armand. (See Menegay, Jules and A.)						
Menegay, Jules and A., Brooklyn, N. Y. Watchcase-spring.....	479,292	July 19	1886	472	60	395
Menge, Joseph, New Orleans, La. Rotary pump.....	471,486	Mar. 22	2853	726	58	1679
Menge, Joseph, New Orleans, La. Rotary pump.....	480,473	Aug. 9	1169	294	60	815
Menge, Joseph, New Orleans, La. Grain-separator.....	481,366	Aug. 23	2618	644	60	1122
Mengel, Joseph A., McKeanburg, Pa. Washing-machine.....	483,723	Oct. 4	295	74	61	62
Mengeringhausen, William H. von, Chester, Pa. Valve-gear.....	480,474	Aug. 9	1171	295	60	816
Menke, Jacob, Antwerp, Belgium. Bottle-stopper fastener.....	471,013	Mar. 15	2136	548	58	1529
Menting, Albert. (See Jolitz, Charles F., assignor.)						
Mentley, William F., Defiance, Ohio. Road-scraper.....	486,566	Nov. 22	2194	578	61	1063
Mentzel, Daniel E., Spangle, Wash. Brake attachment for the steer-wheels of headers.....	477,136	June 14	1417	345	59	1733
Mentzel, Henry D., Baltimore, Md. Mechanical movement. (Reissue).....	11,271	Sept. 13	1307	319 320	60	1605
Mény, Felix, Elizabeth, N. J. Mechanical movement.....	481,409	Aug. 23	2694	661 662	60	1136
Menze, Charles T., assignor of one-half to H. Gerlitz, St. Louis, Mo. Measuring-receptacle.....	479,151	July 19	1673	418	60	353
Menzemer, Stephen A., Santa Clara, Cal. Drier.....	480,112	Aug. 2	557	140	60	688
Menzies, John. (See Morgan and Monzies.)						
Menzies, John, and R. Morgan, New Haven, Conn. Water-closet cistern.....	485,469	Nov. 1	492	130	61	672
Mercader, Camille, Braddock, Pa. Ladle-nozzle.....	481,041	Aug. 16	2055	513	60	1005
Mercader, Camille, Braddock, Pa. Pipe connection for hydraulic mechanisms.....	486,363	Nov. 15	1915	507	61	996
Mercader, Camille, Braddock, Pa. Crane-turning mechanism.....	487,954	Dec. 13	1176	293	61	1571
Mercer, Alfonso, Norfolk, Va. Magazine-gun.....	477,764	June 28	2462	615 616	59	1968
Mercer, Alfonso, Norfolk, Va. Rapid-fire breech mechanism.....	487,631	Dec. 6	633	163	61	1447
Mercer, Andrew, Brooklyn, N. Y. Sectional steam-boiler.....	467,704	Jan. 26	2278	578	58	456
Mercer, Andrew H. (See Parkinson and Mercer.)						
Mercer Bros. & Co. (See Reaman, Abram G., assignor.)						
Merchant, Clarke. (See Montross, Levi H., assignor.)						
Merchant & Co. (See Montross, Levi H., assignor.)						
Merchant, Francis W., London, Canada. Automatic cut-off for gas-burners.....	488,082	Dec. 13	1404	349	61	1619
Merchant, William T. (See Shute, James L., assignor.)						
Mercedith, James P., et al. (See Devlin, James C., assignor.)						
Mercedith, Sidney B., Oneida, N. Y. Bill-file.....	479,604	July 26	2413	602	60	511
Meriden Bronze Company. (See Jones, Augustus H., assignor.)						
Meriden Curtain Fixture Company. (See Perkins, Jndson C., assignor.)						
Meriden Curtain Fixture Company. (See Perkins and Leigh, assignors.)						
Méritens, Augusto de, Paris, France, assignor, by mesne assignments, to Thomson Electric Welding Company, Boston, Mass. Electrically welding metals.....	471,242	Mar. 22	2487	631	58	1608
Merk, George W., San Francisco, Cal. Cooking utensil.....	471,058	Mar. 15	2194	565	58	1541
Merkel, Frederick E., assignor to Merkel & Gransam, New York, N. Y. Picture-exhibitor.....	477,259	June 21	1644	401	59	1790
Merkel & Gransam. (See Merkel, Frederick E., assignor.)						
Merkel, Louis C., assignor of one-half to A. A. and F. C. Mersman, St. Louis, Mo. Up-right piano action.....	473,944	May 3	96	22	59	655
Merkins, Jacob S., assignor of one-third to E. C. Dye, Highlands, Colo. Trolley-switch.....	481,503	Aug. 23	2845	699	60	1167
Merkle, Richard, et al. (See Heidel, Gustavos, assignor.)						
Merkleim, Ludwig. (See Krämer, Franz, assignor.)						
Meron, Alexander, St. Paul, Minn. Combined kitchen-cabinet and ironing-board.....	479,893	Aug. 2	181	44	60	617
Merrell, Erskine R. (See Forsyth and Merrell.)						
Merrell, Gaius L., Syracuse, N. Y. Mince-meat machine.....	470,692	Mar. 15	1636	424 425	58	1432
Merrell, Gaius L., Syracuse, N. Y. Can-filling machine.....	472,583	Apr. 12	888	228 229	59	183
Merrell, Gaius L., assignor to himself, O. F. and F. C. Soule, Syracuse, N. Y. Apparatus for canning corn.....	473,825	Apr. 26	2987	754 755	59	617
Merriam, Henry P., New York, N. Y. Percussion-fuse.....	469,886	Mar. 1	352	90	58	1169
Merriam, Henry P., New York, N. Y. Percussion-fuse.....	469,887	Mar. 1	355	90	58	1169
Merriam, Henry P., New York, N. Y. Fuse.....	475,786	May 31	3019	765 766	59	1276
Merrick, Clinton, Forest City, Iowa. Cleaner for disk harrows.....	467,862	Jan. 26	2532	642	58	504
Merrick, Frank M., Attica, Ind. Shaft attachment for vehicles.....	483,568	Oct. 4	78	19	61	18
Merrick Sewing Machine Company. (See Woodward, Erastus, assignor.)						
Merrick, Timothy, et al. (See Landfeair, William R., assignor.)						
Merridith, Samuel H., West Liberty, Iowa. Tilting gate.....	475,132	May 17	1996	505	59	1049
Merriell, George H. (See Broer and Merriell.)						
Merriell, George H., et al. (See Franklin, Benjamin, assignor.)						
Merriell, Henry J. (See Broer and Merriell.)						
Merriell Brothers. (See Bass, James, assignor.)						
Merrill, Curtis W., Malden, Mass. Vaporizer.....	472,133	Apr. 5	196	52	59	36
Merrill, Edwin C., Allegheny, Pa. Thermostatic regulator.....	471,182	Mar. 22	2397	611	58	1591
Merrill, Edwin C., Allegheny, Pa. Thermostatic regulator.....	486,727	Nov. 22	2455	640 641	61	1116
Merrill, Freeman C., South Paris, Me. Harrow.....	471,719	Mar. 29	3195	814	58	1750
Merrill, George H., Naugatuck, Conn. Button and pin clasp.....	474,025	May 3	223	54	59	681
Merrill, Harvie M., Marshall, Mich. Platform-balance.....	483,937	Oct. 4	616	156	61	127
Merrill, Henry D., Middlebury, Ind. Flood-fence.....	486,349	Nov. 15	1868	492	61	985
Merrill, Hollis W., Lynn, assignor to American Shoe Tip Company, Boston, Mass. Sole.....	481,909	Aug. 30	3523	862	60	1314
Merrill, Jabez H., Salem, Mass. Lasting-machine.....	488,442	Dec. 20	1991	497 498	61	1750
Merrill, John N., assignor of one-half to S. E. Nixon, Burlington, Iowa. Smoke-consumer.....	469,212	Feb. 16	2043	522	58	942
Merrill, Parker, St. Louis, Mo. Cattle-guard.....	472,897	Apr. 12	1345	345	59	269
Merrill, Parker, St. Louis, assignor of one-half to W. S. Wood, Kalamazoo, Mich. Wheel for vehicles.....	469,708	Mar. 1	55	17	58	1109

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Merrill, Rufus S., assignor of one-half to A. A. Reeve, Boston, Mass. Heating attachment for Argand lamps, &c.	469,161	Feb. 16	1948	498	58	926
Merrill, S. O., <i>et al.</i> (See Wood, William T., assignor.)						
Merrill, Samuel I., Los Angeles, Cal. Faucet.	473,325	Apr. 19	2064	519	59	419
Merrill, William, East Saginaw, Mich. Wood-cutting machine.	475,881	May 31	3201	809	59	1312
Merriman, Alanson H., Meriden, Conn. Clutch mechanism for power-presses.	468,506	Feb. 9	940	239	58	716
Merriman, Charles D., and F. W. Tilden, Hinsdale, N. H. Book-holder.	480,410	Aug. 9	1062	266	60	795
Merriman, Hugh P., Morris, N. Y. Lantern.	480,931	Aug. 16	1878	468	60	971
Merritt, Amos C., Allentown, N. Y. Car-coupling.	487,756	Dec. 13	854	217	61	1508
Merritt, Cassius C. (See Wolfe, John B., assignor.)						
Merritt, Charles H. (See Barnum, William H., assignor.)						
Merritt, Daniel F. (See Graves and Merritt.)						
Merritt, Edward B., Chicago, Ill. Garbage-receptacle.	468,046	Feb. 2	212	52	58	566
Merritt, Edward B., Chicago, Ill. Garbage-receptacle.	478,702	July 12	963	239	60	207
Merritt, George, San Francisco, Cal. Electric train-signal.	481,042	Aug. 16	2056	513	60	1006
Merritt, Grant, Frankfort, Ind. Fence.	474,455	May 10	930	239	59	826
Merritt, Mortimer G., Springfield, Mass., assignor to Yost Writing Machine Company, New York, N. Y. Die for making type.	470,432	Mar. 8	1264	324	58	1349
Merritt, Thomas J., St. Louis, Mo. Photograph-gallery wagon.	467,423	Jan. 19	1807	461 462	58	360
Merritt, William H. (See Chapman, George T., assignor.)						
Merrrow, Joseph M., Merrow, Conn. Finish or border for the edges of fabrics.	480,335	Aug. 9	943	239	60	773
Merry, George G., Boston, assignor to I. E. Williams, Woburn, Mass., and J. C. Dickinson, Brooklyn, N. Y. Coin-operated weighing-scale.	483,787	Oct. 4	401	100	61	84
Merry, Henry G., Low Moor, assignor of one-half to G. B. Gaines, Richmond Va. Picking-table for ore-washers.	468,251	Feb. 2	516	128	58	626
Mersereau, Edgar W., assignor to Mersereau Manufacturing Company, Brooklyn, N. Y. Sheet-metal box.	470,859	Mar. 15	1902	487	58	1484
Mersereau Manufacturing Company. (See Adriance, Benjamin, assignor.)						
Mersereau Manufacturing Company. (See Mersereau, Edgar W., assignor.)						
Mersman, Arthur A., <i>et al.</i> (See Merkel, Louis C., assignor.)						
Mersman, Frederick C., <i>et al.</i> (See Merkel, Louis C., assignor.)						
Mertz, Christian F. (See Schorpp, George and L., assignors.)						
Mertz, Emile, Basle, Switzerland. Apparatus for moistening air.	470,693	Mar. 15	1640	425 426	58	1433
Mervin, Edward P., and J. D. Stirckler, Boston, Mass., assignors to Imperial Manufacturing Company, Portland, Me. Button-setting machine.	487,678	Dec. 6	712	182 183	61	1462
Mesa, José R., St. Catalina, Correl Falso, Macuriges, Cuba. Bagging-machine.	467,377	Jan. 19	1742	445	58	347
Mesick, William H., Long Island City, N. Y. Stench-trap.	474,342	May 3	737	192	59	779
Mesick, William H., Long Island City, N. Y. Sink and rack.	477,137	June 14	1417	345	59	1733
Mesker & Bro. (See Brunkhorst, Wieden, and Richards, assignors.)						
Mesker & Bro. (See Mesker, Frank, assignor.)						
Mesker & Bro. (See Mesker and Arbegust, assignors.)						
Mesker & Bro. (See Richards, Charles T., assignor.)						
Mesker, Frank, assignor to Mesker & Bro., St. Louis, Mo. Shutter-fastener.	488,478	Dec. 20	2052	510	61	1764
Mesker, Frank, and T. O. Arbegust, assignors to Mesker & Bro., St. Louis, Mo. Window-frame.	480,908	Aug. 16	1846	459	60	965
Mesker, Frank, and T. O. Arbegust, assignors to Mesker & Bro., St. Louis, Mo. Building-front.	481,115	Aug. 16	2185	541	60	1029
Messer, George E., Concord, Mass. Stop for throttle-valve levers.	484,938	Oct. 25	2233	575	61	489
Messenger, Ralph, Unadilla, N. Y. Milk-tester.	472,382	Apr. 5	591	150	59	111
Messick, George A., Wilmington, Del. Diffusion-battery.	475,587	May 24	2708	687	59	1204
Messina, John A., assignor of one-half to W. H. Williams, "T," Key West, Fla. Blind-stop.	474,258	May 3	572	140	59	749
Messing, John J., St. Louis, Mo. Reversing attachment for screw-cutting lathes.	482,261	Sept. 6	556	132	60	1443
Messmer, Alexander L. H., assignor to Heywood Brothers & Co., Gardner, Mass. Vehicle-wheel tire.	469,029	Feb. 16	1776	453	58	891
Messner, Jacob, Calumet, Mich. Car for use upon inclined railways.	467,945	Feb. 2	63	15	58	537
Messner, Jacob, Calumet, Mich. Safety attachment for elevators.	483,569	Oct. 4	79	20	61	18
Mesta, George, Pittsburg, Pa. Apparatus for pickling and washing metal plates, &c.	484,664	Oct. 18	1769	450	61	383
Mestayer, Albert, Loreauville, La. Harrow.	476,020	May 31	3403	859	59	1352
Mestern, Hugo, assignor to A. Stolzenberg, Mannheim, Germany. Spray-producer.	470,583	Mar. 8	1476	384	58	1391
Meston, Alexander W. (See Meston, Charles R. and A. W.)						
Meston, Charles R. and A. W., assignors to Emerson Electric Manufacturing Company, St. Louis, Mo. Electric cut-out and safety device.	470,204	Mar. 8	862	213	58	1275
Metal Base Electrotpe Company. (See Wolfe, Jacob C., assignor.)						
Metal Goods Manufacturing Company. (See Field, Albert D., assignor.)						
Metal, Max., New York, N. Y. Window-chair.	472,898	Apr. 12	1346	345	59	269
Metcalf, Arthur H., Pawtucket, R. I., and C. S. Gooding, Brookline, Mass., assignors to Campbell Machine Company, Pawtucket, R. I. Sewing-machine.	469,374	Feb. 23	2234	589 590	58	1000
Metcalf, Charles A. (See Tyson, Bryan, assignor.)						
Metcalf, Charles W., Santa Paula, Cal. Centrifugal honey-extractor.	471,487	Mar. 22	2854	726	58	1679
Metcalf, Charles W., Santa Paula, Cal. Centrifugal honey-extractor.	486,728	Nov. 22	2456	641	61	1116
Metcalf, Henry H. (See Lawrence, Harry W., assignor.)						
Metcalf, Ralph M., Luton, assignor of one-half to G. E. Adams, Holly Springs, Iowa. Alarm-lock.	480,237	Aug. 2	771	194	60	728
Metcalfe, Wooster B., and P. A. Ziegler, Hanover, Pa. Cash-recorder.	474,672	May 10	1271	324	59	892
Metesser, Lewis, New Orleans, La. Furnace.	483,570	Oct. 4	81	20	61	19
Metheany, Richard R., Grand Rapids, Mich. Railway-ticket.	471,876	Mar. 29	3441	878	58	1797
Methven, David T., Springfield, Mass. Spectacles.	470,006	Mar. 1	544	135	58	1204
Mets, John D., Dubuque, Iowa. Blank-book cover.	467,821	Jan. 26	2461	625	58	491
Mets, John D., Dubuque, Iowa. Guard for blank or other books.	487,191	Nov. 29	3242	829	61	1288
Mettler, Frank W. (See Mettler, James I., assignor.)						
Mettler, James I., Creston, Ill., assignor of one-half to F. W. Mettler, Helena, Mont. Hand-plow.	488,397	Dec. 20	1919	480	61	1736
Metz, Charles H., Highlandville, Mass. Bicycle-wheel.	478,064	June 28	2937	733 734	59	2058
Metz, George E., <i>et al.</i> (See Cudner, Gustavis L., assignor.)						
Metz, Henry, Philadelphia, Pa. Combined newspaper-holder and door-plate.	475,460	May 24	2512	640	59	1165
Metz, Rudolph, Philadelphia, Pa. Oil-purifier.	473,326	Apr. 19	2065	520	59	419
Metz, Rudolph, Philadelphia, Pa. Oil purifier and reservoir.	482,583	Sept. 13	1108	268	60	1565
Metzger, Amandus, New York, N. Y. Electric switch.	471,271	Mar. 22	2532	643	58	1617
Metzger, Edward, Pittsburg, assignor of one-half to J. Peters, Latrobe, Pa. Machine for making tubes from paper-pulp.	488,149	Dec. 13	1501	377	61	1638

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Metzger, Jules P., assignor to Leslie Brothers Manufacturing Company, Paterson, N. J. Slide-valve.....	488,525	Dec. 20	2133	528	61	1778
Metzner, William C., and G. E. Buschick, Chicago, Ill. Cable railway.....	468,813	Feb. 16	1412	{ 358 359 }	58	820
Meyberg, Maude, New York, N. Y. Facial hygienic steaming apparatus.....	472,134	Apr. 5	196	52, 53	59	36
Meyer, August, assignor of two-thirds to D. H. Miller, Jr., and M. S. Hess, Baltimore, Md. Shoe-fastener.....	470,584	Mar. 8	1477	384	58	1392
Meyer, August, assignor to D. H. Miller, Jr., and M. S. Hess, Baltimore, Md. Shoe-lace fastener.....	488,268	Dec. 20	1711	430	61	1696
Moyer, Ernest A. E., et al. (See Henry, Archie J., assignor.).....	473,195	Apr. 19	1857	468	59	376
Meyer, George, assignor to F. L. McGahan, Indianapolis, Ind. Commutator-brush.....	470,135	Mar. 1	733	182	58	1242
Meyer, Gottfried, Horgen, Switzerland. Station-indicator.....	473,585	Apr. 26	2523	{ 636 637 638 639 }	59	529
Meyer, Gottfried, Schaffhausen, Switzerland. Carding-machine.....	484,538	Oct. 18	1565	398	61	341
Meyer, Gustav, Prague, Austria-Hungary. Interest-calculating apparatus.....	481,670	Aug. 30	3111	759	60	1234
Meyer, Henry, assignor of three-fourths to H. Riedel, H. Grosser, and C. Neynaber, Galveston, Tex. Combined record, diary, and ledger.....	474,673	May 10	1274	325	59	893
Meyer, Isaac, et al. (See Little, Robert H., assignor.).....	476,889	June 14	1021	{ 247 248 }	59	1053
Meyer, Joseph, Jersey City, N. J. Electric heat-alarm.....	483,258	Sept. 27	2202	553	60	1804
Meyer, Julius, New York, N. Y., and C. Binder, Chicago, Ill., assignors to Edison General Electric Company, New York, N. Y. Pole for electric wires.....	478,880	July 12	1239	307	60	261
Meyer, Julius W., assignor of one-half to R. B. Mason, Baltimore, Md. Packing-jar.....	476,402	June 7	278	65	59	1492
Meyer, Leopold, Ahnapee, Wis. Cheese-vat.....	467,308	Jan. 19	1638	58	392	
Meyer, Lucy R., Chicago, Ill. Syringe and syringe-box.....	473,767	Apr. 26	2795	59	580	
Meyer, Ludwig, Stuttgart, Germany. Producing ferments.....	475,787	May 31	3024	766	59	1277
Meyer, Ludwig, Berlin, Germany. Improving oil-paintings by photography.....	480,603	Aug. 9	1367	339	60	854
Meyer, Peter, Metamora, Ill. Display-rack.....	481,504	Aug. 23	2847	699	60	1167
Meyer, Reinhold, Wildburgstetion, Germany. Tile-stove.....	466,698	Jan. 5	607	157	58	117
Meyer-Sniffen Company. (See Bunting, William, Jr., assignor.).....	484,720	Oct. 18	1845	449	61	397
Meyer-Sniffen Company. (See Tabele, Joseph H., assignor.).....	470,205	Mar. 8	864	214	58	1276
Meyer, William C. (See French and Meyer.).....	469,437	Feb. 23	2384	612	58	1017
Meyère, Arthur, Nashville, Tenn. Shirt.....	477,951	June 28	2761	692	59	2026
Meyerfeld, Jesse. (See Kiehl, Hermann, assignor.).....	467,181	Jan. 19	1445	{ 368 369 }	58	291
Meyerhoefer, Tobias, et al. (See Farrington, Joel, assignor.).....	472,267	Apr. 5	409	59	76	
Meyers, Ernest, Taunton, Mass. Perspective-drawing apparatus.....	470,694	Mar. 15	1643	{ 426 427 }	58	1434
Meyers, Frederick, Brooklyn, N. Y., and M. Stoveken, Hoboken, N. J. Hook and eye.....	484,217	Oct. 11	1046	265	61	227
Meyers, John C., Dublin, Ireland. Pumping and measuring apparatus.....	482,094	Sept. 6	279	68	60	1390
Meyers, John J. (See Burnham and Meyers.).....	483,464	Sept. 27	2483	626	60	1859
Meyrowitz, Emil B., Ridgefield, N. J. Eyeglasses.....	484,665	Oct. 18	1773	451	61	383
Mezger, Charles A., Brooklyn, N. Y. Composite electric conductor.....	487,879	Dec. 13	1060	265	61	1548
Michael, John B., Knoxville, Tenn. Throttle-valve.....	474,177	May 3	451	109	59	725
Michaëlis, Ernst, and C. Henning, Cottbus, Prussia, Germany. Dyeing.....	481,043	Aug. 16	2058	513	60	1006
Michaelsen, Cornelius, Lübeck, Germany. Register.....	475,588	May 24	2709	{ 687 688 }	59	1204
Michel, Philip, Stapleton, N. Y. Window-shade.....	481,410	Aug. 23	2696	662	60	1137
Michel, Pierre, Jr., et al. (See Campbell, James A., assignor.).....	480,505	Aug. 9	1217	304	60	825
Michelson, Max J., assignor of one-half to J. Harris, Chicago, Ill. Trunk.....	482,061	Sept. 6	225	54	60	1379
Michener, James B., Kokomo, Ind. Gas-stove.....	484,939	Oct. 25	2234	576	61	490
Michigan Elevator and Engine Company. (See Hultgren, William H., assignor.).....	470,068	Mar. 1	636	158	58	1222
Michigan Fire Ladder and Engine Company. (See Brayton, Richard, assignor.).....	483,938	Oct. 4	617	156	61	127
Michigan Lubricator Company. (See Marvin and Essex, assignors.).....	470,499	Mar. 8	1364	355	58	1368
Michigan Sand Brick Company. (See Lewis, Eugene H., assignor.).....	474,995	May 17	1787	452	59	1008
Michl, Franz, New York, N. Y. Cigar-lighter.....	485,393	Nov. 1	380	102	61	650
Miciangi, Emerick. (See Green, John, assignor.).....	484,208	Oct. 11	1049	265	61	227
Mickey, David W., White City, Kans. Check-hook.....	472,711	Apr. 12	1086	278	59	212
Middlebrooke, Hobart C., Rock Rapids, Iowa. Tail-piece for banjos or violins.....	487,932	Dec. 13	1145	286	61	1564
Middlekauff, E. D. (See Graves, James W., assignor.).....	469,709	Mar. 1	58	17	58	1110
Middlekauff, Ellsworth D., Stockton, Cal. Riveting-machine.....	478,703	July 12	965	239	60	207
Middlekauff, Ellsworth D., Stockton, assignor of one-half to J. M. McKiernan, Portersville, Cal. Pump.....	485,965	Nov. 8	1242	328	61	843
Middleton, Robert, Leeds, England. Hydraulic apparatus for moving loads.....	475,882	May 31	3203	810	59	1312
Mider, Jacob T., Wathena, Kans. Harvester.....	471,131	Mar. 22	2316	594	58	1577
Midgley, Joseph E., and D. D. Case, Detroit, Mich. Nasal respirator.....	484,218	Oct. 11	1049	265	61	227
Midgley, Thomas. (See Emerson and Midgley.).....	472,711	Apr. 12	1086	278	59	212
Midgley, Thomas, Beaver Falls, Pa. Wire mat.....	487,932	Dec. 13	1145	286	61	1564
Midland Chemical Company. (See Dow, Herbert H., assignor.) (Reissue.).....	469,709	Mar. 1	58	17	58	1110
Midland Manufacturing Company. (See Livengood, Winfield S., assignor.).....	478,703	July 12	965	239	60	207
Midland Manufacturing Company. (See McMillan, Duncan, assignor.).....	485,965	Nov. 8	1242	328	61	843
Miggett, William, Philadelphia, Pa. Car-coupling.....	475,882	May 31	3203	810	59	1312
Mikesell, Azariah H., assignor to G. H. Gilmour and J. D. Walker, Salt Lake City, Utah Ter. Carpet-stretcher.....	470,068	Mar. 1	636	158	58	1222
Miland, Theodor J., White, S. D. Draft-equalizer.....	483,938	Oct. 4	617	156	61	127
Milbourn, Zenas E. (See Pearson, Paul, assignor.).....	470,499	Mar. 8	1364	355	58	1368
Milbradt, Gustave A., St. Paul, Minn. Rolling shelf-ladder.....	474,995	May 17	1787	452	59	1008
Milburn, Charles F., G. E. Byrkit, Toledo, and J. C. Crabbs, Auhurndale, Ohio. Lathe for turning wagon-axles.....	485,393	Nov. 1	380	102	61	650
Milburn, Gustave D., assignor to Photo Materials Company, Rochester, N. Y. Film-holder for cameras.....	485,393	Nov. 1	380	102	61	650
Milburn, Thomas. (See Wohlfarth, Charles F., assignor.).....	482,409	Sept. 13	822	197	60	1510
Milbrum, Ernest W., Berlin, assignor of one-half to W. H. Honiss, Hartford, Conn. Pen- oil-clasp.....	484,218	Oct. 11	1049	265	61	227
Miles, Arthur W., and E. A. Commander, Livingston, Mont. Wrench.....	472,711	Apr. 12	1086	278	59	212
Miles, Elbridge G., San Francisco, Cal. Shoe.....	487,932	Dec. 13	1145	286	61	1564
Miles, George B., Washington, D. C. Type-case stand.....	469,709	Mar. 1	58	17	58	1110
Miles, George D., Big Rapids, assignor to E. C. Fox, Grand Rapids, Mich. Adjustable dust-pan.....	478,703	July 12	965	239	60	207
Miles, Georgiana F., New York, N. Y. Syringe.....	485,965	Nov. 8	1242	328	61	843
Miles, Melvin T., Le Mars, Iowa. Car-coupling.....	475,882	May 31	3203	810	59	1312
Miles, Nancy E., Indianapolis, Ind. Corset.....	471,131	Mar. 22	2316	594	58	1577
Miles, Rebecca E., Porterville, Cal. Churn.....						

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Miles, Robert P. (See Ravenel and Miles.)						
Miles, Samuel J., assignor to F. Siegel, Chicago, Ill. Furnace	468,814	Feb. 16	1416	359	58	820
Miles, Samuel T. Jr., Britton, S. D. Horseshoe's tool	468,547	Feb. 9	1006	237	58	730
Miles, Willard W. (See Hopkins, Hiland E., assignor.)						
Miles, William J., Jr., Terre Haute, Ind. Alloy	467,329	Jan. 19	1669		58	334
Miley, William H., Fall River, Mass. Let-off for looms	475,590	May 24	2714	688	59	1205
Milliser & Co., M. (See Cussen, William J., assignor.)						
Milks, Elbert D., Machias, N. Y. Device for supporting wall-paper	482,645	Sept. 13	1194	289	60	1581
Milks, Harvey R., Napoli, N. Y. Sap-spout and bucket-cover	469,791	Mar. 1	200	52	58	1140
Millard, Herbert B., assignor to Hartford Sanitary Manufacturing Company, Hartford, Conn. Cuspidor	473,634	Apr. 26	2602	655	59	543
Millard, John W. (See Sapp, Samuel M., assignor.)						
Millard, Martin S., Kansas City, Mo. Refrigerator-car	466,794	Jan. 12	786	204	58	159
Millard, Martin S., Kansas City, Mo. Refrigerator	475,591	May 24	2715	659	59	1205
Millard, Martin S., Kansas City, Mo. Refrigerator	475,592	May 24	2717	389	59	1205
Millard, Martin S., Kansas City, Mo. Construction of walls	475,593	May 24	2719	689	59	1206
Millard, Norman L. (See Sleeper, George W., assignor.)						
Millard, Sarah A., et al. (See Watson, Nelson M., assignor.)						
Millay, Harvey L. (See Hayes and Millay.)						
Mille, Anguste, Paris, France. Trombone	468,025	Feb. 2	183	45	58	560
Miller, A. W. (See Calver, Washington I., assignor.)						
Miller, Aaron, Midland, Mich. Hay-rack for farm-wagons	487,333	Dec. 6	155	41	61	1351
Miller, Albert G. (See Brown and Smith, assignors.)						
Miller, Alexander, New York, N. Y., assignor to Brown & Miller, Jersey City, N. J. Evap- orating apparatus	466,570	Jan. 5	419	{ 107 108 }	58	81
Miller, Alexander, New York, N. Y., assignor to Brown & Miller, Jersey City, N. J. Ele- vating apparatus	466,571	Jan. 5	421	108	58	81
Miller, Allen T., assignor to G. F. W. N., and H. B. Kuhns, Dayton, Ohio. Valve	476,668	June 7	662	161	59	1568
Miller, Amanuel M., Fairfield, Tex. Sweep-plow	475,461	May 24	2513	640	59	1166
Miller, Amanuel M., Fairfield, Tex. Trace-carrier	478,704	July 12	966	240	60	208
Miller, Andrew C., and G. F. Wells, Auburn, N. Y. Dental engine	471,877	Mar. 29	3442	878	53	1798
Miller, Andrew G., Estill Springs, Tenn. Cockle-separator	488,443	Dec. 20	1994	{ 498 499 }	61	1751
Miller, Annie J., New York, N. Y. Combined button and lacing book	481,767	Aug. 30	3200	801	60	1269
Miller, Anton, La Crosse, Wis. Lunch-bucket	469,182	Feb. 16	1949	499	58	926
Miller, Arnold, Medford, Wis. Car-truck	477,765	June 28	2465	616	59	1969
Miller, Arnold, Medford, Wis. Car-truck	477,766	June 28	2467	{ 616 617 }	59	1969
Miller, Arnold, Medford, Wis. Car-truck	477,767	June 28	2468	617	59	1969
Miller, Arnold, Medford, Wis. Axle-box	477,768	June 28	2470	617	59	1970
Miller, Augustus M., et al. (See Zimmermann, Peter, Jr., assignor.)						
Miller, Austin E., Sprague, Wash. Tricycle	471,770	Mar. 29	3272	836	58	1765
Miller, Charles, assignor to J. Richens, Auburn, N. Y. Machine for winding bandages	476,667	June 7	660	160	59	1563
Miller, Charles A., Brooklyn, N. Y. Registering measuring-faucet	475,945	May 31	3295	832	59	1330
Miller, Charles F., Lancaster, Pa. Refrigerating-machine	481,146	Aug. 16	2246	{ 553 554 }	60	1040
Miller, Charles G., Waterbury, Conn. Exercising-machine	481,730	Aug. 30	3219	785	60	1254
Miller, Charles H., Rockford, Ill. Watchmaker's tool	477,432	June 21	1913	471	59	1841
Miller, Charles J., assignor to Novelty Electric Company, Philadelphia, Pa. Electric- lamp shade	486,729	Nov. 22	2459	641	61	1117
Miller, Charles W., assignor of one-half to C. Royce, Clifton, Ariz. Ter. Label-holder	479,716	July 26	2607	648	60	546
Miller, Daniel K., Philadelphia, Pa. Rolling metals	467,512	Jan. 26	1968	500	58	398
Miller, David M., Fairfield, Cal. Car-axle	475,965	May 31	3328	839	59	1336
Miller, Decatur H., Jr., et al. (See Meyer, August, assignor.)						
Miller, Dora R., New Orleans, La. Rubber for blackboards	473,558	Apr. 26	2467	624	59	518
Miller, Edward C., East Orange, N. J. Alloy	467,149	Jan. 12	1379		58	271
Miller, Edward D., Chicago, Ill. Heel for boots or shoes	469,746	Mar. 1	124	32	58	1123
Miller, Edward G., et al. (See Lucas, Austin H., assignor.)						
Miller, Edward G., Wilkesburg, Pa. Lightning-arrester	472,135	Apr. 5	198	53	59	37
Miller, Edward I., assignor to Business Men's Manufacturing Company, Westfield, N. Y. Brush	484,107	Oct. 11	867	221	61	192
Miller, Edwin G. S. (See Hawkins, Edward S., assignor.)						
Miller, Elmer E., Canton, Ohio. Mechanism for propelling cars	477,260	June 21	1646	402	59	1790
Miller, Frank., assignor to J. B. Perkins, Cleveland, Ohio. Friction-clutch	468,626	Feb. 9	1123	226	58	752
Miller, Fred. (See Stone and Miller.)						
Miller, Frederic S., Mendota, Ill. Wheel	475,510	May 24	2592	659	59	1180
Miller, Fredrick C., Newport, Ky. Cigar-mold	476,666	June 7	660	160	59	1567
Miller, Fredrick C., Newport, Ky. Cigar-bunch machine	484,219	Oct. 11	1049	266	61	227
Miller, George A., Colfax, Wash. Well-boring and prospecting	476,757	June 7	793	195	59	1595
Miller, George A., Butler, Pa. Nut-lock	480,667	Aug. 9	1475	367	60	876
Miller, George E., Lynn, assignor to W. A. Macleod and B. Dickerman, Boston, Mass. Recording device for scales	472,642	Apr. 12	977	253	59	199
Miller, George S. (See Green, Henry, assignor.)						
Miller, George W. (See Patterson, George W., assignor.)						
Miller, George W., Woonsocket, R. I. Rotary cloth-press	463,815	Feb. 16	1417	360	58	821
Miller, George W., Kalamazoo, Mich. Surface cattle-guard	473,327	Apr. 19	2067	520	59	419
Miller, George W., Kalamazoo, Mich. Railway-velocipede	473,586	Apr. 26	2532	639	59	530
Miller, George W., Kalamazoo, Mich. Car-wheel	475,018	May 17	1823	462	59	1015
Miller, George W., Kalamazoo, Mich. Surface cattle-guard	480,733	Aug. 16	1581	395	60	911
Miller, George W., Lucas, Mich. Flooring or siding tongs	483,571	Oct. 4	82	21	61	19
Miller, George W., Bryan, Tex. Fan attachment for sewing-machines	485,554	Nov. 1	611	163	61	698
Miller, Guyon, Downingtown, Pa. Pulp-engine	482,184	Sept. 6	431	{ 103 104 }	60	1420
Miller, Horace E., Newark, N. J. Die for forming articles from plastic material	488,570	Dec. 27	2202	544	61	1809
Miller, Hugh. (See Findlay, James, assignor.)						
Miller, J. Walter. (See Iske, Anthony, assignor.)						
Miller, James M., Washington, D. C. Dredging-machine	479,375	July 19	2031	507	60	423
Miller, James P., Boston, Mass. Sofa-bed	482,262	Sept. 6	558	132	60	1443
Miller, James W., assignor to himself and L. L. Johnson, Stewartsdale, N. D. Corn-har- vester	470,069	Mar. 1	637	158	58	1223
Miller, John, Velpen, Ind. Wagon-brake	478,349	July 5	451	111	60	91
Miller, John A., St. Louis, Mo. Combined rigid and ratchet wrench	485,200	Nov. 1	203	58	61	614
Miller, John A., T. S. and H. G. Lester, Marine City, Mich. Nautical course-indicator	474,846	May 17	1549	396	59	961
Miller, John C., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Central-draft lamp	478,802	July 12	1138	220	60	241

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Miller, John C., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Wick-carrier.	483,850	Oct. 4	493	122	61	102
Miller, John C., assignor to Matthews & Willard Manufacturing Company, Waterbury, Conn. Central-draft-lamp burner.	487,955	Dec. 13	1177	294	61	1571
Miller, John E., Allegany, N. Y. Thill-coupling.	481,961	Sept. 6	59	14	60	1346
Miller, John G., Champaigne, Ill. Trace-supporter.	478,012	June 23	2858	715	59	2044
Miller, John G., and E. Yeiser, Newmantown, Pa. Cigar-bunch cutter.	473,077	Sept. 20	1877	475	60	1730
Miller, John H., Bridgeport, Conn. Spring-setting machine.	486,832	Nov. 22	2635	687	61	1153
Miller, John H., and J. H. Oswalt, Clayton, Ohio. Pump-motor.	482,800	Sept. 20	1447	359	60	1644
Miller, John J., Bartow, Fla. Weed-turner.	469,581	Feb. 23	2616	671	58	1061
Miller, John J., Pittsburg, Pa. Thimble for light-fixtures.	479,139	July 19	1656	413	60	350
Miller, John T., Chicago, Ill. Folding stand or trestle.	478,065	June 23	2939	734	59	2059
Miller, John W., Penfield, Pa. Crosscut-saw handle.	487,371	Dec. 6	219	60	61	1364
Miller, John W., Bellmore, Ind. Grate-shelf.	487,422	Dec. 6	317	81	61	1384
Miller, Joseph M., Chicago, Ill. Fire-extinguisher.	483,632	Oct. 4	170	43	61	36
Miller, Joseph M., Chicago, Ill. Fire-bucket.	488,321	Dec. 20	1795	451	61	1711
Miller-Knoblock Wagon Company. (See Miller, William H., assignor.)						
Miller, Lawrence B., Enterprise, assignor of one-half to T. M. Jones, Abilene, Kans. Draft-equalizer.	475,133	May 17	1998	506	59	1049
Miller, Lee A., Milwaukee, assignor of one-half to S. B. Fuller, Watertown, Wis. Spool-holder for sewing-machines.	475,511	May 24	2593	660	59	1181
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	470,250	Mar. 8	926	230	58	1288
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	480,113	Aug. 2	558	140	60	688
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	480,114	Aug. 2	561	141	60	689
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	480,115	Aug. 2	564	142	60	690
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	480,116	Aug. 2	567	144	60	690
Miller, Lewis, Akron, Ohio. Grain-binding harvester.	488,398	Dec. 20	1920	480	61	1736
Miller, Lewis, assignor of one-half to F. H. Taylor and G. H. Torrey, Oil City, Pa. Combined section-liner and protractor.	471,428	Mar. 22	2767	706	58	1662
Miller, M. B. (See Gersuch, George W., assignor.)						
Miller, Morris V., assignor of one-half to N. Immerwahr and E. Jones, Bellaire, Ohio. Game apparatus.	482,685	Sept. 13	1256	306	60	1594
Miller, Morton A. (See Miller and Bowman, assignors.)						
Miller, Nelsen A., Elmira, N. Y. Indicator.	487,445	Dec. 6	363	94	61	1393
Miller, Philip R., and P. Barker, Kearney, Nehr. Sash-holder.	469,316	Feb. 23	2201	564	58	980
Miller, Pierre D., and W. N. De Vault, Peoria, Ill. Hay-loader.	480,269	Aug. 9	841	214	60	755
Miller, Riley E., and J. D. Bowman; said Bowman assignor to M. A. Miller, College Corner, Ohio. Wire-reel.	481,306	Aug. 23	2533	621	60	1107
Miller, Roy, Alma Centre, Wis. Book or blank case.	480,388	Aug. 9	1033	259	60	790
Miller, Rufus B., Sprague, Wash. Horse-power.	475,044	May 17	1859	471	59	1022
Miller, Russell C., assignor of two-thirds to M. Tyler and W. W. Keyworth, Salisbury, Conn. Carving-machine.	479,653	July 26	2489	620	60	524
Miller, Samuel, assignor to E. Glover, London, England. Electrolyte or depolarizing solution for galvanic batteries.	468,887	Feb. 16	1527	-----	58	842
Miller, Samuel L., et al. (See Hoke, Quinton J., assignor.)						
Miller, Simon, Philadelphia, Pa. Harness connection for heddle-frames.	467,424	Jan. 19	1811	463	58	360
Miller, Stanley G., assignor of one-half to W. F. Miller, Philadelphia, Pa. Lingo or heddle-weight for Jacquard looms.	487,537	Dec. 6	500	130	61	1419
Miller, Theodor, New York, N. Y. Tongue for stringless pianos.	471,153	Mar. 22	2399	611	58	1592
Miller, Thomas, Jersey City, N. J. Valved funnel.	474,674	May 10	1275	325	59	893
Miller, Thomas, Jersey City, N. J. Urn.	477,261	June 21	1647	402	59	1790
Miller, Thomas, Jersey City, N. J. Coffee or tea urn.	486,881	Nov. 29	2717	708	61	1184
Miller, Thomas, Jersey City, N. J. Hot-water urn.	488,320	Dec. 20	1792	450	61	1711
Miller, Thomas, Tyrona, Pa. Butter-knife.	475,789	May 31	3025	766	59	1277
Miller, Thomas B. (See Young, Robert G., assignor.)						
Miller, Thomas S., Philadelphia, Pa. Door-check.	470,433	Mar. 8	1266	324	58	1349
Miller, Thomas S., New York, N. Y. Conveying apparatus.	474,047	May 3	264	64	59	688
Miller, Thomas S., New York, N. Y. Conveying apparatus.	478,348	July 5	453	111	60	91
Miller, Vernon J. (See Botts, Isaac, assignor.)						
Miller, Walter, Cleveland, Ohio. Reversing-valve.	480,604	Aug. 9	1368	340	60	855
Miller, Webb, Chicago, Ill. Spring and canvas coat.	475,788	May 31	3024	766	59	1277
Miller, Wesley J., Harrisburg, Pa. Revolving hair-brush.	481,264	Aug. 23	2458	605	60	1095
Miller, William, Cincinnati, Ohio. Grate or lining for stoves.	466,504	Jan. 5	316	79	58	60
Miller, William, Hillsdale, Mich., and W. S. Duvall, Washington, D. C.; said Duvall assignor to said Miller. Wrench.	478,121	July 5	65	17	60	15
Miller, William B., et al. (See Zimmermann, Peter, Jr., assignor.)						
Miller, William E., Brooklyn, N. Y. Vehicle attachment.	488,023	Dec. 13	1405	349	61	1620
Miller, William F. (See Miller, Stanley G., assignor.)						
Miller, William G., et al. (See Sweet, Larntine C., assignor.)						
Miller, William G., Cambridge, Mass. Truck for railway-cars.	467,293	Jan. 19	1618	412	58	394
Miller, William H. (See Steele, Benjamin M., assignor.)						
Miller, William H., assignor to Miller-Knoblock Wagon Company, South Bend, Ind. Sprinkler-head and valve therefor.	475,244	May 17	2168	551	59	1083
Miller, William H., and T. L. Farrow, assignors of one-third to E. D. Rich, Winston, N. C. Box screw and clamp.	484,159	Oct. 11	954	245	61	209
Miller, William J., R. S. McBean, and J. W. McBurnett, Colorado, Tex. Vehicle-axle.	472,515	Apr. 12	841	215	59	173
Miller, William P. (See Grantland, John W., assignor.)						
Miller, Wilson B., Round Rock, Tex. Farm-gate.	486,289	Nov. 15	1778	467	61	968
Miller, Winfield S., Milpitas, Cal. Cultivator.	485,108	Oct. 25	2488	639	61	541
Miller's Falls Company. (See Lanfair, Herbert D., assignor.)						
Miller's Falls Company. (See Rogers, George E., assignor.)						
Miller's Falls Company. (See Smith, Hiram B., assignor.)						
Millet, Albert, et al. (See Millet, Pierre, assignor.)						
Millet, Charles W., Dolgeville, N. Y. Bicycle-tire.	477,769	June 23	2471	618	59	1970
Millet, Ernest, et al. (See Millet, Pierre, assignor.)						
Millet, John W., Dolgeville, assignor to A. Dolge, New York, N. Y. Felt roller.	472,899	Apr. 12	1346	346	59	270
Millet, John W., assignor to A. Dolge, Dolgeville, N. Y. Fulling-mill.	472,900	Apr. 12	1347	346	59	270

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Millet, Pierre, assignor of two-thirds to E. and A. Millet, Bonnet Carré, La. Wagon end-gate	479,076	July 19	1552	388	60	331
Millett, Humphry D., Maywood, assignor to C. H. Ferry, Chicago, Ill. Spring-coiling machine	468,573	Feb. 9	1049	266 267	58	738
Millhiser & Co., M. (See Cussen, William J., assignor.)						
Millian, John A., Dexter, Kans. Whiffletree attachment	474,026	May 3	224	54	59	681
Millican, Finly C. (See Millican, Joel W., assignor.)						
Millican, Joel W., assignor of one-half to F. C. Millican, Grapevine, Tex. Car-coupling	488,571	Dec. 27	2203	545	61	1809
Millidge, John, Bailey's Harbor, Wis. Horse-collar	488,572	Dec. 27	2205	545	61	1809
Milligan, Henry C., South Orange, N. J., assignor to R. Wolff & Co., New York, N. Y. Buckle	477,601	June 21	2180	541	59	1896
Milligan, Henry C., South Orange, N. J., assignor to R. Wolff & Co., New York, N. Y. Lady's shopping-bag	481,116	Aug. 16	2185	541	60	1029
Milligan, John F. (See Fosburgh and Milligan.)						
Milligan, Madison M. (See Stone, Benjamin F., assignor.)						
Milligan, Thomas G., Washington, D. C. House-door letter-box	476,669	June 7	663	161	59	1568
Milliken, Charles R. (See Flanders, John J., assignor.)						
Milliken, Charles R. (See Foster, Charles J., assignor.)						
Milliken, David, Fort Wadsworth, N. Y. Fence	479,443	July 26	2160	539	60	464
Milliken, John A., Brooklyn, N. Y. Ticket receiving and delivering apparatus	468,981	Feb. 16	1701	433 434	58	876
Milliken, William H., assignor of one-half to J. C. Lyman, Chicago, Ill. Torpedo-signal	482,019	Sept. 6	159	39	60	1366
Millis, H. L., trustee. (See Appleyard, Arthur E., assignor.)						
Millis, Hiram S., Detroit, Tex. Extinguishing fire	477,138	June 14	1419	345	59	1734
Millis, John, U. S. Army. Valve-motion indicator for steam-engines	481,671	Aug. 30	3112	760	60	1234
Mills, Arthur H., et al. (See Phare, John J., assignor.)						
Mills, Charles, New York, N. Y. Tripod	471,392	Mar. 22	2713	691	58	1653
Mills, Daniel, Philadelphia, Pa. Rotating hook mechanism for boot or shoe sewing machines	477,433	June 21	1913	472	59	1841
Mills, Daniel, Philadelphia, Pa. Feeding mechanism for boot or shoe sewing machines	477,434	June 21	1915	472	59	1842
Mills, Daniel, Philadelphia, Pa. Boot or shoe sewing machine	477,435	June 21	1918	473	59	1842
Mills, Daniel, Philadelphia, Pa. Boot or shoe sewing machine	477,436	June 21	1919	473	59	1843
Mills, Daniel, and Daniel, Jr., Philadelphia, Pa. Boot or shoe sewing machine	477,431	June 21	1908	470 471	59	1841
Mills, Edward L., Erie, Pa. Steam-engine governor	485,817	Nov. 8	996	267	61	793
Mills, Edward L., Erie, Pa. Balanced slide-valve	485,818	Nov. 8	997	268	61	794
Mills, Frank W., Chicago, Ill. Railway-gate	488,322	Dec. 20	1796	451	61	1711
Mills, Frank W., assignor to Mills Improved Pneumatic Brake Company, Chicago, Ill. Air-brake	476,546	June 7	482	114	59	1533
Mills, H. R., et al. (See Phare, John J., assignor.)						
Mills Improved Pneumatic Brake Company. (See Mills, Frank W., assignor.)						
Mills Improved Pneumatic Brake Company. (See Mills, Mortimer B., assignor.)						
Mills, James M., Modesto, Ill. Dehorner	480,932	Aug. 16	1879	469	60	972
Mills, Jonathan, Cleveland, Ohio. Bolting-reel	474,916	May 17	1647	421 422	59	982
Mills, Jonathan, Columbus, Ohio. Purifier and separator	476,231	May 31	3760	949	59	1492
Mills, Lloyd M., Grand Rapids, Mich. Cash recorder and drawer	487,284	Dec. 6	70	21, 22	61	1336
Mills, Melvin A., Lawrence, Mass. Core-box	484,940	Oct. 25	2236	576	61	490
Mills, Mortimer B., Chicago, Ill. Railway-gate	480,955	Aug. 16	1921	481	60	979
Mills, Mortimer B., assignor to Mills Improved Pneumatic Brake Company, Chicago, Ill. Safety-valve	476,755	June 7	791	194	59	1595
Mills, Mortimer B., assignor to Mills Improved Pneumatic Brake Company, Chicago, Ill. Air-pump for brake mechanisms	476,756	June 7	792	195	59	1595
Mills, Norman T., Boston, Mass. Watch-crown holder	467,294	Jan. 19	1619	413	58	324
Mills, Norman T., Boston, Mass. Watchcase-pendant	475,064	May 17	1891	480	59	1028
Mills, Ralph, New York, N. Y. Cash register and indicator	475,408	May 24	2422	618	59	1149
Mills, Robert, et al., trustees. (See Krepps, Virgil A., assignor.)						
Mills, Webster L., Condit, Ohio. Axle-box	484,556	Oct. 18	1591	403	61	346
Mills, William H., Portland, N. Y. Grape-vine clamp	475,589	May 24	2713	688	59	1205
Mills, William R. (See Smith, Charles, assignor.)						
Milne, Alexander. (See Stretch, Joseph, assignor.)						
Milne, James. (See Thoeni, Martin, assignor.)						
Milne, James, assignor of two-thirds to J. J. Milne, Scotch Grove, Iowa. Rope-hook	474,675	May 10	1276	325	59	893
Milne, James, assignor of two-thirds to J. J. Milne, Scotch Grove, Iowa. Stump puller	475,333	May 24	2302	591	59	1127
Milner, Joseph J. (See Milne, James, assignor.)						
Milner, Albert R., assignor to Milner Music Company, Cleveland, Ohio. Adjustable piano-stool	471,184	Mar. 22	2400	612	58	1592
Milner Manufacturing Company. (See Bolthoff, William H., assignor.)						
Milner Music Company. (See Milner, Albert R., assignor.)						
Miloché, Alexander. (See Reutter, Franz, assignor.)						
Milsted, William N., New York, N. Y. Gas-meter	477,910	June 28	2698	675 676	59	2012
Milsted, William N., New York, N. Y. Meter diaphragm	482,185	Sept. 6	437	104	60	1421
Miltimore, Alonzo E., Catskill, N. Y., assignor, by mesne assignments, to G. H. Schroeder and F. Palmer, Washington, D. C. Magneto-telephone for personal wear	466,725	Jan. 5	669	172	58	127
Miltonberger, John, Warsaw, Ind. Bread-raiser and cabinet	478,200	July 5	206	52	60	42
Milwaukee Harvester Company. (See Crandall, Henry F., assignor.)						
Milzer, August G. (See Heath and Milzer.)						
Mims, D. D. (See Rowe, Isaac N., assignor.)						
Minaker, S. J. (See Powell, Henry S., assignor.)						
Minard, Russell W., Larned, Kans. Trace-support	474,753	May 10	1389	351	59	916
Minear, George L., Ottumwa, Iowa. Plate attachment for cameras	481,802	Aug. 30	3344	818	60	1279
Minear, Solomon C., assignor to D. A. Wright, Columbus, Ohio. Corn-planter	470,500	Mar. 8	1364	355 356	58	1368
Miner, Howard A., Philadelphia, Pa. Electric-light shade, &c.	476,021	May 31	3404	859	59	1353
Miner, John, et al. (See McKinney, Robert, assignor.)						
Miner, William H., Chicago, Ill. Draft-rigging for cars	474,996	May 17	1788	452 453	59	1008
Miner, William W., New Haven, Conn. Manufacturing horseshoe-nails	481,962	Sept. 6	60	14	60	1346
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Die for swaging blanks for horseshoe-nails	484,226	Oct. 11	1051	266	61	228
Miner, William W., New Haven, assignor to New Process Nail Company, Torrington, Conn. Blank-feeding device	488,081	Dec. 13	1406	349	61	1620
Mings, George W., New Castle, Colo. Motor	473,328	Apr. 19	2068	530 531	59	419

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Minis, D. D. (See Rowe, Isaac N., assignor.)						
Mink, Fritz, Philadelphia, Pa. Back or bezel for watchcases	470,646	Mar. 8	1566	407	58	1410
Mink, Fritz, Philadelphia, Pa. Knurling or ornamenting watchcases	482,626	Sept. 13	1258	307	60	1594
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Machine for ornamenting watchcases	468,748	Feb. 9	1311	333	58	790
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Cover or bezel of watchcases	468,749	Feb. 9	1312	333	58	791
Mink, Fritz, assignor to Keystone Watch Case Company, Philadelphia, Pa. Watch-bow fastener	472,764	Apr. 12	1159	297	59	232
Minneapolis Electro-Matrix Company. (See Street and Travis, assignors.)						
Minneapolis Electro-Matrix Company. (See Travis, Charles L., assignor.)						
Minneapolis Plow Works. (See Johnson, Nils J., assignor.)						
Minerly, William W., East Patchogue, N. Y. Combined can-opener and painter's tool	471,562	Mar. 29	2953	753	58	1706
Minnesota Thresher Manufacturing Company. (See Wilson, George E., assignor.)						
Mionick, Albert, Colton, assignor of one-half to M. Blanchard, San Bernardino, Cal. Ventilating device for railway-cars	483,851	Oct. 4	495	123	61	102
Minor, Alfred A., Egg Harbor, Wis. Vehicle-hub	478,227	July 5	359	87	60	72
Minor, Alfred A., Egg Harbor, Wis. Furniture-caster	481,963	Sept. 6	61	15	60	1346
Minor, Daniel B. (See Russell and Minor.)						
Minor, Frederick E., et al. (See Blume, Charles A., assignor.)						
Minor, John W., Brockton, Mass. Picket-pointing machine	469,390	Feb. 23	2314	596	58	1003
Minor, Oscar C., et al. (See Blume, Charles A., assignor.)						
Minor, Peter W., Springfield, N. Y. Upper-machine	469,582	Feb. 23	2617	671	58	1061
Minor, Peter W., Springfield, N. Y. Machine for hammering leather	486,194	Nov. 15	1617	429	61	936
Minto, James H., Liverpool, England. Method of and apparatus for aerating liquids	483,259	Sept. 27	2204	553	60	1205
Minton, Nathan W., Lebanon, Ky. Picket fence	480,270	Aug. 9	842	214	60	756
Minton, William D., and A. S. Douglas, Marshall, Tex. Carrier-iron for draw-bars	483,465	Sept. 27	2487	626	60	1859
Minty, William S. (See Bröström, Carl F., assignor.)						
Miranda, Abraham R., Boston, Mass. Soap-holder attachment for water-faucets	479,330	July 19	1937	484	60	405
Mirfield, Samuel, assignor of one-half to W. H. Oliphant, Toronto, Canada. Thill-coupling	476,758	June 7	794	195	59	1596
Mischler, Gottlieb, Rock Island, Ill. Harvester cutting apparatus	479,568	July 26	2365	590	60	502
Mishler, Frank J., et al. (See Mishler, Henry, assignor.)						
Mishler, Henry, Mogadore, Ohio. Potter's tool	467,609	Jan. 26	2130	541	58	428
Mishler, Henry, assignor of one-half to M. B. and F. J. Mishler, Mogadore, Ohio. Machine for making playing-marbles	471,243	Mar. 22	2488	631	58	1609
Mishler, Milton B., et al. (See Mishler, Henry, assignor.)						
Mitchel, Harris B. (See Lewis, Leroy S., assignor.)						
Mitchell, Charles H., Oxford, Ohio. Shifting device for vehicle-bodies	488,444	Dec. 20	1995	499	61	1751
Mitchell, Charlie I., Chicago, Ill., assignor to Adams & Westlake Company, of Illinois. Lantern	480,734	Aug. 16	1582	396	60	911
Mitchell, Claudius H., and R. M. Veitch, Oakland, Cal. Bicycle-tire	476,670	June 7	665	161	59	1569
Mitchell, Daniel W. and E. L., Southborough, Mass. Railway time-signal	481,581	Aug. 30	2977	730	60	1209
Mitchell, Elma M. (See Mitchell, John E. and E. M.)						
Mitchell, Elmer L. (See Mitchell, Daniel W. and E. L.)						
Mitchell, Frank O., Middletown, Conn. Sap-spout	472,306	Apr. 5	469	120	59	88
Mitchell, Fred B., et al. (See Spurr, George W., assignor.)						
Mitchell, George H., Idaville, Ind. Farm-gate	466,830	Jan. 12	837	215	58	170
Mitchell, George W. (See Nehf and Mitchell.)						
Mitchell, Isaac. (See Mitchell, John H. and I.)						
Mitchell, James F., Titusville, Fla. Ladder	473,768	Apr. 26	2796	703	59	581
Mitchell, James H., Philadelphia, Pa. Duplex dough-sheeting machine	466,854	Jan. 12	885	227	58	177
Mitchell, James H., Philadelphia, Pa. Knife cleaning and flouring device	472,194	Apr. 5	289	76	59	54
Mitchell, James H., Philadelphia, Pa. Continuous dough-press for form-making	472,765	Apr. 12	1160	297	59	232
Mitchell, John A., and C. T. Deal, Scottsburg, Ind. Feed-trough	477,139	June 14	1419	346	59	1734
Mitchell, John E. and E. M., Salem, Iowa. Plow	467,946	Feb. 2	64	15	58	537
Mitchell, John E. and E. M., Salem, Iowa. Plow	473,517	Apr. 26	2399	607	59	504
Mitchell, John E. and E. M., Salem, Iowa. Plow	485,394	Nov. 1	383	103	61	651
Mitchell, John F., et al. (See Walton, James, assignor.)						
Mitchell, John H. and I., Brockhows, near Huddersfield, England. Pulling-stock	479,605	July 26	2414	602	60	511
Mitchell, John J., Avondale, Ala. Fire-guard for grates	474,562	May 10	1099	281	59	860
Mitchell, John W., et al. (See Cole, John J., assignor.)						
Mitchell, Jonas L., assignor to Diamond Prospecting Company, Chicago, Ill. Mining-machine	469,260	Feb. 23	2108	542	58	963
Mitchell, Joseph, assignor of one-fourth to M. James, Cayuga, Ind. Memorial monument	481,367	Aug. 23	2620	644	60	1123
Mitchell, Joseph, Sheffield, and W. K. Birkinshaw, Derby, England. Pick	484,333	Oct. 11	1241	316	61	265
Mitchell, Mancell W., New Albany, Ind. Anchor for joists	484,666	Oct. 18	1773	451	61	383
Mitchell, Ransom Y., Findlay, Ohio. Car-coupling	487,632	Dec. 6	636	163	61	1447
Mitchell, Robert C., et al. (See Spurr, George W., assignor.)						
Mitchell, Thomas, London, England. Manufacturing linoleum, &c.	467,378	Jan. 19	1745	445	58	347
Mitchell, Thomas, Wimbledon, England. Device for manufacturing linoleum floor-cloth	482,948	Sept. 20	1683	423	60	1690
Mitchell, Thomas S., Pittsburg, Pa. Switch mechanism	475,087	May 17	1936	490	59	1036
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated smoothing-cylinder	468,426	Feb. 9	810	203	58	601
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated smoothing-iron	469,792	Mar. 1	201	52	58	1140
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated vessel	474,398	May 10	226	216	59	808
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrical heater	474,797	May 10	1465	372	59	932
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrically-heated matrix-press	474,964	May 17	1732	440	59	998
Mitchell, Willis, Malden, assignor to Butterfield-Mitchell Electric Heating Company, Boston, Mass. Electrical brazing device	478,201	July 5	207	52	60	43
Mitchell, Willis, Malden, assignor, by mesne assignments, to American Electric Heating Company, Boston, Mass. Electrical heater	487,285	Dec. 6	74	22	61	1336
Mitcheltree, James B., Burnet, Tex. Refrigerating-cover for vessels	469,163	Feb. 16	1950	499	58	926
Mitchill, Cornelius S. (See Walker, Louis A., assignor.)						
Mitten, George D. (See Busking, Henry F., assignor.)						
Mitzlaff, Hermann von, Berlin, Germany. Hydraulic press	475,224	May 17	2130	539	59	1076
Mitzlaff, Hermann von, Berlin, Germany. Slide-valve	477,088	June 14	1349	328	59	1720
Mix, Edward C., Jersey City, N. J. Clip for supporting dresses, &c.	487,757	Dec. 13	856	217	61	1508
Mix & Genest. (See Oesterreich, Wilhelm, assignor.)						
Moak, Jndson, Utica, N. Y. Attachment for heating apparatus	487,192	Nov. 29	3244	830	61	1288

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Gr.	Vol.	Page.
Moberg, Alfred, Clinton, Mass. Machine for dyeing fabrics	466,921	Jan. 12	1002	256	58	200
Moch, Eugene W., New York, N. Y. Feather-tip or plume	467,947	Feb. 2	65	15	53	537
Mock, Samuel T., Milwaukee, Wis. Railway-switch	467,948	Feb. 2	65	15	53	538
Model Mop, Pail, and Wringer Company. (See Betts, William H., assignor.)						
Modes, William F., Streator, Ill. Glass-furnace	469,406	Feb. 23	2343	602	58	1009
Modes, William F., Streator, Ill. Glass tank-furnace	467,286	Dec. 6	76	23	61	1336
Moe, Alfred, Jersey City, N. J. Whirligig	475,594	May 24	2721	690	59	1206
Moe, George T., Philadelphia, Pa. Furnace	485,966	Nov. 8	1244	338	61	843
Moe, Hiram G. (See Triumbe, Chauncey B., assignor.)						
Moe, Peter, Minneapolis, Minn. Logging-sled	469,332	Feb. 23	2327	571	58	986
Moe, Theodore M. (See Stickney, Frank, assignor.)						
Moebius, Bernard, New York, N. Y. Treating base-bullion amalgam	480,956	Aug. 16	1922	481	60	979
Moeller, Frederick W., Washington, D. C. Wall-paper-trimming machine	475,134	May 17	2000	506	59	1049
Moeller, Johan, Boston, Mass. Beer-filter	476,671	June 7	666	162	59	1569
Moews, Paul, Newark, N. J., assignor to J. S. Spencer, New York, N. Y. Opera-glass attachment	475,462	May 24	2513	641	59	1166
Moews, Paul, Newark, N. J., assignor to J. S. Spencer, New York, and J. E. Spencer, Brooklyn, N. Y. Opera-glass attachment	475,463	May 24	2515	641	59	1166
Moffat, Edward S., and T. G. Wolf, Scranton, Pa. Railway-tie	470,585	Mar. 8	1478	384 } 385 }	58	1392
Moffat, Edward S., and T. G. Wolf, Scranton, Pa. Railway-tie	472,901	Apr. 12	1348	347	59	270
Moffat, George D., and R. W. Huss, Chicago, Ill. Pneumatic tire	470,070	Mar. 1	640	158	58	1223
Moffet, James. (See Taylor, Benjamin F., assignor.)						
Moffett, Charles J. (See Davis, John T., assignor.)						
Moffitt, Aaron B. (See Ford and Moffitt.)						
Moffitt, John W., Philadelphia, Pa., assignor to P. McGill, Lambertville, N. J. Artificial tooth	482,377	Sept. 13	779	187	60	1501
Moffitt, William E., Pilot Point, Tex. Attachment for disk harrows	467,182	Jan. 19	1447	369	58	291
Moffitt, William E., J. L. Williams, and L. W. Bennett, Pilot Point, Tex. Cotton-handling device	468,548	Feb. 9	1007	258	58	730
Mohan, Michael J. (See Mohan, William J. and M. J.)						
Mohan, William J. and M. J., Covington, Ky. Riding-saddle	477,016	June 14	1223	296	59	1695
Mohan, William J. and M. J., Covington, Ky. Horseshoe	485,470	Nov. 1	494	131	61	672
Möhle, Aloys, Saarbrücken, Germany. Well-curbing	479,010	July 19	1455	361	60	313
Möhle, Henry. (See Newell and Möhle.)						
Mohme, Henry J., Sigourney, Iowa. Rope-clamp	487,287	Dec. 6	78	23	61	1337
Mohn, Frederick W., Hoboken, N. J. Stage appliance	467,754	Jan. 26	2361	598	58	472
Mohr, Benjamin F., Mifflinburg, Pa. Dust collector and conveyor	484,185	Aug. 23	2313	570	60	1067
Moir, Henry C., Summer Hill, near Sydney, New South Wales. Reversible seat	476,474	June 7	380	88	59	1511
Moland, George O., assignor of one-half to O. K. Nelson, Springfield, Ill. Extension-table	471,393	Mar. 22	2715	692	58	1653
Moldenbauer, Carl, Frankfurt-on-the-Main, Germany. Extracting gold from its ores	483,766	Oct. 4	365	61	77	
Molendo, Herman, New York, N. Y. Receptacle for portable electric lamps	477,810	June 28	2528	634	59	1950
Molière, James W., San Francisco, Cal. Electro-therapeutical instrument	483,745	Oct. 4	334	84	61	70
Moline Plow Company. (See Lindgren, August, assignor.)						
Moline Pump Company. (See Bergquist, Frank, assignor.)						
Molitor, Aaron F., assignor to E. Beument & Sons, Lansing, Mich. Fastening for spring-tooth harrows	483,552	Oct. 4	496	123	61	103
Molitor, Charles, Chicago, Ill. Electric annunciator	466,357	Jan. 5	74	19	58	17
Mollenkamp & Binne. (See Hofmann, Johann, assignor.)						
Mollerup, Carl C. (See Adler, Hattie, assignor.)						
Mollnau, Martin M., Halle-on-the-Saale, Germany. Platform-scale	488,284	Dec. 20	1737	437 } 438 } 634 } 635 }	61	1701
Molloy, Edmond, Philadelphia, Pa. Heater for vehicles	477,811	June 28	2529	635 }	59	1980
Molloy, Frank, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Molloy, Frank, assignor of eleven-twentieths to A. S. Dinsmore and W. S. Peters, Haverhill, Mass. Heel-burnishing machine	472,307	Apr. 5	470	120 } 121 }	59	88
Molloy, Frank, assignor to himself and O. Brown, trustees, Haverhill, Mass. Lasting-machine	486,730	Nov. 22	2459	642	61	1117
Molloy, John J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Molloy, Michael H., Milwaukee, Wis. Car-brake	469,423	Feb. 23	2370	608	58	1013
Molt, Heinrich, Westerrade, Germany. Box-closure	475,135	May 17	2001	506	59	1050
Momburg, Louis, and W. F. Dallmann, Milwaukee, Wis. Gear-guard for wringers	484,970	Oct. 25	2276	587	61	498
Monday, Newton, assignor of one-half to J. M. O'Carra, Lathrop, Mo. Rock-drill	486,567	Nov. 22	2196	578	61	1064
Monday, Robert, assignor to W. C. Price, Lampasas, and L. J. Wertheimer, Dallas, Tex. Separable button	480,336	Aug. 9	945	239	60	774
Monday, Robert, Lampasas, assignor of one-half to L. J. Samuels and E. Donnan, Dallas, Tex. Sash-holder	480,337	Aug. 9	946	240	60	774
Monfort, Abram C., Pawtucket, R. I. Spirit-lamp	472,506	Apr. 5	785	200	59	149
Monfort, D. G. (See Potter, Samuel A., assignor.)						
Monier, Pierre A. J., Plaine St. Denis, France. Construction of tanks, reservoirs, silos, &c.	486,535	Nov. 22	2144	566	61	1055
Monitor Packer Company. (See Hoadley, Isaac N., assignor.)						
Monjeau, Cleophas, Middletown, Ohio. Sand-screen	482,020	Sept. 6	163	39	60	1367
Monk, Henry, Elsdon, Ill. Compound locomotive steam-engine	480,668	Aug. 9	1476	368	60	876
Monkhouse, Helen G., London, England. Invalid-lift	470,944	Mar. 15	2027	518 } 519 }	58	1508
Monrath, Gustav. (See Devold and Monrath.)						
Monroe, Charles W., Cleveland, Ohio. Latch	481,910	Aug. 30	3524	862	60	1314
Monroe, Daniel L., Bloomfield, Iowa. Well-boring apparatus	481,636	Aug. 30	3060	747	60	1234
Monroe, David M., assignor to R. T. Smith, Baltimore, Md. Can-soldering machine	483,234	Sept. 27	2133	540 } 541 }	60	1792
Monroe Manufacturing and Lumber Company. (See Dodge, Henry B., assignor.)						
Monroe, Robert B., New York, N. Y. Toy	468,047	Feb. 2	213	52	58	566
Montague, John R., and J. A. Pross, Syracuse, N. Y. Journal-bearing	480,025	Aug. 2	430	109	60	663
Montague, John R., and J. A. Pross, Syracuse, N. Y. Roller cotton-gin	485,015	Oct. 25	2356	605 } 606 } 607 } 521 }	61	513
Montague, Thomas E., West Lorne, Canada. Machine for bending vehicle-shafts	473,329	Apr. 19	2071	522 } 523 }	59	420
Montana Vote Registering Machine Company. (See Kennedy, Dongan, assignor.)						
Monteith, George, Cincinnati, Ohio. Hub-band	474,754	May 10	1390	351	59	916
Montgomery, Archibald, Philadelphia, Pa. Adjusting-pin for molding-flasks	475,088	May 17	1937	490	59	1038
Montgomery, George A. (See Stone, Allison B., assignor.)						
Montgomery, Henry, Newark, N. J. Bowling-alley	471,244	Mar. 22	2489	632	58	1609

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Montgomery, J. E., <i>et al.</i> (See Tatro, Charles P., assignor.)						
Montgomery, James, <i>et al.</i> (See Tatro, Charles P., assignor.)						
Montgomery, James, assignor of one-half to R. Grant, Jersey City, N. J. Grate-bar.....	478,013	June 28	2858	{ 715 716 }	59	2044
Montgomery, Peter T., Mound Bayou, Miss. Ditching-plow.....	487,869	Dec. 13	1043	261	61	1545
Montgomery, Roderick N., Melbourne, Victoria. Billiard scorer and register.....	488,480	Dec. 20	2054	510	61	1764
Montgomery, Rosine F. (See Frazier, Joseph W., assignor.)						
Montgomery, Thomas J., <i>et al.</i> (See Woolf, Albert E., assignor.)						
Montgomery, Thomas J., <i>et al.</i> (See Woolf, Albert E., assignor.) (Reissue.)						
Monte, Joseph, Needham, assignor to Steel Edge Stamping and Retinning Company, Boston, Mass. Pliers.....	486,616	Nov. 22	2286	596	61	1081
Montross, Levi H., Camden, N. J. Roofing-file.....	472,680	Apr. 12	1030	266	59	207
Montross, Levi H., Camden, N. J., assignor to C. Merchant, Philadelphia, Pa. Roof.....	483,966	Oct. 4	665	167	61	138
Montross, Levi H., Camden, N. J., assignor to Merchant & Co., Philadelphia, Pa. Roofing plate or shingle.....	487,372	Dec. 6	220	60	61	1364
Montz, William H., Packerton, Pa. Supporting device for sliding doors.....	467,822	Jan. 26	2463	625	58	491
Montz, William H., Packerton, Pa. Sliding-door lock.....	470,434	Mar. 8	1267	{ 334 335 }	58	1350
Monzel, John, Chicago, assignor of one-half to B. F. Windsor, Joliet, Ill. Bed-spring.....	487,288	Dec. 6	78	24	61	1337
Moodey, Nathan W., Fresno, Cal. Miner's tool.....	479,444	July 26	2161	539	60	464
Moodie, Thomas S., South Walpole, Mass. Harness attachment.....	475,282	May 17	2225	571	59	1096
Moody, Charles D. (See Day and Moody.)						
Moody, Charles D. (See Moody, David J., assignor.)						
Moody, David J., St. Louis, assignor to C. D. Moody, Webster Groves, Mo. Velocipede.....	473,196	Apr. 19	1858	468	59	376
Moody, Emery C., Avon, Mass. Sole-trimming machine.....	471,394	Mar. 22	2716	692	58	1653
Moody, George A. (See Pitcher and Moody.)						
Moody, Nathan W. (See Taylor, Horace H., assignor.)						
Moody, Walter S. (See Lemp and Moody.)						
Moog, Fritz, Mülheim-on-the-Mosel, Germany. Apparatus for decanting bottles.....	485,050	Oct. 25	2407	619	61	524
Moormaw, Henry E., Newton, Ala., assignor of one-half to E. T. Hinote, Caryville, Fla. Car-coupling.....	486,409	Nov. 15	1963	521	61	1005
Moomy, Samuel C., assignor of one-half to W. A. Schoenfield, Erie, Pa. Ice-cream freezer.....	476,232	May 31	3765	950	59	1423
Moon, Edward W., St. Louis, Mo. Elevator.....	480,202	Aug. 2	708	181	60	716
Moou, George R., Wilmington, Ohio. Oven.....	476,291	June 7	92	21	59	1456
Moon, Hermon, Grove City, Pa. Slide-valve.....	485,505	Nov. 1	539	143	61	682
Moon, Hiram, Red Creek, N. Y. Transplanter.....	482,314	Sept. 6	655	156	60	1463
Mooney, Benjamin F., assignor of one-half to I. F. Pratt and E. Troy, Olean, N. Y. Rope or cord fastening.....	475,245	May 17	2169	552	59	1083
Mooney, Herman O., assignor to United States Down Extractor Company, Farmington, N. H. Pneumatic grading and sorting machine.....	478,516	July 5	697	{ 169 170 }	60	139
Mooney, Hugh, Jersey City, N. J. Gumming-machine.....	469,583	Feb. 23	2619	672	58	1061
Mooney, Nicholas G., New York, N. Y. Horseshoe-pad.....	479,912	Aug. 2	202	50	60	622
Moor, George, La Fayette, Oreg. Gopher-trap.....	485,421	Nov. 1	421	112	61	658
Moor, William H., Atlanta, Ga. Smoke and cinder conductor for railway-trains.....	477,565	June 21	2125	{ 528 529 }	59	1885
Moore, A., Jr., <i>et al.</i> (See Fitzwater, William M., assignor.)						
Moore, Albert H., Gloucester, Mass. Carpet-stretcher.....	476,960	June 14	1143	276	59	1678
Moore, Alfred. (See Garnett and Moore.)						
Moore, Andrew H. (See Dull and Moore.)						
Moore, Benjamin, Brooklyn, N. Y. Wall-finish and making same.....	488,024	Dec. 13	1295	.....	61	1596
Moore, Charles E., Boston, Mass. Electric brake mechanism for elevators.....	468,917	Feb. 16	1577	400	58	852
Moore, Charles E., Boston, Mass. Operating mechanism for elevators.....	488,526	Dec. 20	2135	528	61	1779
Moore, Charles E., assignor to A. M. Putnam, Boston, Mass., and G. N. Fletcher, Detroit, Mich. Machine for pointing and finishing horseshoe-nails.....	470,321	Mar. 8	1070	{ 272 273 }	58	1314
Moore, Charles E., assignor to A. M. Putnam, Boston, Mass., and G. N. Fletcher, Detroit, Mich. Machine for forging horseshoe-nails.....	470,322	Mar. 8	1074	274	58	1314
Moore, Charles J., Toledo, Ohio. Wheel.....	475,464	May 24	2517	641	59	1166
Moore, Columbus A., Belton, Mo. Spring-motor.....	468,982	Feb. 16	1703	434	58	876
Moore, David A., Guthrieville, and H. C. Moore, Berwyn, Pa. Handle.....	484,466	Sept. 27	2487	626	60	1860
Moore, David T., Brooklyn, N. Y. Banjo.....	484,222	Oct. 11	1053	267	61	228
Moore, Edward C., Detroit, Mich. Dental tool.....	478,881	July 12	1241	307	60	261
Moore, Edward F., Argentine, Kans. Suspenders.....	487,758	Dec. 13	857	218	61	1508
Moore, Edward J., Philadelphia, Pa. Steam-boiler.....	486,731	Nov. 22	2462	643	61	1117
Moore, Edward J., Philadelphia, Pa. Steam-boiler.....	487,075	Nov. 29	3057	{ 784 785 }	61	1251
Moore, Edward Y., Milwaukee, Wis. Differential pulley-block.....	467,513	Jan. 26	1970	501	58	399
Moore, Edwin, Brooklyn, N. Y. Window-sash.....	480,203	Aug. 2	709	181	60	716
Moore, Enoch P. (See Wilson, David Y., assignor.)						
Moore, Erastus D., New York, N. Y. Electric annunciator.....	482,263	Sept. 6	559	133	60	1444
Moore, Everett D., assignor to American Oil Projectile Company, Baltimore, Md. Oil-projectile.....	478,705	July 12	967	240	60	208
Moore, Frank, <i>et al.</i> (See Lassar, Zabby, assignor.)						
Moore, Frank M. (See Ferguson, Clarence R., assignor.)						
Moore, Frank M., Syracuse, N. Y. Impression-roller.....	463,071	Feb. 2	216	60	58	572
Moore, Frank M., Spreckelsville, Hawaii. Globe-valve.....	481,803	Aug. 30	3346	819	60	1280
Moore, Frederic H., Boston, Mass. Expanding conductor.....	474,563	May 10	1100	281	59	860
Moore, Frederick L. (See Spaulding and Moore.)						
Moore, Frederick S., Hanford, Cal. Plow.....	487,578	Dec. 6	554	142	61	1431
Moore, George B., Springfield, Mass. Valve.....	482,187	Sept. 6	439	105	60	1421
Moore, George C., assignor of one-half to J. W. Green, Jr., Easthampton, Mass. Shuttle-operating mechanism for narrow-ware looms.....	488,213	Dec. 20	1625	406	61	1620
Moore, George C., assignor of one-half to J. W. Green, Jr., Easthampton, Mass. Loom-shuttle.....	488,214	Dec. 20	1628	406	61	1620
Moore, George H., Norwich, Conn. Collecting-tube for filters.....	473,011	Apr. 19	1539	392	59	319
Moore, George L., and C. Jory, assignors to W. T. Harris, Stockton, Cal. Grape-picker.....	477,952	June 28	2763	692	59	2026
Moore, George M., and G. W. Steen, Commerce, Tex. Quilting-frame for sewing-machines.....	479,654	July 26	2492	621	60	525
Moore, George R., Philadelphia, Pa. Oil-burner attachment for stoves or heaters.....	472,268	Apr. 5	410	105	59	77
Moore, George R., New York, N. Y., assignor to M. J. Dunn and F. W. Rider, Detroit, Mich. Blacksmith's vise.....	470,764	Mar. 15	1745	450	58	1454
Moore, George W., Jr., Lynchburg, Va. Mail-bag catcher.....	481,654	Aug. 30	3089	753	60	1230
Moore, George W., assignor of one-fourth to E. J. Moses, Burnet, Tex. Safety-truck for cars.....	486,833	Nov. 22	2637	688	61	1153
Moore, Gilpin, assignor to Deere & Company, Moline, Ill. Cultivator.....	478,624	July 12	858	211	60	186
Moore, Gilpin, assignor to Deere & Company, Moline, Ill. Combined clevis and gage-wheel.....	481,186	Aug. 23	2316	570	60	1067
Moore, Harry C. (See Moore, David A. and H. C.)						
Moore, Hubert S., London, England. Sash-holder.....	480,751	Nov. 22	2559	667	61	1136

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Moore, Hugh, Manch Chunk, Pa. Car-coupling	479,717	July 26	2608	648	60	546
Moore, Hugh, and O. O. Jarrard, Manch Chunk, Pa. Electric switch	470,790	Mar. 15	1787	460	58	1462
Moore, J. E., <i>et al.</i> (See Jackson and Reiger, assignors.)						
Moore, Jacob W., Oxford, Ark. Combined feed trough and rack	484,037	Oct. 11	778	195	61	174
Moore, James H., assignor to Nashua Lock and Hardware Company, Nashua, N. H. Hinge	473,012	Apr. 19	1540	333	59	320
Moore, James S., Sullivan, assignor of one-half to W. S. Bristol, Flat Rock, Ind. Can-filling machine	468,888	Feb. 16	1527	389	58	842
Moore, James W. (See Grasham and Moore.)						
Moore, John A. C., Sewickley, Pa. Hose-support	484,557	Oct. 18	1592	404	61	346
Moore, John C., Brooklyn, N. Y. Safety-belt	468,574	Feb. 9	1053	268	58	738
Moore, John C. B. and C. L. Wroughton, Fairfield, Nebr. Curtain attachment	469,164	Feb. 16	1951	499	58	926
Moore, John F., Crowell, Nebr. Hay-rack	479,826	Aug. 2	83	21	60	598
Moore, John J., and D. A. Henry, deceased; C. M. Henry, administratrix, New York, N. Y., assignors to Thomson-Houston Electric Company, of Connecticut. Switchboard for electric-light circuits	485,613	Nov. 8	744	196	61	741
Moore, John R., Louisville, Ky. Bedstead-exhibitor	479,894	Aug. 2	182	45	60	617
Moore, John S. (See Barrow, Jacob, assignor.)						
Moore, John V., Hiawatha, Kans. Tag for cloth boards	478,938	July 12	1332	331	60	279
Moore, John W., Washington, D. C. House-door letter-box	467,633	Dec. 6	637	163	61	1448
Moore, Jonathan J., Thornstown, Ind. Traction-engine	469,888	Mar. 1	358	90	58	1179
Moore, Joseph B., Minneapolis, Minn. Electric-lamp holder	475,286	May 17	2229	572	59	1097
Moore, Luzern. (See Day and Moore.)						
Moore, Mark C., assignor to H. P. Deuser Company, Hamilton, Ohio. Disk harrow	468,395	Feb. 9	769	191	58	683
Moore, Prentice B., North Wilbraham, Mass. Anti-filling valve for bottles	485,395	Nov. 1	384	103	61	651
Moore, Richard H., Great Barrington, Mass. Glove-package holder	487,127	Nov. 29	3145	806	61	1269
Moore, Robert B., San Francisco, Cal. Rosette-turning cutter-head	484,221	Oct. 11	1052	267	61	228
Moore, Robert S., Bradshaw, Nebr. Steam feed-cooker	471,488	Mar. 22	2856	726	58	1680
Moore, Robert W., Elza, Ga. Cover-fastener	467,949	Feb. 2	67	16	58	538
Moore, S. J. C., <i>et al.</i> (See Fitzwater, William M., assignor.)						
Moore, Solon E., Putnam, Conn. Pen and letter rack	483,572	Oct. 4	83	21	61	19
Moore, Thomas B., Philadelphia, Pa., and J. G. Hodgson, Maywood, Ill. Railway-tie and fastening	484,036	Oct. 11	776	195	61	174
Moore, Thomas C., and S. F. Crull, Dublin, Ind. Bicycle	476,157	May 31	3627	917	59	1398
Moore, Thomas F., <i>et al.</i> (See Larson, Gust, assignor.)						
Moore, Thomas R., Walden, N. Y. Knife-blade machine	481,804	Aug. 30	3347	819	60	1280
Moore, Waverly C., Greer's Depot, S. C. Cultivator	485,705	Nov. 8	852	229	61	764
Moore, William, Kokomo, Ind. Apparatus for separating natural gas from oil, water, &c.	473,013	Apr. 19	1541	393	59	320
Moore, William, and J. W. Parker, Owosso, Mich. Latho-dog	486,166	Nov. 15	1583	419	61	929
Moore, William B. (See Wright, Judson E., assignor.)						
Moore, William C., Kansas City, Mo., assignor to Electric Secret Service Company, New York, N. Y. Electric signaling apparatus	475,334	May 24	2303	592	59	1128
Moore, William H., Owen Sound, Canada. Horseshoe	468,252	Feb. 2	518	128	58	626
Moore, Levi M., Curtis, Nebr. Paper-delivering tip	471,221	Mar. 22	2461	625	58	1604
Moore, Walter. (See McQueen and Moore.)						
Moorfield, Frank, Brooklyn, N. Y. Apparatus for forming or shaping hollow articles	476,058	May 31	3464	874	59	1365
Moorhouse, Marguerite J., <i>et al.</i> (See Moorhouse, Walter, assignor.)						
Moorhouse, Walter, assignor to M. J. Lenhart and M. J. Moorhouse, Philadelphia, Pa. Washer for paper-stock	478,066	June 28	2910	734	59	2059
Moors, George F., assignor of one-half to J. T. Griffith, Owensborough, Ky. Fruit-gathering implement	466,795	Jan. 12	787	204	58	159
Moors, Newell J., <i>et al.</i> (See Abbott, Charles J., assignor.)						
Moran, Charles A., New York, N. Y. Candle-shade holder	475,790	May 31	3026	767	59	1277
Moran, James. (See Johnson and Moran.)						
Moran, John H., Licking, Mo. Caster attachment	475,136	May 17	2009	506	59	1050
Moran, Michael, St. Louis, Mo. Making bolts	469,261	Feb. 23	2114	543	58	964
Moran, Robert, Seattle, Wash. Coin-actuated vending-machine	472,507	Apr. 5	785	201	59	149
Moran, Robert, Seattle, Wash. Hydraulic lifting-dock	481,411	Aug. 23	2698	663	60	1137
Moran, Robert, Seattle, Wash. Coin-actuated vending-machine	487,409	Dec. 6	298	77	61	1380
Moran, T. W., administrator. (See Le Grande, William W.)						
Moran, William, Erie, Pa., assignor of one-half to G. E. Ryckman, Brockton, N. Y. Paper fruit-basket	471,650	Mar. 29	3077	783	58	1728
Morand, Franklin A., assignor of one-half to H. H. Seeley, Kearney, Nebr. Pump	470,695	Mar. 15	1644	427	58	1434
Morck, August, Jr., <i>et al.</i> (See Cobham, Frederick P., assignor.)						
Mork, Fred, <i>et al.</i> (See Cobham, Frederick P., assignor.)						
Morden, Walter H., and A. J. Gilmour, Toronto, Canada. Ink-well for school-desks	485,595	Nov. 1	674	179	61	712
Morden, William J., Chicago, Ill. Railway construction	481,368	Aug. 23	2621	645	60	1123
More, Edward A., trustee. (See Yard, Frank A., assignor.)						
More, Richard T., Dayton, Ohio. Combined cane and stool	484,334	Oct. 11	1242	316	61	265
Morehead, J. Turner. (See Guerrant, George M., assignor.)						
Morehouse, Charles L., Brooklyn, assignor to McKesson & Robbins, New York, N. Y. Atomizer	485,396	Nov. 1	385	103	61	651
Moreland, Lavoister C., Ogilby, Cal. Amalgamator and ore-concentrator	479,140	July 19	1657	414	60	350
Moreland, Roswell E., Trenton, N. J. Stem winding and setting mechanism	468,204	Feb. 2	447	111	58	612
Moremen, Marcus S., Switzerland, Fla. Muzzle	478,882	July 12	1242	308	60	261
Morency, Pierre, Montreal, Canada. Fire-kindler	485,644	Nov. 8	746	196	61	742
Morey, Albert E., assignor to Akron Tool Company, Akron, Ohio. Wheel-cultivator	479,913	Aug. 2	203	51	60	622
Morey, Roswell E., Oakland, Cal. Machine for forming berry-baskets	486,617	Nov. 22	2 86	596	61	1081
Morey, William S., Natick, Mass. Machine for lasting and trimming uppers	469,972	Mar. 1	499	123	58	1195
Morford, Charles H., Allentown, Pa. Cash-recorder	476,890	June 14	1022	218	59	1654
Morgan, Alfred F., Clinton, Wis. Spool-holder	485,206	Nov. 1	79	25	61	588
Morgan, Alfred W., Washington, D. C. Well-boring apparatus	476,475	June 7	382	88, 89	59	1511
Morgan, Benjamin B. (See Geer, Henry W., assignor.)						
Morgan, Charles, Latah, Wash. Can-opener	479,011	July 19	1457	361	60	313
Morgan, Charles F., Cleveland, Ohio. Adjustable book-cover protector	471,748	Mar. 29	3244	826	58	1759
Morgan, Charles O., Morton, Minn. Perforating-machine	479,294	July 19	1889	473	60	395
Morgan, Daniel B., Wabash, Ind. Thrill-support	488,130	Dec. 13	1475	372	61	1633
Morgan, David S., Asheville, N. C. Roller-knife for trimming wall-paper	482,830	Sept. 20	1485	370	60	1652
Morgan, Edmund C., Chicago, Ill. Standard for electric wires	474,847	May 17	1552	396	59	961
Morgan, Edmund C., Chicago, Ill. Armature for electric motors	474,848	May 17	1553	396	59	961
Morgan, Elisha, Springfield, Mass. Envelope	468,679	Feb. 2	256	63	58	574
Morgan, Elisha, Springfield, Mass. Toilet-paper fixture	469,301	Feb. 23	2192	560	58	976
Morgan Envelope Company. (See Hicks, Oliver H., assignor.)						
Morgan, Eustis P., Saco, and J. H. McMullan, Portland, Me. Roving-frame	483,573	Oct. 4	84	22	61	19
Morgan, Francis H., Manchester, and G. H. Scott, assignors to Morgan Spring Company, Worcester, Mass. Spring-balance	479,718	July 26	2609	648	60	546

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Morgan, Frank E. (See Lane, Frederic A., assignor.)						
Morgan, Franklin P., Orono, La. Cultivator	487,933	Dec. 13	1146	286	61	1565
Morgan, George H., Auburn, N. Y. Skirt-distending device	467,183	Jan. 19	1448	369	58	291
Morgan, Harry G. (See Morgan, Milo L., assignor.)						
Morgan, Harry W., Rochester, N. Y. Label-attaching machine	486,882	Nov. 29	2719	709	61	1185
Morgan, Henry P., South Norwalk, Conn. Fishing rod	472,766	Apr. 12	1161	298	59	232
Morgan, Henry R. (See Wilmore, William H., assignor.)						
Morgan, Jesse M., Chetopa, Kas. Pruning implement	470,586	Mar. 8	1479	385	58	1392
Morgan, Jesse T. (See Dinmick, Albert M., assignor.)						
Morgan, Jesse T. (See Dinmick and Morgan.)						
Morgan, John. (See Purcell and Morgan.)						
Morgan, John B., Middleborough, Mass. Concentric steam-joint	485,596	Nov. 1	676	179	61	713
Morgan, John B., Middleborough, assignor, by mesne assignments, of one-half to Rotary Steam Joint Company, Rockland, Mass. Tool-heating device	485,584	Nov. 1	659	175	61	709
Morgan, John R. (See Morgan, Thomas R., Sr., and J. R.)						
Morgan, John R. (See Morgan, Thomas R., Sr., J. R., T. R., Jr., and W. H.)						
Morgan, John R., et al. (See Morgan, William H., assignor.)						
Morgan, John R., assignor of three-fourths to T. R., Sr., and T. R. Morgan, Jr., and W. H.)	472,739	Apr. 12	1123	288 289 281 282	59	225
Morgan, Alliance, Ohio. Friction-clutch						
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	478,803	July 12	1139	282	60	241
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	478,804	July 12	1141	282	60	242
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	481,964	Sept. 6	62	15, 16	60	1346
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Chain-block	484,038	Oct. 11	779	196	61	174
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	486,117	Nov. 15	1508	399 400	61	913
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	488,716	Dec. 27	2431	603	61	1853
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr., T. R. Morgan, Jr., and W. H. Morgan, Alliance, Ohio. Chain-block	483,161	Sept. 27	2018	510 511	60	1770
Morgan, John R., assignor of three-fourths to T. R. Morgan, Sr., T. R. Morgan, Jr., and W. H. Morgan, Alliance, Ohio. Brake for drums of overhead traveling cranes	483,467	Sept. 27	2488	626 627	60	1860
Morgan, John W., Belleville, Ill. Oil-cup	477,379	June 21	1835	450	59	1826
Morgan, Joseph N., Wallace, Ind. Farm-gate	467,950	Feb. 2	68	16	58	538
Morgan, Joseph N., Wallace, Ind. Gate	478,451	July 5	595	146	60	118
Morgan, Joseph U., Dublin, assignor of one-half to M. Shew and J. R. Bond, Cambridge City, Ind. Bicycle-hub	473,426	Apr. 19	2341	564	59	452
Morgan, Milo L., assignor to H. G. Morgan, New York, N. Y. Cash-recorder	467,425	Jan. 19	1812	463	58	361
Morgan, O. P., et al. (See Long, Montgomery, assignor.)						
Morgan, Reese, Bellevue, Ky. Core-seat for pipe-flasks	469,747	Mar. 1	124	33	58	1123
Morgan, Robert. (See Menzies and Morgan.)						
Morgan, Robert, New Haven, Conn. Siphon for water-closet tanks	475,512	May 24	2594	660	59	1181
Morgan, Robert, and J. Menzies, New Haven, Conn. Water-closet	477,867	June 24	2634	659	59	2000
Morgan, Robert, and J. Menzies, New Haven, Conn. Siphon for water-closets	488,794	Dec. 27	2519	632	61	1877
Morgan, Robert W. (See Stafford and Morgan.)						
Morgan, Robert W., New York, N. Y. Check-book	468,441	Feb. 9	829	209 210 750	58	695
Morgan, Ruben D., Cleveland, Ohio. Workman's time-recorder	486,977	Nov. 29	2907	751	61	1222
Morgan, S. W., et al. (See Vandament, George A., assignor.)						
Morgan, Samuel E., Jasper, Ala. Churn	488,573	Dec. 27	2205	545	61	1809
Morgan, Silas J., La Grange, Ill. Milk-receiver	482,264	Sept. 6	560	133	60	1444
Morgan, Simon, Paterson, N. J. Card and Jacquard machine protector	479,895	Aug. 2	183	45	60	618
Morgan Spring Company. (See Morgan and Scott, assignors.)						
Morgan, Thomas R., et al. (See Morgan, William H., assignor.)						
Morgan, Thomas R., Jr., et al. (See Morgan, John R., assignor.)						
Morgan, Thomas R., Sr., et al. (See Morgan, John R., assignor.)						
Morgan, Thomas R., Sr., et al. (See Morgan, William H., assignor.)						
Morgan, Thomas R., Sr., and J. R., assignors of one-fourth to T. R., Jr., and W. H. Morgan, Alliance, Ohio. Overhead traveling crane	475,883	May 31	3204	810 811 669 670	59	1312
Morgan, Thomas R., Sr., J. R., T. R., Jr., and W. H., Alliance, Ohio. Mortar-mounting	479,761	July 26	2692	670	60	562
Morgan, William H. (See Morgan, Thomas R., Sr., J. R., T. R., Jr., and W. H.)						
Morgan, William H., et al. (See Morgan, John R., assignor.)						
Morgan, William H., et al. (See Morgan, Thomas R., Sr., and J. R., assignors.)						
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and J. R. Morgan, Alliance, Ohio. Trolley for electric railways	469,899	Mar. 1	372	93, 94	58	1172
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and J. R. Morgan, Alliance, Ohio. Traveling crane	477,437	June 21	1922	474	59	1843
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and J. R. Morgan, Alliance, Ohio. Mortar-mounting	479,445	July 26	2162	539 540	60	464
Morgan, William H., assignor of three-fourths to T. R. Morgan, Sr. and Jr., and J. R. Morgan, Alliance, Ohio. Mortar-mounting	479,446	July 26	2164	540 541	60	464
Morgan, William R., and C. S. Osborn, Grand Rapids, Mich.; said Morgan assignor to said Osborn. Folding table	476,400	June 7	275	65	59	1492
Morgans, William H., Pontiac, Mich. Gas-generating apparatus	474,178	May 3	452	109 110	59	725
Morganthaler, Frederick, Brooklyn, N. Y. Electric lock	475,137	May 17	2003	507	59	1050
Mori, Fredrick. (See Atkinson, Ravenshaw, and Mori.)						
Moriarty, Charles A., Brooklyn, N. Y. Automatic medicine-stand	483,574	Oct. 4	86	22	61	20
Morison-Allen Company. (See Thurston, Henry C., assignor.)						
Morison, Donald B., Hartlepool, England. Steam-boiler flue and fire-box	477,770	June 28	2472	618	59	1970
Morison, George S., Chicago, Ill. Expansion-bearing for bridges	484,971	Oct. 25	2277	587 588	61	498
Morison, George S., Chicago, Ill., and C. Vogel, San Anselmo, Cal., assignors to Vogel Cable Construction Company, of Colorado. Conduit for cable and electric tramways	469,262	Feb. 23	2115	543 544	58	964
Morley, Don C. (See Morley, James C. and D. C.)						
Morley, James C. and D. C., Hudson, Mich. Ratchet-wrench	467,688	Jan. 26	2247	572	58	450
Morley, John. (See Jennings and Morley.)						
Mörner, Hampus. (See Ekstörner and Mörner.)						
Mörral, John. (See Mörral, Samuel E., J., and W. W.)						
Mörral, Samuel E., J., and W. W., Mörral, Ohio. Corn-husking machine	484,808	Oct. 25	2009	516 517	61	445

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Morral, William W. (See Morral, Samuel E., J., and W. W.)						
Morrell, James A., New Orleans, La. Evaporator	468,776	Feb. 9	1359	{ 342 343 }	58	800
Morrell, James A., New Orleans, La. Process of and apparatus for evaporating sugar solutions	476,891	June 14	1024	248	59	1654
Morrell, Lewis E., <i>et al.</i> (See Marty, Frank, assignor.)						
Morrell, Robert, Summit, N. J. Rail-fastening for longitudinal stringers	467,548	Jan. 26	2046	516	58	412
Morrell, Robert, assignor of fourteen-twentieths to C. S. Day, A. F. Libby, C. F. Wood, G. H. Williams, Summit, W. W. McCullum, Millburn, J. Neafie, C. Brock, Boonton, W. H. Lewis, A. Reasoner, Hoboken, F. Nishwitz, Millington, and C. Siedler, Morristown, N. J. Metallic railway-tie	483,853	Oct. 4	497	123	61	103
Morrell, Robert, assignor of fourteen-twentieths to C. S. Day, A. F. Libby, C. F. Wood, G. H. Williams, Summit, W. W. McCullum, Millburn, J. Neafie, C. Brock, Boonton, W. H. Lewis, A. Reasoner, Hoboken, F. Nishwitz, Millington, and C. Siedler, Morristown, N. J. Rail-joint fastening	483,854	Oct. 4	498	124	61	103
Morrell, Robert, assignor of fourteen-twentieths to C. S. Day, A. F. Libby, C. F. Wood, G. H. Williams, Summit, W. W. McCullum, Millburn, J. Neafie, C. Brock, Boonton, W. H. Lewis, A. Reasoner, Hoboken, F. Nishwitz, Millington, and C. Siedler, Morristown, N. J. Rail-joint fastening	483,855	Oct. 4	499	124	61	103
Morrell, William N., Waterloo, N. Y. Phaeton	473,330	Apr. 19	2082	524	59	422
Morrill, Charles, New York, N. Y. Saw-set	468,816	Feb. 16	1419	361	58	821
Morrill, Charles, New York, N. Y. Lifting-jack	477,771	June 28	2473	618	59	1970
Morrill, George B., East Orange, N. J. Penholder	487,035	Nov. 29	2908	772	61	1239
Morrill, George P., Canterbury, N. H. Ax or tool wedge	477,262	June 21	1649	403	59	1791
Morrill, George W., assignor of one-half to E. H. Rollins, Alton, S. A. Edgerly and C. F. Piper, Wolfborough, N. H. Lasting-pinchers	480,433	Aug. 9	1104	276	60	802
Morrill, Osgood. (See Wells, Harlan P., assignor.)						
Morrill, Osgood. (See Wells and Morrill.)						
Morris, Alfred A., Sandy Hill, N. Y. Regulator for feed-boxes	484,039	Oct. 11	780	196	61	174
Morris, Arthur, Rocketteller, Ill. Hand-binder	482,468	Sept. 27	2491	627	60	1860
Morris Box Lid Company. (See Boatman, Frank P., assignor.)						
Morris Box Lid Company. (See French, Philo N., assignor.)						
Morris, Charles H. C., <i>et al.</i> (See Ladd, Daniel E., assignor.)						
Morris, Charles W., <i>et al.</i> (See Smith, Wesley, assignor.)						
Morris, Charles W., Jr., trustee, <i>et al.</i> (See Smith, Wesley, assignor.)						
Morris, Frank, Alliance, Ohio. Molder's flask	487,851	Dec. 13	1009	{ 254 255 }	61	1539
Morris, George, Libertyville, Ill. Cherry-picker	476,059	May 31	3468	875	59	1366
Morris, George M. (See Morris, John B. and G. M.)						
Morris, George M., Cincinnati, Ohio. Cloth-holder	479,914	Aug. 2	205	51	60	622
Morris, George W., assignor of one-half to A. B. Kipp, Minonk, Ill. Weather-strip	485,747	Nov. 8	915	245	61	777
Morris, Henry. (See Morris, John H. and H.)						
Morris, Isaac L. (See Walters and Morris.)						
Morris, James E., assignor of one-half to W. H. Williams, Chester, Pa. Transferring cable cars from one line to a crossing line	467,457	Jan. 19	1861	475	58	371
Morris, James M., and S. J. Harkness, Scofield, Utah Ter. Car-replacer	473,587	Apr. 26	2533	639	59	530
Morris, Jesse T., Jr., Portsmouth, Va. Clamping device for elastic tires	469,165	Feb. 16	1952	499	58	927
Morris, John B., Philadelphia, Pa. Combination-lock, packing-box, and savings-bank	472,136	Apr. 5	199	53, 54	59	37
Morris, John B. and G. M., Cincinnati, Ohio. Canceling punch	470,435	Mar. 8	1270	325	58	1350
Morris, John H., Maquoketa, Iowa. Fence-machine	474,179	May 3	454	110	59	725
Morris, John H. and H., Seward, Nebr. Combination-lock	466,420	Jan. 5	175	46, 47	58	34
Morris, Joseph L., and J. P. Nace, Lawrence, Kans. Automatic railway-switch	470,696	Mar. 15	1645	{ 427 428 }	58	1434
Morris Manufacturing Company. (See Tinsman, Samuel H., assignor.)						
Morris, Matthias K., Holiday's Cove, W. Va. Type-writing machine	473,945	May 3	97	22, 23	59	655
Morris, Nat. R., <i>et al.</i> (See Sours, Charles D., assignor.)						
Morris, Norman K., Denver, Colo. Method of and apparatus for the manufacture of lead fiber	467,041	Jan. 12	1191	301	58	234
Morris, Norman K., and J. W. Bailey, Denver, Colo. Method of and apparatus for producing lead carbonate	467,042	Jan. 12	1193	301	58	235
Morris, Owen C., Phoenix, Md. Railway-signal	479,436	Mar. 8	1271	{ 325 326 }	58	1350
Morris, Richard, <i>et al.</i> (See Trump, John G., assignor.)						
Morris, Robert J., and R. L. Wiggins, Alexanderville, Ga. Manure-distributor	488,445	Dec. 20	1997	499	61	1752
Morris, Thomas, Brooklyn, assignor to J. Berbecker & Co., New York, N. Y. Extension-bracket	476,892	June 14	1026	248	59	1654
Morris, Thomas D., Seward, Nebr. Door-check	469,825	Mar. 1	258	66	58	1151
Morris, William B., Seattle, Wash. Stump-puller	471,878	Mar. 29	3444	878	58	1798
Morris, William F. (See Kane, William E., assignor.)						
Morris, William J. (See Keenan and Morris.)						
Morris, William L., Cleveland, Ohio. Ore-pulverizer	474,095	May 3	336	81	59	702
Morris, William S., Grand Rapids, Mich. Roofing for box-cars	487,193	Nov. 29	3245	830	61	1288
Morrison, Chester L., West Point, Va. Smoke-conduit for railway-trains	473,769	Apr. 26	2797	703	59	581
Morrison, Edgar K., South Acworth, N. H., assignor to Union Special Sewing Machine Company, Chicago, Ill. Work-guiding device for sewing-machines	468,056	Feb. 2	224	55	58	568
Morrison, George E., and W. A. Dye, Jr., Edgerton, Kans. Device for converting motion	482,584	Sept. 13	1109	268	60	1566
Morrison, George W. (See Fleming, Will A., assignor.)						
Morrison, Hamon, assignor of one-half to G. W. Campbell and J. H. Vaughn, Morantown, Kans. Corn-harvester	482,186	Sept. 6	438	105	60	1421
Morrison, James. (See Shippe, Walter S., assignor.)						
Morrison, James D., Reinbeck, Iowa. Railway-car	475,791	May 31	3027	767	59	1278
Morrison, James F. (See Painter, Gwynne E., assignor.)						
Morrison, James F., and J. Gripp, Pittsburg, Pa. Steam-generator	485,291	Nov. 1	205	58	61	614
Morrison, Jennie M., Milwaukee, Wis. Convertible couch	470,251	Mar. 8	929	230	58	1288
Morrison, John H., Salda, Colo. Vaginal syringe	473,202	July 5	209	52	60	43
Morrison, John W., St. Louis, Mo. Display-rack	470,206	Mar. 8	865	214	58	1276
Morrison, Kenneth J., and M. McLellan, Stellarton, Canada; said McLellan assignor to said Morrison. Pick	486,732	Nov. 22	2467	644	61	1118
Morrison, Robert T., Jr., assignor of one-half to D. P. Eells, Cleveland, Ohio. Car-coupling	475,283	May 17	2235	571	59	1096
Morrison, Walter G., Willimantic, Conn. Device for driving spindles	479,896	Aug. 2	184	45	60	618
Morrison, Walter G., Willimantic, Conn. Spindle	486,231	Nov. 15	1676	443	61	947
Morrison, William H., Holmesburg, Pa. Book-support	470,207	Mar. 8	867	214	58	1276
Morrison, William H., Philadelphia, Pa. Ball-and-socket joint for book-supports	485,471	Nov. 1	495	131	61	672
Morrow, Alexander P., Indianapolis, Ind., assignor to Eclipse Bicycle Company, Beaver Falls, Pa. Crank arm and shaft	485,350	Nov. 1	312	83	61	635

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Morrow, E. W. (See St. John, William H., assignor.)						
Morrow, Edward A., and J. Wilson, Chester, Ark. Automatic railway-gate	479,295	July 19 1890	473	474	60	396
Morrow, Frank M., Altoona, Pa. Show-stand	485,109	Oct. 25 2490	639		61	542
Morrow, Henry M., <i>et al.</i> (See Wade, William, assignor.)						
Morrow, John, New York, N. Y. Car-brake	471,014	Mar. 15 2136	518		58	1529
Morrow, Robert S., and D. W. Glenn, Cleveland, Ohio. Car-coupling	486,489	Nov. 22 2081	551		61	1042
Morse, Cyrus B., assignor to J. H. Comer, New York, and B. P. Dummer, Flushing, N. Y. Machine for making package-carriers	487,679	Dec. 6 717	183		61	1462
Morrow, Wesley, Millbrook, Canada. Potato-digger	469,973	Mar. 1 500	124		53	1195
Morrow, Wesley, Millbrook, Canada. Flax-harvester	480,434	Aug. 9 1105	276		60	802
Morse, Alfred B., Easton, Mass. Heat-regulating device	474,139	May 3 389	91		59	713
Morse, Alfred B., Easton, Mass. Thermostat	474,140	May 3 393	95		59	714
Morse, Charles H., Cambridge, Mass. Protector for electrical apparatus	470,697	Mar. 15 1648	428		58	1435
Morse, Charles S., assignor to Benedict & Burnham Manufacturing Company, Waterbury, Conn. Charging-wagon	476,547	June 7 483	115		59	1533
Morse, Cyrus B. (See Bowman, Rose, and Morse.)						
Morse, George D., and M. Chase, Haverhill, Mass. Type-plate and blank for the same	480,933	Aug. 16 1880	469		60	972
Morse, Jamin S., New York, N. Y. Combined electrical protective and time-detecting system	466,505	Jan. 5 317	80		58	60
Morse, Orville M., assignor to Knickerbocker Company, Jackson, Mich. Dust-collector	468,435	Feb. 16 1607	407		58	857
Morse, Orville M., assignor to Knickerbocker Company, Jackson, Mich. Dust-collector	471,272	Mar. 22 2533	643		58	1617
Morse, Thomas S., Lenox, Mass. Folding framing-square	472,902	Apr. 12 1349	347		59	270
Morse, William M. (See Pattin, Morse, and Pattin.)						
Morss, Charles A. (See Vogler, William, assignor.)						
Morss, Charles A. (See Williams, John H., assignor.)						
Morss, Stephen B., Rahway, N. J. Sash-holder	481,622	Aug. 30 3040	742		60	1220
Mortimer, Charles J. (See Atkinson, John, assignor.)						
Mortimer, John D. D., Stockton, Cal. Hotel-desk	476,807	June 14 887	218		59	1627
Mortimer, John D. D., Stockton, Cal. Shipping receipt-book	482,047	Sept. 6 206	49		60	1375
Morton, Albert H., assignor to Kitsoo Machine Company, Lowell, Mass. Clearer for spike-cylinders and spike-aprons	475,246	May 17 2170	552		59	1083
Morton, Alexander and J., Darvel, Scotland. Figured woven fabric	483,078	Sept. 20 1878	476		60	1731
Morton, Alice R. P., New York, N. Y. Sewing or embroidery table	486,662	Nov. 22 2260	590		61	1076
Morton, Augustus, assignor to Bridgeport Brass Company, Bridgeport, Conn. Fly-fan	474,141	May 3 395	95		59	714
Morton, Augustus, assignor to Bridgeport Brass Company, Bridgeport, Conn. Bicycle-bell	480,026	Aug. 2 432	109		60	664
Morton, Ephraim S., assignor of one-half to A. H. Baker, Brockton, Mass. Last-block fastener	468,087	Feb. 2 267	65		58	576
Morton, Ephraim S., assignor of one-half to A. H. Baker, Brockton, Mass. Last-block fastener	468,088	Feb. 2 268	65		58	576
Morton, Frank, St. Louis, Mo. Ventilating apparatus for grain-bins	468,356	Feb. 9 708	175		58	670
Morton, George K., St. Thomas, Canada. Wallet	474,676	May 10 1277	325		59	893
Morton, George N., <i>et al.</i> (See Facer, Wilson E., assignor.)	479,655	July 26 2493	621		60	525
Morton, Henry, assignor to Branford Lock Works, Branford, Conn. Cylinder-lock	469,946	Mar. 1 453	113		58	1187
Morton, James. (See Morton, Alexander and J.)						
Morton, James, Valley Falls, assignor to Geo. W. Stafford Manufacturing Company, Providence, R. I. Let-off mechanism for looms	475,595	May 24 2723	690		59	1206
Morton, Matthew, Romeo, Mich. Key-seat-cutting machine	468,072	Feb. 2 247	60, 61		58	572
Morton, Matthew, Romeo, Mich. Reversible universal shaper	472,061	Apr. 5 75	20, 21		59	16
Morton, Matthew, and W. Rowan, Romeo, Mich. Combined feed-cutter and corn-husker	468,817	Feb. 16 1420	361		58	821
Morton, Robert P., Liberty, Ind. Wheel-cultivator	466,421	Jan. 5 179	47		58	34
Morton, Samuel S. (See Farquhar, Eisenhart, and Morton.)						
Morton, Samnel S., York, Pa. Journal-box bearing	476,158	May 31 3628	917	918	59	1398
Morton, William F. and W. M., New Haven, Conn. Knob attachment	471,563	Mar. 29 2953	753		58	1706
Morton, William M. (See Morton, William F. and W. M.)						
Morton, William M., New Haven, Conn. Sash-fastener	470,945	Mar. 15 2029	519		58	1508
Morton, William M., New Haven, Conn. Sash-fastener	475,966	May 31 3339	840		59	1337
Morton, Wilson, assignor to W. R. Cavell, Toronto, Canada. Duplicating memorandum-book or sale-slip	487,680	Dec. 6 720	184		61	1463
Moshbacher, Samnel, New York, assignor of one-half to J. E. Hills, Brooklyn, and F. E. Williams, New York, N. Y. Portable shelf	471,697	Mar. 29 3154	804		58	1743
Mosby, Frank W., Jr., Birmingham, Ala. Oil-reservoir	471,489	Mar. 22 2358	727		58	1680
Mosby, Svvert T., Chicago, Ill. Safety attachment	486,490	Nov. 22 2082	551		61	1043
Mosby, William L., <i>et al.</i> (See Cross, Thomas A., assignor.)						
Moschek, Anton, <i>et al.</i> (See Anchan, Ferdinand, assignor.)						
Moseley, Joseph, and B. Blundstone, Manchester, England. India-rubber tire	475,732	May 24 2935	745		59	1246
Moseley, Walker, London, England, assignor to Western Electric Company, Chicago, Ill. Multiple switchboard	468,818	Feb. 16 1422	362		58	821
Moseley, William G., Grain Valley, Mo. Canceling and dating stamp	485,472	Nov. 1 497	131		61	673
Moser, John W. (See Bell and Moser.)						
Moses, Ealy J. (See Moore, George W., assignor.)						
Moses, Frank, Toronto, Canada. Hot-air furnace and cooking-stove	467,755	Jan. 26 2361	599		58	472
Moses, Frank D., assignor to Universal Gas Construction Company, Chicago, Ill. Manufacturing gas	479,293	July 19 1887	473		60	395
Moses, Philo, Fremont, Ohio. Apparatus for pointing carbon pencils	469,486	Feb. 23 2472	634		58	1033
Moses, Philo, Fremont, Ohio. Apparatus for trimming carbon points	476,292	June 7 93	21		59	1456
Moses, Theodore B., Jr., Boston, Mass. Wagon	485,292	Nov. 1 206	58		61	614
Mosher Arc Lamp Company. (See Mosher, John A., assignor.)						
Mosher, Charles D., New York, N. Y. Steam-separator	472,308	Apr. 5 472	121		59	89
Mosher, Charles D., Amesbury, Mass. Steam-generator	472,309	Apr. 5 474	122		59	89
Mosher, Charles D., Amesbury, Mass. Steam-separator	472,310	Apr. 5 476	123		59	89
Mosher, Charles D., Amesbury, Mass. Steam-engine	486,883	Nov. 29 2722	710		61	1185
Mosher, Charles D., assignor of one-half to W. Gardner, New York, N. Y. Thrust-bearing for shafting	485,207	Nov. 1 80	25		61	589
Mosher, George D., assignor of one-half to S. Novitsky, Birmingham, Conn. Thermostatic fire-alarm	473,669	Apr. 26 2652	669		59	553
Mosher, John A., Abilene, Kans. Rheostat	467,611	Jan. 26 2133	541		58	423
Mosher, John A., Chicago, Ill. Electric-arc lamp	485,293	Nov. 1 206	59		61	614
Mosher, John A., assignor to Mosher Arc Lamp Company, Abilene, Kans. Electric-arc lamp	467,610	Jan. 26 2131	541		58	423
Mosher, John A., Chicago, Ill., assignor to Mosher Arc Lamp Company, Abilene, Kans. Electric-arc lamp	472,064	Apr. 5 81	22, 23		59	17
Mosher, John J., and M. R. Jewell, Rochester, N. Y.; said Mosher assignor to said Jewell. Registering and indicating device	485,967	Nov. 8 1244	328		61	843

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Mosher, Samuel E. (See Fuchs, Oscar J., assignor.)						
Mosher, Samuel E., Chillicothe, Ohio. Bicycle.....	477,772	June 28	2474	619	59	1971
Mosher, Silas H., and C. L. Anderson, assignors to Mosher Tubular Metallic Packing and Manufacturing Company, Chicago, Ill. Metallic packing.....	471,185	Mar. 22	2401	612	58	1592
Mosher Tubular Metallic Packing and Manufacturing Company. (See Mosher and Anderson, assignors.)						
Moskovits, Maximilian H. (See Mason and Moskovits.)						
Moskowitz, Jacob. (See Becher, Carl, assignor.)						
Moskowitz, Jacob D., assignor of one-fourth to S. J. Braun, Toledo, Ohio. Bicycle.....	472,796	Apr. 12	1203	309	59	240
Moskowitz, Morris. (See Young and Moskowitz.)						
Moskowitz, Morris. (See Young, Moskowitz, Adler, and Loewenberg.)						
Mosler Bank Safe Company. (See Mosler, Moses, assignor.)						
Mosler Bank Safe Company. (See Mosler, Moses, assignor.) (Reissue.)						
Mosler Bank Safe Company. (See Peck, Franklin H., assignor.)						
Mosler, Moses, assignor to Mosler Bank Safe Company, Cincinnati, Ohio. Burglar-proof safe. (Reissue.)	11,219	Feb. 2	641	160	58	648
Mosler, Moses, assignor to Mosler Bank Safe Company, Cincinnati, Ohio. Safe-door.....	472,584	Apr. 12	892	229	59	184
Mosler Safe and Lock Company. (See Kaiser, John X., assignor.)						
Moss, George A., San Francisco, Cal. Suspension-hook.....	484,335	Oct. 11	1243	316	61	265
Moss, John R., Webster, Pa. Elevator.....	475,263	July 5	325	78, 79	60	65
Moss, John S., Martinsburg, W. Va. Underground electric conduit and trolley-bar for electric railways.....	485,555	Nov. 1	612	163	61	698
Moss, Julian, assignor of two-thirds to E. R. Blanchard and H. B. White, Detroit, Mich. Oscillating engine.....	479,012	July 19	1458	362 } 363 }	60	313
Mossberg, Frank. (See Wardwell, Simon W., Jr., assignor.)						
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Machine for closing the edges of studs, &c.....	478,517	July 5	700	170	60	139
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Wrench.....	482,021	Sept. 6	164	39	60	1367
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Wrench.....	482,749	Sept. 20	1370	339	60	1628
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Jeweler's turk's-head roll.....	484,108	Oct. 11	868	221	61	192
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Antifriction-bearing.....	486,052	Nov. 8	1380	367	61	871
Mossberg, Frank, assignor to Mossberg Manufacturing Company, Attleborough, Mass. Making cages for antifriction-bearings.....	487,194	Nov. 29	3246	830	61	1288
Mossberg Manufacturing Company. (See Mossberg, Frank, assignor.)						
Mosser, Samuel T., Abingdon, Ill. Button-exhibitor.....	483,469	Sept. 27	2493	628	60	1860
Mössner, Gustav, Stuttgart, Germany. Handle for stew-pans.....	468,710	Feb. 9	1253	320	58	780
Mosure, Jonathan, Maglev, Ind. Post-hole auger.....	467,184	Jan. 19	1448	369	58	292
Motherhead, Thomas B., Corsicana, Tex. Stove-flue cleaner.....	479,447	July 26	2165	541	60	465
Motley, Peter, Philadelphia, Pa. Sash-holder.....	487,034	Dec. 13	1147	2-7	61	1565
Mott, Joseph T., New York, N. Y. Fruit-transporting package.....	486,618	Nov. 22	2238	597	61	1081
Motte, Henri P., Paris, France. Panorama.....	487,490	Dec. 6	426	109 } 110 }	61	1405
Motter, Jacob V., Brooklyn, N. Y. Driving mechanism for cars.....	479,915	Aug. 2	206	52	60	632
Mottinger, Noah W., Akron, Ohio, assignor of one-half to S. Mottinger, Suffolk, Va. Hinge.....	481,044	Aug. 16	2059	514	60	1006
Mottinger, Simon. (See Mottinger, Noah W., assignor.)						
Mouat, Laurence, Jr. and E. W. Pratt, assignors to Chicago Hardware Manufacturing Company, Chicago, Ill. Lock.....	484,443	Oct. 18	1415	361	61	311
Moulton, Alvin D. (See Beardsley and Moulton.)						
Moulton, Alvin D. (See Beardsley, Moulton, and Wurth.)						
Moulton, Luther V., Grand Rapids, Mich. Folding bed.....	474,027	May 3	226	54 } 396 } 397 }	59	681
Moulton, Luther V., Grand Rapids, Mich. Folding bed.....	474,849	May 17	1554	396 } 397 }	59	962
Mount, James H., Jamesburg, N. J. Fishing-reel.....	485,208	Nov. 1	81	26	61	589
Mount, Joseph, and F. H. Warnock, Spokane, Wash. Hoisting apparatus.....	467,289	Jan. 19	1612	411	58	323
Mount Pleasant Road Grader Company. (See Holland, James M., assignor.)						
Mower, Jacob K. (See Herrington, Charles R., assignor.)						
Mower, Samuel E., assignor to H. G. Thompson & Sons, New Haven, Conn. Electric-motor mechanism.....	474,328	May 3	706	182	59	772
Mowrer, Isaac S., Xenia, Ohio. Steam-cooker.....	485,819	Nov. 8	999	268	61	794
Mowry, Joseph B., Mansfield, Ohio. Brick-machine.....	468,396	Feb. 9	770	191 } 192 }	58	683
Moxham, Arthur J., Johnstown, Pa. Box brace-chair for girder-rails.....	472,767	Apr. 12	1164	298	59	233
Moxham, Arthur J., Johnstown, Pa. Expansion-rail for railways.....	477,672	June 28	2319	579	59	1939
Moxham, Arthur J., Johnstown, Pa. Rail for railways.....	477,673	June 28	2320	579	59	1940
Moxham, Arthur J., Johnstown, Pa. Rail for railways.....	477,674	June 28	2321	580	59	1940
Moxham, Arthur J., Johnstown, Pa. Expansion-rail for railways.....	477,675	June 28	2322	580	59	1940
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,676	June 28	2323	580	59	1940
Moxham, Arthur J., Johnstown, Pa. Rail-joint.....	477,677	June 28	2325	581	59	1941
Moxham, Arthur J., Johnstown, Pa. Railway-rail joint.....	477,678	June 28	2326	581	59	1941
Moxham, Arthur J., Johnstown, Pa. Combined rail and cross-tie.....	477,679	June 28	2326	581	59	1941
Moxham, Arthur J., Johnstown, Pa. Railway-rail joint.....	477,680	June 28	2327	581	59	1941
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,681	June 28	2328	582	59	1942
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,682	June 28	2331	582	59	1942
Moxham, Arthur J., Johnstown, Pa. Rail for railways.....	477,683	June 28	2333	583	59	1943
Moxham, Arthur J., Johnstown, Pa. Frog or cross for railway-crossings.....	477,684	June 28	2334	583	59	1943
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,685	June 28	2336	584	59	1944
Moxham, Arthur J., Johnstown, Pa. Switch-piece for railway-tracks.....	477,686	June 28	2338	584	59	1944
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,687	June 28	2340	584 } 585 }	59	1915
Moxham, Arthur J., Johnstown, Pa. Railway-crossing.....	477,688	June 28	2342	585	59	1945
Moxham, Arthur J., Johnstown, Pa. Railway-rail joint.....	477,689	June 28	2344	586	59	1946
Moxham, Arthur J., Johnstown, Pa. Railway-rail and making the same.....	477,690	June 28	2346	586	59	1946
Moxham, Arthur J., Johnstown, Pa. Chair for railway-rails.....	482,801	Sept. 20	1447	359	60	1644
Moxham, Arthur J., Johnstown, Pa. Railway-rail chair.....	482,802	Sept. 20	1448	359	60	1644
Moxham, Arthur J., Johnstown, Pa. Channel-rail and chair.....	482,803	Sept. 20	1449	359	60	1644
Moxham, Arthur J., Johnstown, Pa. Railway-rail chair and making the same.....	482,804	Sept. 20	1450	360	60	1644
Moxham, Arthur J., Johnstown, Pa. Combined railway-rail and chair and making the same.....	482,805	Sept. 20	1451	360	60	1645
Moyer, Harvey A. (See Gowing, Daniel H., assignor.)						
Moyer, Mahlon. (See Stiles, William E., assignor.)						
Moyers, James M., assignor of one-half to W. J. Payne, Richmond, Va. Loom-shuttle threader.....	473,849	Apr. 26	2928	737	59	606

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Mozier, Albert M., Cleveland, Ohio. Semaphore for railway service	466,614	Jan. 5	486	125	58	93
Muckenbirt, Charles H., Detroit, Mich. Water-closet	488,363	Dec. 20	1866	467	61	1726
Muckenbirt, Charles H., assignor of two-thirds to J. Bingen and A. J. Springborn, Detroit, Mich. Waste-trap	470,647	Mar. 8	1567	468	58	1410
Mudge, Clark S., Bettsville, Ohio. Musical instrument	488,828	Dec. 27	2597	644	61	1887
Muehleisen, Carl, Baltimore, Md. Child's carriage	486,678	Nov. 22	2380	623	61	1100
Muehlmann, Adolph, Newport, Ky. Engraver's block	481,238	Aug. 23	2402	593	60	1084
Muehlstein Manufacturing Company. (See Muehlstein, Adolph O., assignor.)						
Mueller, Charles R., Jr. (See Hoeninghausen and Mueller.)						
Mueller, David, New York, N. Y., assignor to Bottlers' and Brewers' Machine Manufac- turing Company, Power bottle-corking machine	482,454	Sept. 13	898	{ 217 218 }	{ 60 60 }	1523
Mueller, Emil T., La Crosse, Wis. Cleaner for barrel-bushings	472,065	Apr. 5	84	23	59	18
Mueller, Frank, Albany, N. Y. Labeling-machine	474,877	May 10	1278	326	59	894
Mueller, George A. and O. W., assignors to said George A. Mueller and G. A. Muenzen- maier, Cincinnati, Ohio. Grinding attachment for lathes	477,911	June 28	2700	676	59	2013
Mueller, John B., Streator, Ill. Horse-collar	478,452	July 5	599	146	60	118
Mueller, Ludwig O., and L. Stader, assignors to O. Völker, Munich, Germany. Coffin	460,358	Jan. 5	75	19	58	17
Mueller, Oscar W. (See Mueller, George A. and O. W.)						
Mueller, Philip, Decatur, Ill. Privy	484,040	Oct. 11	781	{ 196 197 }	{ 61 61 }	175
Mueller, Philip, Decatur, Ill. Pipe-rod coupling	480,290	Nov. 15	1779	468	61	969
Mueller, Sebastian, Sharpsburg, A. R. Matchett, and W. Eggers, assignors to H. J. Heinz Company, Allegheny, Pa. Packing-case	474,755	May 10	1391	{ 351 352 }	{ 59 58 }	917
Muenger, Frederick, Hill City, S. D. Miner's candlestick	471,998	Mar. 29	3605	921	58	1830
Muenzenmaier, George A. (See Mueller, George A. and O. W., assignors.)						
Muhlfeld, Henry J., and F. J. Spillane, New York, N. Y. Easel attachment for chairs and other supports	481,045	Aug. 16	2060	514	60	1007
Muhlfelder, David, administrator. (See Mayes, Thomas.)						
Muhlstein, Adolph O., assignor to Muehlstein Manufacturing Company, Pittsburg, Pa. Apparatus for elevating hose	485,129	Oct. 25	2517	647	61	547
Muhr's Sons, H. (See Erbean, Julius, assignor.)						
Muir, James, et al. (See Wright, Samuel, assignor.)						
Muir, James A. (See Blalock and Muir.)						
Muir, James A., Huntsville, Tex. Book-support	481,505	Aug. 23	2847	700	60	1168
Muir, Thomas, Margaretville, N. Y. Butter worker and weigher	485,968	Nov. 8	1245	329	61	844
Mulcahy, Thomas. (See Quinn, John J., assignor.)						
Mulford, Clarence C., Galva, assignor to W. H. Ryon, Streator, Ill. Radiator	487,880	Dec. 13	1060	266	61	1548
Mulholland, W. P., et al. (See Dixon, Henry J., assignor.)						
Mullaly, John, and L. L. Bullock, New York, N. Y. Surface-printing plate	476,759	June 7	796	195	59	1596
Mullaly, John, and L. L. Bullock, New York, N. Y. Surface-printing plate	483,498	Sept. 27	2532	637	60	1869
Mullane, Patrick, Moline, Ill. Holdback for vehicles	468,678	Feb. 9	1206	306	58	769
Mullaney, Edmond D., Badus, S. D. Belt-reel for thrashing-machines	473,946	May 3	99	23	59	656
Mullaney, John E., assignor of one-half to L. R. Thian, Minneapolis, Minn. Chain coup- ling for cars	473,014	Apr. 19	1543	{ 393 394 }	{ 59 59 }	320
Mullen, Charles H. (See Derbyshire and Mullen.)						
Mullen, Melville V., assignor of one-half to R. G. Chase, Chicago, Ill. Side bearing for car-trucks	468,057	Feb. 2	226	55	58	568
Mullen, William J., New York, N. Y. Gas-radiator	480,117	Aug. 2	569	144	60	691
Müller, August, Christianstadt, Germany. Means for varying the strokes of pumps	467,823	Jan. 26	2465	626	58	492
Müller, Bernhard, Chemnitz, Germany. Smoke-consuming furnace	470,501	Mar. 8	1366	356	58	1368
Müller, Bernhard, assignor of one-half to B. Strauss, New York, N. Y. Box-nailing ma- chine	480,735	Aug. 16	1582	{ 396 397 }	{ 60 60 }	912
Müller, Frank X. (See Boehringer and Müller.)						
Müller, Franz, Berlin, Germany. Automatic coin-actuated telephone	483,162	Sept. 27	2019	511	60	1770
Müller, Frederick, Philadelphia, Pa. Pocketbook, &c	476,159	May 31	3630	918	59	1398
Müller, Friedrich, Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Driving attachment or power-transmitter	468,357	Feb. 9	710	{ 175 176 }	{ 58 58 }	671
Muller, George, Hoboken, N. J. Cable-railway curve	481,412	Aug. 23	2699	{ 663 664 }	{ 60 60 }	1138
Muller, George, Hoboken, N. J. Cable-traction system	481,413	Aug. 23	2703	{ 664 665 }	{ 60 60 }	1139
Müller-Jacobs, Armand, assignor to Heliocautic Art Company, New York, N. Y. Pro- ducing photographs on hard surfaces	474,850	May 17	1556		59	962
Müller, Jean, Baltimore, Md. Apparatus for conveying meat through smoke-houses	474,606	May 10	1158	{ 294 295 }	{ 59 59 }	871
Müller, Johann L., Leipsic, Germany. Action for mechanical musical instruments	480,854	Aug. 16	1763	441	60	949
Müller, John H., Brooklyn, N. Y. Machine for knotting the ends of spiral springs	468,465	Feb. 9	868	{ 220 221 }	{ 58 58 }	702
Müller, John H., Bridgeport, Conn. Machine for crushing springs	486,834	Nov. 22	2639	689	61	1154
Müller, Joseph J., Lucerne, Switzerland. Bicycle-support	484,941	Oct. 25	2237	576	61	490
Müller, Julius. (See Baum and Müller.)						
Müller, Otto. (See Gühring, Karl, assignor.)						
Müller, Rudolf, Reiberstieg, Hamburg, Germany. Steam-boiler and furnace	483,260	Sept. 27	2206	554	60	1805
Müller, Teile H. (See Newhall and Müller.)						
Müller, Wilhelm J., Ehrenberg, Germany. Apparatus for kneading dough and shaping it into loaves	479,827	Aug. 2	84	21	60	598
Mullin, Daniel A. (See Sheehan and Mullin.)						
Mullin, Daniel J., Chicago, Ill. Railway joint or fastening	467,674	Jan. 26	2226	566	58	446
Mullins, John W., Fariston, Ky. Firearm	487,423	Dec. 6	318	81	61	1324
Mulloy, John. (See Farnen and Mulloy.)						
Mumbrauer, Edmund. (See Mumbrauer, Wilhelm and E.)						
Mumbrauer, Wilhelm and E., New York, N. Y. Apparatus for measuring and drawing off liquids	472,625	Apr. 12	957	248	59	195
Mumford, Edgar H., Detroit, Mich. Bolster attachment for log-cars	467,951	Feb. 2	68	16	58	538
Mumford, Edgar H., Detroit, Mich. Electric steering-gear	479,828	Aug. 2	85	21, 32	60	598
Mumford, Lucian C., New York, N. Y. Cork-extractor	474,480	May 10	959	247	59	832
Munch, William S., Maplewood, Ohio. Corn-shocker	471,132	Mar. 22	2317	595	58	1577
Mundelin, Louis J., New Haven, Conn. Nipple-holding machine	468,304	Feb. 2	621	155	58	644
Mundry, Peter. (See Gallant, John W., assignor.)						
Mundt, Henry, and H. A. Hoops, Detroit, Mich. Safety device for elevators	484,109	Oct. 11	870	221	61	192
Mundt, Wilhelm, New York, N. Y. Braiding-machine	468,997	Feb. 16	1723	439	58	881
Mundt, Wilhelm, assignor to himself, R. Cohn, and J. Haberman, New York, N. Y. Com- bined spool-holder and stop-motion for braiding-machines	469,974	Mar. 1	501	124	58	1195
Munger, Henry C., Chicago, Ill. Poultry-crate	472,903	Apr. 12	1350	348	59	271

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Munger, Robert S., Birmingham, Ala. Machine for handling, cleaning, and distributing seed-cotton.....	478,883	July 12	1244	{ 308 } 126	60	261
Munger, Robert S., Birmingham, Ala. Duplex cotton-press.....	483,633	Oct. 4	173	43	61	36
Munger, Royal L., and T. R. Capwell, assignors to Dunkirk Wagon Company, Dunkirk, N. Y. Vehicle-brake mechanism.....	478,966	July 12	1379	339	60	287
Municipal Signal Company. (See Martin, Morris, assignor.)						
Municipal Signal Company. (See Wilson, John C., assignor.)						
Munn, H. L., et al. (See Brown, Charles D., assignor.)						
Munn, John F., and J. P. W. Rowe, Troy, N. Y. Nail or tack holding attachment for hammers.....	469,710	Mar. 1	59	17	58	1110
Munn, William G., and E. Christman, assignors to Brennan & Company Southwestern Agricultural Works, Louisville, Ky. Grain-drill.....	473,234	Apr. 19	1923	484	59	390
Munro, Daniel, and W. H. Avis, Toronto, Canada. Spinning-machine.....	475,138	May 17	2004	507	59	1050
Munroe, Frederick W. (See Prior, Matthew, assignor.)						
Munroe, Paul H., Plainfield, Ill. Wagon.....	466,615	Jan. 5	487	{ 125 } 126	58	94
Munroe, Paul H., Plainfield, Ill. Potato-harvester.....	430,776	Aug. 16	1643	411	60	924
Munroe, Robert and Robert, Jr., Allegheny, Pa. Water-tube boiler.....	478,756	July 12	1053	259	60	225
Munsch, Bernhard H., Hastedt, near Bremen, assignor to W. and A. Osenbrück, Hemelingen, Germany. Gas-compressor for refrigerating-machines.....	482,876	Sept. 20	1560	389	60	1667
Munsell & Co., Eugene. (See Dyer, Arthur H. S., assignor.)						
Munsell & Co., Eugene. (See Jefferson, Charles W., assignor.)						
Munsell, William W., Dodge City, Kans. Railway-coach.....	467,514	Jan. 26	1972	501	58	399
Munsell, William W., Dodge City, Kans. Car-heating.....	465,209	Nov. 1	84	26	61	589
Munsie, James F., Jersey City, N. J., assignor to T. L. Coles, New York, N. Y. Under-ground electric conduit.....	470,946	Mar. 15	2031	519	58	1509
Munson, Anson L., East Oakland, assignor of one-half to T. G. McLeran, San Francisco, Cal. Anti-fouling paint.....	488,479	Dec. 20	2053	.....	61	1764
Munson, Corydon W., Toledo, Ohio. Bicycle-exhibiting device.....	478,805	July 12	1144	283	60	242
Munson, Harvey S., New Haven, Conn. Paper box.....	467,336	Jan. 19	1687	432	58	337
Munson, Katharine C., Winthrop, Mass. Shield for baking-ovens.....	484,539	Oct. 18	1568	398	61	341
Munson, Robert L., Silver City, N. Mex. Ter. Car-coupling.....	480,118	Aug. 2	570	145	60	691
Munson Type Writer Company. (See Seifried, Samuel J., assignor.)						
Müster, Nicholas. (See Stenger and Münster.)						
Munton, James, Maywood, Ill. Mold for casting steel car-couplings.....	482,687	Sept. 13	1260	{ 307 } 308	60	1594
Munton, James, Maywood, Ill. Metallic mold for casting draw-bars.....	482,688	Sept. 13	1262	{ 308 } 309	60	1595
Muntzenberger, Adolph, Harvard, Ill. Malt-plow.....	476,293	June 7	95	21, 22	59	1456
Munz, Charles W., assignor of one-half to W. Williams, Detroit, Mich. Extension-table.....	483,361	Sept. 27	2344	589	60	1831
Munz, Theodore C., Toledo, Ohio. Wheel.....	482,806	Sept. 20	1452	360	60	1645
Murali, Aloys R. de. (See Badoni, Massimiliano, assignor.)						
Murch, Alfred, West Fitchburg, Mass. Means for operating the picker-staffs of looms.....	478,453	July 5	600	146	60	118
Murchland, William, Kilmarnock, Scotland. Cow-milker.....	473,770	Apr. 26	2799	704	59	581
Murden, James A., Norfolk, Va. Car-coupling.....	468,679	Feb. 9	1206	307	58	770
Murdoch, Alexander. (See Xander, George A., assignor.)						
Murdock, Edwin H., Cincinnati, Ohio. Check cash register and indicator.....	471,342	Mar. 22	2627	{ 667 } 668	58	1637
Murdock, Edwin H., Cincinnati, Ohio. Cash register and indicator.....	480,957	Ang. 16	1924	{ 481 } 482	60	979
Murdock, Edwin H., Cincinnati, Ohio. Conductor's trip-slip.....	481,369	Aug. 23	2022	645	60	1123
Murdock, Edwin H., Cincinnati, Ohio. Cash register and indicator.....	484,917	Oct. 25	2198	{ 566 } 567	61	482
Murdock, Edwin R., assignor of one-half to C. Gjermundson, Tigerton, Wis. Fire-kindler.....	468,427	Feb. 9	811	.....	58	691
Murdock, Harvey, Brooklyn, N. Y. Window-blind.....	474,259	May 3	573	141	59	749
Murdock, Harvey, Brooklyn, N. Y. Oven-thermometer.....	477,143	June 14	1424	346	59	1735
Murdock, John G., Cincinnati, Ohio. Plumber's fastening-strap for lead pipes.....	470,698	Mar. 15	1650	428	58	1435
Murdock Parlor Grate Company. (See Shaw, Samuel, assignor.)						
Murphy, Charles H., Madisonville, Ky. Faucet bottle-washer.....	473,947	May 3	100	23	59	656
Murphy, John S., Greensburg, assignor of one-half to W. J. Johnston, Pittsburg, Pa. Shoe-lace fastener.....	478,122	July 5	66	17	60	15
Murphy, William R. (See Wendell, Isaac P. and H. A., assignors.)						
Murphy, Cornelius. (See Fellows, Byron W., assignor.)						
Murphy, Daniel H., Hartford, Conn. Commode.....	479,897	Aug. 2	185	45, 46	60	618
Murphy, Daniel W., Marion, Ohio. Annealing-oven.....	482,048	Sept. 6	207	49	60	1376
Murphy, Edward, New York, N. Y. Cash register and indicator.....	488,150	Dec. 13	1503	{ 378 } 379 380	61	1638
Murphy, Frank J., assignor of one-half to A. M. Rundle, Danbury, Conn. Machine for plucking hairs from skins.....	487,349	Dec. 6	179	50	61	1356
Murphy, James C., New Orleans, La. Apparatus for transporting and transferring materials.....	469,912	Mar. 1	394	99	58	1177
Murphy, Jeremiah F., Birmingham, Ala. Cylinder-cock.....	467,295	Jan. 19	1620	413	58	324
Murphy, John B., deceased, Cincinnati, Ohio; M. J. Murphy, administratrix. Cut-out.....	468,101	Feb. 2	287	70	58	580
Murphy, John D., Chicago, Ill. Tube-flanging machine.....	486,984	Nov. 29	2922	754	61	1235
Murphy, John F., Paterson, N. J. Compound engine.....	474,643	May 10	1218	312	59	8-2
Murphy, Joseph, and F. M. Rankin, Covington, Ohio. Fire-escape.....	484,402	Oct. 11	784	197	61	175
Murphy, Junius A., New Orleans, La. Machine for preparing hair for combing.....	467,043	Jan. 12	1196	{ 302 } 303	58	235
Murphy, Junius A., New Orleans, La. Drawing-frame.....	468,726	Feb. 9	1279	325	58	784
Murphy, Junius A., New Orleans, La. Traverse-motion for bobbins in winding-machines.....	472,383	Apr. 5	592	151	59	111
Murphy, Junius A., New Orleans, La. Hair-curling machine.....	480,605	Aug. 9	1369	340	60	855
Murphy, Mary J., administratrix. (See Murphy, John B.)						
Murphy, Michael L., Coraopolis, Pa. Glass-furnace.....	476,672	June 7	667	162	59	1569
Murphy, Peter H., East St. Louis, Ill. Car-coupling.....	469,166	Feb. 16	1953	500	58	927
Murphy, Robert T., Gainesville, Ga. Safety-switch.....	488,172	Dec. 13	1551	389	61	1648
Murphy, Robert W., Seattle, Wash. Ink-roller for printing-presses.....	487,759	Dec. 13	859	218	61	1509
Murphy, Thomas, Sewickley, Pa. Method of and apparatus for equalizing links.....	478,454	July 5	601	146	60	119
Murphy, Thomas, Deal, England. Knife-cleaner.....	487,446	Dec. 6	364	94	61	1393
Murphy, William G., Jr., Marysville, Cal. Electric railway.....	483,856	Oct. 4	500	124	61	104
Murphy, William W. (See McCollum, James C., assignor.)						
Murr, William, Fountain City, Wis. Horse-collar.....	487,956	Dec. 13	1179	294	61	1571
Murray, Albert M., and D. N. Stutsman, near Goshe, Ind. Box-machine.....	484,041	Oct. 11	782	197	61	175
Murray, Alexander H. (See Grant and Murray.)						
Murray, Alexander K., Bradford, Pa. Lamp-filling tank or cau.....	483,857	Oct. 4	501	125	61	104

Alphabetical list of patentees—Continued.

Name, residence, and invention,	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Murray, Alexander K., Bradford, Pa. Gas-producer	486,491	Nov. 22	2083	552	61	1043
Murray, Archibald B., San Rafael, Cal. Water-motor	474,851	May 17	1557	397	59	962
Murray, Charles H. (See Noble and Murray.)						
Murray, Edward J. B. (See Murray, Thomas E., assignor.)						
Murray, George, assignor to Johnson Company, Johnstown, Pa. Brace-chair for railway-rails	478,806	July 12	1145	283	60	242
Murray, George, assignor to Johnson Company, Johnstown, Pa. Brace-chair for railways	482,807	Sept. 20	1452	{ 360 361 }	{ 60 60 }	1645
Murray, George W., Minneapolis, Minn. Spring-mattress	468,018	Feb. 2	167	41	58	557
Murray, James, Hillsborough, Ohio. Hotel-register	467,426	Jan. 19	1814	463	58	361
Murray, James, Hillsborough, Ohio. Ruling-machine	468,549	Feb. 9	1009	{ 258 259 }	{ 58 58 }	730
Murray, John G., et al. (See Riggs, Lewis S., assignor.)						
Murray, John J. (See Hays, James C., assignor.)						
Murray, Samuel, assignor of one-half to W. F. Murray, San Francisco, Cal. Rope-guiding sheave	479,296	July 19	1893	474	60	396
Murray, Samuel A., Jr. (See Eltonhead, William B., assignor.)						
Murray, Stephen D., assignor to W. Burr, Dallas, Tex. Cotton-ginning apparatus	467,044	Jan. 12	1199	303	58	236
Murray, Stephen D., assignor to W. Burr, Dallas, Tex. Apparatus for feeding seed-cotton to gins	488,446	Dec. 20	1998	{ 499 500 }	{ 61 61 }	1751
Murray, Stephen D., assignor to W. Burr, Dallas, Tex., and J. H. Deems, St. Louis, Mo. Apparatus for elevating, distributing, and feeding seed-cotton to gins	472,607	Apr. 12	928	240	59	190
Murray, Thomas E., assignor of one-half to E. J. B. Murray, Albany, N. Y. Combined cock and coupling for barrels, &c.	485,847	Nov. 8	1045	279	61	803
Murray, Tiberis S. (See Williams and Murray.)						
Murray, William F. (See Murray, Samuel, assignor.)						
Murray, William J. (See Tholen and Murray.)						
Murrey, Jasper, assignor of one-half to S. Harris, Cleveland, Ohio. Brake mechanism for cars	486,384	Nov. 15	1917	{ 507 508 }	{ 61 61 }	997
Murrey, Thomas J., New York, assignor of one-half to R. O. Israel, Brooklyn, N. Y. Toaster	475,884	May 31	3207	811	59	1313
Musgrave, George H., Somerville, Mass. Lubricator	466,572	Jan. 5	422	{ 108 109 }	{ 58 58 }	81
Musgrave, Thomas H. (See Senger, Henry, assignor.)						
Musgrove, Joseph, assignor to Gender & Paeschke Manufacturing Company, Milwaukee, Wis. Cover-holder for tea-kettles, &c.	478,967	July 12	1379	339	60	287
Musse, Bertha, New York, N. Y. Adjustable pattern for drafting garments	467,045	Jan. 12	1202	{ 303 304 }	{ 58 58 }	236
Musse, Bertha, New York, N. Y. Adjustable pattern	487,760	Dec. 13	860	218	61	1509
Musser, Henry C., et al. (See Groff, Sylvanus E., assignor.)						
Mussey, Eugene K., et al. (See Weller, George L., assignor.)						
Mussey, George D., Detroit, Mich. Ice-creeper	488,215	Dec. 20	1630	406	61	1680
Musso, Emma, Vineland, N. J. Skewer or needle for closing fowls, &c.	482,969	Sept. 20	1713	432	60	1696
Muther, Lorenz, assignor to Union Special Sewing Machine Company, Oak Park, Ill. Machine for sewing looped fabrics	469,525	Feb. 23	2530	651	58	1044
Mutimer, Frederick, assignor of one-half to Rockford Bolt Works, Rockford, Ill. Bolt-threading machine	480,204	Aug. 2	709	181	60	716
Muzzy, William A. (See Dearborn, Gilbert K., assignor.)						
Myer, Henry C. (See Colves, Charles, assignor.)						
Myers, Alvie, Melmore, Ohio. Clutch	481,046	Aug. 16	2062	514	60	1007
Myers, Augustus, Toronto, Canada. Derrick	474,142	May 3	396	96	59	715
Myers, Charles, assignor of three-fourths to M. Wells, Manchester, England. Screw-propeller	467,322	Jan. 19	1658	{ 422 423 }	{ 58 58 }	332
Myers, Charles, assignor of one-half to M. Wells, Manchester, England. Screw-propeller	467,393	Jan. 19	1659	423	58	332
Myers, Charles and E., and J. Davies, Manchester, England. Screw-propeller	467,824	Jan. 26	2467	626	58	492
Myers, Charles E. (See Jones and Myers)						
Myers, Charles F., McKinstry's Mills, Md. Adjustable brush-handle	476,060	May 31	3469	875	59	1366
Myers, Clark C., New Richmond, Ohio. Seythe-snath	472,626	Apr. 12	959	248	59	196
Myers, David, North Manchester, Ind. Automatic boiler-cleaner	466,506	Jan. 5	320	80	58	61
Myers, Elizabeth. (See Myers and Davies.)						
Myers, Frank I., New York, N. Y. Electric railway signaling apparatus	467,581	Jan. 26	2089	529	58	421
Myers, Frank I., New York, N. Y., assignor to Hall Signal Company, of Maine. Railway signaling apparatus	469,438	Feb. 23	2385	612	58	1017
Myers, Frederick, New York, N. Y. Banjo	472,904	Apr. 12	1351	348	59	271
Myers, George D., et al. (See Myers, Orlando R., assignor.)						
Myers, George F., Pittsburg, Pa. System of electric lighting	480,372	Aug. 9	1004	{ 252 253 }	{ 60 60 }	785
Myers, George F., Pittsburg, Pa. Mining-machine	481,187	Aug. 23	2317	570	60	1068
Myers, George F., assignor of one-half to H. G. Pott, Sheboygan, Wis. Band sawing-machine	478,364	Dec. 20	1867	{ 467 468 }	{ 61 61 }	1726
Myers, Harry E. (See Krouse, Myers, and Girard.)						
Myers, Henry, Philadelphia, Pa. Wheel-tire	468,971	Feb. 16	1674	427	58	870
Myers, Henry, Philadelphia, Pa. Wheel-tire	477,773	June 28	2475	619	59	1971
Myers, Henry, Philadelphia, Pa. Wheel-tire	477,774	June 28	2477	619	59	1971
Myers, Henry, assignor of two-thirds to C. H. Worner and J. Hessenauer, Alton, Ill. Lubricator	467,595	Jan. 26	2111	535	58	425
Myers, James L., Boston, Mass. Roller-compressor	476,233	May 31	3766	950	59	1423
Myers, James L., Boston, Mass. Leaf-stripping machine	476,234	May 31	3767	950	59	1423
Myers, James L., New Orleans, La., assignor to Tropical Fibre Machine and Process Company, Portland, Me. Machine for treating fibrous plants	476,160	May 31	3631	{ 918 919 }	{ 59 59 }	1399
Myers, James L., New Orleans, La., assignor to Tropical Fibre Machine and Process Company, Portland, Me. Machine for treating fibrous plants	476,161	May 31	3634	920	59	1399
Myers, John, Welsh Run, Pa. Brooder	475,139	May 17	2007	507	59	1051
Myers, John A., Louisville, Ky. Piston meter	480,606	Aug. 9	1370	{ 340 341 }	{ 60 60 }	855
Myers, John F., San Francisco, Cal. Attachment for ranges	471,222	Mar. 22	2462	625	58	1604
Myers, John F., San Francisco, Cal. Cooking, heating, and illuminating lamp-stove	481,768	Aug. 30	3291	801	60	1269
Myers, John H., Philadelphia, Pa. Sleeping-car	476,022	May 31	3405	859	59	1353
Myers, John V., Industry, Ill. Thill-coupling	493,261	Sept. 27	2206	554	60	1805
Myers, Luther, Maumee, Ohio. Vehicle	486,884	Nov. 29	2735	711	61	1186
Myers, Orlando R., Warsaw, assignor of three-fourths to E. H. Porter, O. Edwards, and G. D. Myers, Hancock county, Ill. Car-coupling	476,401	June 7	277	65	59	1492
Myers, Philip A., Ashland, Ohio. Hay-carrier and track	466,616	Jan. 5	489	126	58	94
Myers, Philip A., Ashland, Ohio. Pump	486,350	Nov. 15	1869	492	61	986
Myers, Reuben J., Mount Joy, Pa. Padlock	468,113	Feb. 2	308	74	58	583

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Myers, Sheridan J., Hebron, Miss. Rein-support	475,465	May 24	2518	642	59	1167
Myers, Solomon. (See Cashell, George W., assignor.)						
Myers, Theodore B. (See Yungbauer, Joseph, assignor.)						
Myers, William B., Sterling, Ill. Wind-wheel	472,763	Apr. 12	1157	297	59	232
Myers, William F., Jersey City, N. J. Machine for perforating check or other blanks	468,353	Feb. 9	712	176	58	671
Myers, William H., Oregon, Wis. Plow	469,584	Feb. 23	2620	672	58	1062
Myers, William J., assignor of one-third to J. Gihney, Sing Sing, N. Y. Brush-holder	467,043	Jan. 12	1203	304	58	237
Myers, William M., Hannibal, Mo. Beverage	471,879	Mar. 29	3445	.....	58	1798
Mynard, Frank T., Dushore, Pa. Wagon-spoke	487,289	Dec. 6	80	24	61	1337
Myrick, Joseph A., Salisbury, N. C. Bleaching	481,414	Aug. 23	2706	665	60	1139
N. O. Nelson Manufacturing Company. (See Case and Hendrick, assignors.)						
N. O. Nelson Manufacturing Company. (See Crawford, Edwin G., assignor.)						
Naber, Joseph, Jr., Hamburg, N. Y. Tea-kettle	485,016	Oct. 25	2360	607	61	514
Nabring, Richard H. (See Johanson, Emil, assignor.)						
Nace, John P. (See Morris and Nace.)						
Nace, Thomas H., Chicago, Ill. Engine-governor	480,778	Aug. 16	1645	412	60	925
Nadorff, Henry, Louisville, Ky. Ammonia-still	484,667	Oct. 18	1774	451	61	353
Naeff, John J., Paterson, N. J. Recovering tin from scrap	477,220	June 21	1571	356	59	1776
Naegele, Charles F., New York, N. Y. Fastener for picture-frames	481,117	Aug. 16	2186	541	60	1029
Naegele, Otto E., Minneapolis, Minn. Record form-book	467,994	Feb. 2	134	32	58	549
Naeglin, Charles. (See Sharp, Abel B., assignor.)						
Nærup, Thorwald, Jr. (See Kraske and Nærup.)						
Nagal, Jacob. (See Huelsen and Nagal.)						
Nagel, Eduard, Hoboken, N. J. Water-heater	479,141	July 19	1659	415	60	350
Nagele, John, assignor of one-half to M. J. Manning, Clarendon, Ark. Car-wheel guard ..	470,362	Mar. 8	1147	294	58	1328
Nagley, Charles C. and F. G., Memphis, N. Y. Transplanting-machine	467,428	Jan. 19	1818	464	58	361
Nagley, Frank G. (See Nagley, Charles C. and F. G.)						
Nairn, John W. (See Folk, Nairn, and Dempsey.)						
Nance, John D., Huntsville, Tex. Roller-index	466,619	Jan. 5	493	127	58	95
Nanney, Addison A., Evansville, Ind. Steam-actuated valve for engines	471,882	Mar. 29	3448	880	58	1799
Napier, Alfred M., Brooklyn, assignor of one-half to A. G. Cabus, New York, N. Y. Knob attachment	467,281	Jan. 19	1601	408	58	320
Naples, Pedro de, San Francisco, Cal. Ore-concentrator	486,232	Nov. 15	1677	444	61	947
Narracott, Samuel J. (See Oetzmann and Narracott.)						
Nash, Charles E., Newton, Mass. Multiple-signal transmitter	466,620	Jan. 5	495	127	58	95
Nash, Nathan E., and G. A. Eddy, assignors to National Electric Valve Company, Cleveland, Ohio. Valve-controller	471,999	Mar. 29	3606	921	58	1830
Nashua Iron and Brass Foundry Company. (See Caswell, Alvin C., assignor.)						
Nashua Lock and Hardware Company. (See Moore, James H., assignor.)						
Nashua Saddlery Hardware Company. (See Taber, Orrin, assignor.)						
Nason, Carleton W., and C. H. Leinert, New York, N. Y. Refrigerating apparatus	482,268	Sept. 6	567	{ 134 135 }	{ 60 59 }	{ 1445 1207 }
Nate, John J., Chicago, Ill. Cable-hanger	475,600	May 24	2728	691	59	1207
Nate, John J., Chicago, Ill. Electric switch	487,092	Nov. 29	3087	{ 793 794 }	{ 61 61 }	{ 1258 1258 }
Nation, Edmund C., Peekskill, assignor to himself, and E. Wagh, Brooklyn, N. Y. Apparatus for making bleaching-powder	480,028	Aug. 2	434	110	60	664
National Ammonia Company. (See Dreisierner, Jacob, assignor.)						
National Carving Company. (See Snow, Frederick, assignor.)						
National Cash Register Company. (See Blanchard, Allen I., assignor.)						
National Cash Register Company. (See Carney, Thomas, assignor.)						
National Cash Register Company. (See Douglas, William G., assignor.)						
National Cash Register Company. (See Grove, George W., assignor.)						
National Cash Register Company. (See Lord, Charles E., assignor.)						
National Cash Register Company. (See Loree, Perry E., assignor.)						
National Cash Register Company. (See Parkhurst and Ham, assignors.)						
National Cash Register Company. (See Pfeifer, John, assignor.)						
National Cash Register Company. (See Rector, Edward, assignor.)						
National Cash Register Company. (See Reeves, Orwell C., assignor.)						
National Chemical and Fertilizer Company. (See Van Ruymbeke, Joseph, assignor.)						
National Company. (See Baldwin, Cyrus W., assignor.)						
National Company. (See Brown, Thomas E., Jr., assignor.)						
National Company. (See Heermans, Thaddeus W., assignor.)						
National Company. (See Otis and Smith, assignors.)						
National Company. (See Reynolds, George H., assignor.)						
National Company. (See Smith, Rudolph C., assignor.)						
National Company. (See Venn, Isaac H., assignor.)						
National Cork Extractor Company. (See Lumley, Webb, and Jacobs, assignors.)						
National Cotton Seed Oil and Huller Company. (See Faulkner, James J., assignor.)						
National Electric Valve Company. (See Nash and Eddy, assignors.)						
National Fly Paper Company. (See Trenner, Alfred B., assignor.)						
National Fly Paper Company. (See Whitelaw, Francis M., assignor.)						
National Hardware Company. (See Fiske, Joseph, assignor.)						
National Harrow Company. (See Bostick, Alonzo, assignor.)						
National Heeling Machine Company. (See Demary, George T., assignor.)						
National Hollow Brake Beam Company. (See Baker, Jacob W., assignor.) (Reissue.)						
National Hollow Brake Beam Company. (See Hien, Philip, assignor.)						
National Hollow Brake Beam Company. (See Robischung, Henry B., assignor.)						
National Ice Machine Company. (See Duffy, John F., assignor.)						
National Key-Opening Can Company. (See Zimmerman, John, assignor.)						
National Machine Company. (See Hogan, James T., assignor.)						
National Machine Works. (See Hertel, Max, assignor.)						
National Manufacturing Company. (See Derlon, Arthur C., assignor.)						
National Match Selling Machine Company. (See Latimer, William G., assignor.)						
National Needle Company. (See Berry, John, assignor.)						
National Saw Company. (See Clemson, George N., assignor.)						
National Sheet Metal Screw Pipe Company. (See Sonthard, Abraham M., assignor.)						
National Switch and Signal Company. (See Pfeil, George H., assignor.)						
National Switch and Signal Company. (See Pfeil, Henry S., assignor.)						
National Tube Works Company. (See Dodge, Walter E., assignor.)						
National Type Writer Company. (See Unz, Henry H., assignor.)						
National Worsted Mills. (See Shanahan, John J., assignor.)						
Natus, Fred. C. A. (See Black and Natus.)						
Nauman, William H., assignor to Dayton Farm Implement Company, Dayton, Ohio. Combined harrow and seeder	477,441	June 21	1927	{ 475 476 }	{ 59 59 }	{ 1844 1844 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Naumann, Charles, Schlettau, Germany. Manure-distributer and grain-drill	467,517	Jan. 26	1979	502	58	400
Navarre, A. F. (See Warner, John P., assignor.)						
Navarro, José F. de, New York, N. Y. Rotary furnace for burning cement, &c. (Reissue).....	11,224	Feb. 9	1362	343	58	801
Navone, Antonio L., Calistoga, Cal. Saw-swaging device	478,886	July 12	1254	310	60	263
Naylor, Ernest W., Cleveland, Ohio. Hydraulic shearing-machine	471,824	Mar. 29	3369	858	58	1783
Naylor, Ernest W., Cleveland, Ohio. Safety device for elevators	471,825	Mar. 29	3370	858	58	1783
Naylor, John. (See Anderson and Naylor.)						
Naylor Manufacturing Company. (See Naylor, William H., assignor.)						
Naylor, William H., Philadelphia, Pa., assignor to Naylor Manufacturing Company, Camden, N. J. Sash cord and securer	476,163	May 31	3639	921	59	1400
Neafie, James, <i>et al.</i> (See Morrell, Robert assignor.)						
Neagle, Thomas J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Neal, Albert D., Boston, and H. F. Eaton, Cambridge, Mass.; said Eaton assignor to said Neal. Electrical transmitting apparatus	486,888	Nov. 29	2729	712	61	1187
Neal, Albert D., Boston, and H. F. Eaton, Quincy, Mass.; said Eaton assignor to said Neal. Type-writing and printing instrument	486,889	Nov. 29	2735	712 713 714	61	1188
Neal, Albert D., Boston, and H. F. Eaton, Quincy, Mass.; said Eaton assignor to said Neal. Electrical type-writer	487,227	Nov. 29	3302	842 843 844	61	1298
Neal, Albert D., Boston, and H. F. Eaton, Quincy, Mass.; said Eaton assignor to said Neal. Electric type-writer	487,228	Nov. 29	3367	843 844 845	61	1299
Neal, Albert D., Boston, and H. F. Eaton, Quincy, Mass.; said Eaton assignor to said Neal. Printing-telegraph	487,229	Nov. 29	3313	845 846 847 848	61	1300
Neal, Andrew J., assignor of one-half to L. H. Swaney and C. M. Neal, Miles, Iowa. Horse-shoe-calk-sharpening device	485,585	Nov. 1	661	175	61	709
Neal, Charles M., <i>et al.</i> (See Neal, Andrew J., assignor.)						
Neal, Fred H., and J. R. Donnelly, Fairfield, Me. Burglar-alarm	480,340	Aug. 9	948	240	60	775
Neal, Lemuel C., Lewiston, Idaho. Current-motor	471,564	Mar. 29	2954	753	58	1707
Neal, William A., Bunger's, W. Va. Portable fence	488,632	Dec. 27	2300	569	61	1827
Neale, David, Fort Calhoun, Nebr. Anchor-ripar	486,887	Nov. 29	2728	711	61	1187
Neames, Maurice M., St. Patrick's, La. Car-dumping apparatus	470,589	Mar. 8	1483	386	58	1393
Nebel, John, Charlton, assignor to Siemens Brothers & Co., Limited, Westminster, England. Armature for dynamo-electric machines	482,265	Sept. 6	562	133	60	1444
Neckerman, Irvan, Pittsburg, assignor of one-half to J. O. Baglin, Allegheny, Pa. Car-coupling	470,144	Mar. 1	744	185	58	1244
Nedwied, Wilhelm, Schlan, Austria-Hungary. Coffee-roaster	466,263	Jan. 12	904	231	58	181
Needham, John O. (See Needham, William, assignor.)						
Needham, William, assignor of one-half to J. O. Needham, Tampico, Ill. Hog-nose cutter	472,932	Apr. 12	1396	358	59	280
Neef, Charles J., Texarkana, Ark. Motor	472,906	Apr. 12	1354	348	59	271
Neef, John, Akron, Ohio. Box-machine	488,066	Dec. 13	1408	350	61	1620
Neefus, David, Jr., Elizabeth, N. J. Egg-box	484,863	Oct. 25	2099	541	61	463
Neely, Austin, Greenville, Miss. Seed-planter	473,124	Apr. 19	1728	437	59	352
Neely, Samuel L. (See Lantz and Neely.)						
Neely, William A., Lynn, Mass. Sewing-machine	467,299	Jan. 19	1628	414	58	325
Neely, William A., Lynn, Mass. Stay for boots or shoes	472,197	Apr. 5	292	76	59	55
Neer, Charles F., Catawba, Ohio. Thill-coupling	488,771	Dec. 27	2511	624	61	1869
Neer, Harry M., assignor to himself, O. W. Kelly, and T. Reynolds, Springfield, Ohio. Cash register and indicator	476,295	June 7	98	22 23 24 25	59	1457
Neeves, George A., <i>et al.</i> (See Altmann, Julius, assignor.)						
Neeves, William B., <i>et al.</i> (See Altmann, Julius, assignor.)						
Neff, Abraham J., assignor to W. B. Lehman, Goshen, Ind. Sickie-grinder	485,973	Nov. 8	1255	331	61	846
Neff, Chapin C., Good Hope, Ill. Car-coupling	478,125	July 5	69	18	60	16
Neffen, P. H., <i>et al.</i> (See Thrush, John W., assignor.)						
Negley, William R., Pittsburg, Pa. Game-board	484,558	Oct. 18	1593	404	61	346
Negri, Constantine de. (See Williamson and Negri.)						
Négrier, Charles, Périgueux, France. Apparatus for concentrating sulphuric acid	468,891	Feb. 16	1532	390	58	842
Negus, John S., Brooklyn, N. Y. Ship's log	481,241	Aug. 23	2407	594	60	1085
Nehf, Leonard J. M., and G. W. Mitchell, Sutton, Nebr. Cultivator	469,588	Feb. 23	2627	673	58	1063
Nehr, Herman F., assignor to Craighead & Kintz Company, Ballardvale, Mass. Sand-blast machine	469,642	Feb. 23	2688	692	58	1076
Nehring, William, Evansville, Ind. Lock	482,970	Sept. 20	1714	433	60	1696
Nehse, Friedrich C., Dusseldorf, Germany. Device for filling coal into regulation stoves	475,885	May 31	3208	811	59	1313
Neider, Fred. A., Augusta, Ky. Carriage-curtain light	470,699	Mar. 15	1651	428	58	1435
Neidhardt, William A., New York, N. Y. Towel-bracket	474,260	May 3	574	141	59	749
Neidhardt, William A., New York, N. Y. Towel-bracket	477,144	June 14	1425	347	59	1735
Neil, Albert A. (See Daily and Neil.)						
Neil, William S., Enon, W. Va. Self-locking nut	483,676	Oct. 4	231	58	61	48
Neill, James W., Leadville, Colo. Treating and concentrating pyritiferous ores	472,387	Apr. 5	597	152	59	112
Neill, Julia L. (See Pickett and Neill.)						
Neill, Robert J., Elizabeth, N. J. Sectional-top folding table	482,525	Sept. 13	1023	247	60	1549
Neilsen, Wilhelm. (See Guethler and Gellhaus, assignors.)						
Neily, Charles C., Boston, Mass. Gymnastic apparatus	481,807	Aug. 30	3352	820	60	1281
Neimeyer, John, assignor to D. Shafer, Hamilton, Ohio. Saw-handle	480,856	Aug. 16	1765	442	60	949
Nelbach, Joseph B. (See Dowling, William H., assignor.)						
Nelke, Louis. (See Koecher, Edmund, assignor.)						
Nellis, Emery D., St. Louis, Mo. Stove-damper	470,439	Mar. 8	1274	326	58	1351
Nellis, Emery D., St. Louis, Mo. Stove-grate	478,042	June 28	2904	725	59	2052
Nelms, Alexander P., Georgetown, Tex. Nut-lock	482,949	Sept. 20	1684	424	60	1690
Nelson, Alexander M., Birkenhead, assignor of one-half to J. Wilson, Liverpool, England. Writing device	488,945	Dec. 27	2793	689	61	1928
Nelson, Andrew L., J. Knapper, and I. Taylor, Dunbar, Pa. Safety miner's lamp	474,182	May 3	457	111	59	726
Nelson, Charles, Axtell, Nebr. Wagon-box	478,706	July 12	968	240 241	60	208
Nelson, Charles, Brooklyn, N. Y. Torpedo	485,974	Nov. 8	1257	331	61	846
Nelson, Charles F., Winchester, Va. Railway-tie and fastening	468,360	Feb. 9	714	177	58	672
Nelson, Elihu, New York, N. Y. Sectional feed-water heater	477,816	June 28	2546	637	59	1983
Nelson, Elihu, assignor of one-half to W. M. Macbean, New York, N. Y. Sectional surface condenser	477,812	June 28	2532	635	59	1981
Nelson, Elihu, assignor of one-half to W. M. Macbean, New York, N. Y. Sectional surface condenser	477,813	June 28	2537	635 636	59	1981

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Nelson, Elihu, assignor of one-half to W. M. Macbean, New York, N. Y. Feed-water heater and condenser	477,814	June 28	2540	636	59	1982
Nelson, Elihu, assignor of one-half to W. M. Macbean, New York, N. Y. Feed-water heater and condenser	477,815	June 28	2543	636	59	1983
Nelson, George, assignor of one-half to L. R. Fife, Livingston, Tex. Mole-trap	488,448	Dec. 20	2002	500	61	1754
Nelson, Hahns. (See Lane, Dennis, assignor.)						
Nelson, Hans. (See Christensen and Nelson.)						
Nelson, Hayden S., and F. M. Heuett, assignors of one-half to B. Hardin, M. Janes, and L. B. Daniels, Jr., Beirne, Ark. Combined seeder and harrow	486,494	Nov. 22	2088	553	61	1043
Nelson, Irenaus P., Muncie, Ind. Jar-sealing device	474,756	May 10	1392	352	59	917
Nelson, Irenaus P., assignor of one-half to G. F. McCulloch, Muncie, Ind. Jar-sealing device	478,126	July 5	70	18	60	16
Nelson, James F., Homer, La. Cultivator	467,995	Feb. 2	136	33	58	550
Nelson, John, West Bay City, Mich. Rail-joint	473,162	Apr. 19	1788	451	59	364
Nelson, John, Brooklyn, N. Y. Heater	488,131	Dec. 13	1477	372	61	1634
Nelson, John A., Nebraska City, Nebr. Gate	467,556	Jan. 26	2059	520	58	415
Nelson, Joseph M., Coleman, Mich. Station-indicator	472,221	Apr. 5	337	87	59	63
Nelson, Ole K. (See Moland, George O., assignor.)						
Nelson, Peter H., assignor to S. H. Sinclair Company, Chicago, Ill. Gas-burner for heating purposes	472,198	Apr. 5	293	77	59	55
Nelson, Peter H., assignor to S. H. Sinclair Company, Chicago, Ill. Combined gas generator and heater	480,436	Aug. 9	1106	277	60	802
Nelson, Robert S., and A. Kreuter, Chicago, Ill. Ironing-machine	473,950	May 3	106	24	59	657
Nelson, Robert S., and A. Kreuter, Chicago, Ill. Ironing-machine	485,707	Nov. 8	853	229	61	764
Nelson, Robert W., Hartford, Conn. Type setting and distributing machine	473,405	Apr. 19	2212	555	59	446
Nelson, Swen P., Omaha, Nebr. Car-coupling	467,014	Jan. 12	1146	291	58	226
Nelson, T. J. (See Stracener, Upton W., assignor.)						
Nelson, Thomas G., and W. P. Gelabert, Sweet Springs, Mo. Billet-loop	476,673	June 7	668	162	59	1569
Nelson, Thomas P., Harrisburg, Pa. Target	473,332	Apr. 19	2084	524	59	422
Nelson, William C., Santa Rosa, Cal. Dish-washer	467,620	Jan. 26	2145	544 545	58	431
Nelson, William W., and C. A. Singletary, Collinsville, Ill. Hook	466,700	Jan. 5	611	159	58	118
Neeninger, Oscar A. (See Beck and Neeninger.)						
Neeninger, Robert F., assignor to E. J. Ill, Newark, N. J. Treating materials containing metals	488,898	Dec. 27	2705	669	61	1910
Neracher, Charles, Cleveland, Ohio. Wood-trimming machine. (Reissue.)	11,286	Nov. 22	2651	692	61	1156
Neri, Contento, Friendship, Me. Surface-gage	480,959	Aug. 16	1928	482	60	980
Nerta, Oehlmann von, Washington, D. C. Dry-dock	472,566	Apr. 12	868	223	59	179
Nesbit, Robert H., et al. (See Griffin, Thomas W., assignor.)						
Nesbitt, Josiah, assignor of one-half to J. J. Coulter, Toronto, Canada. Engine or machinery stop	469,213	Feb. 16	2045	523	58	942
Nesbitt, Thomas. (See Beale and Nesbitt.)						
Nesmith, Joseph A., Paxson, Va. Convertible chair	483,810	Oct. 4	431	106 107	61	89
Nesom, Thomas. (See Crahan and Nesom.)						
Ness, Arthur, Middlesbrough-on-Tees, England. Lubricator	482,560	Sept. 13	1078	262	60	1559
Nessle, John P., Newark, N. J. Whistle-harp	471,015	Mar. 15	2139	549	58	1530
Nesson, Henry, Bristol, S. D. Stool	469,358	Feb. 23	2265	581	58	994
Nester, Hershel M., assignor of one-half to Dilworth & Poling, Hendricks, W. Va. Button	485,111	Oct. 25	2492	640	61	542
Neth, George J., assignor of one-half to J. Gress, Dayton, Ohio. Double-acting pump	482,692	Sept. 13	1270	311	60	1596
Netschert, John G., assignor of one-third to J. W. Vogel, Newark, N. J. Lock-nut	471,492	Mar. 22	2861	727	58	1681
Nen, Gustave S., New York, N. Y. Electric-wire tapper	467,891	Jan. 26	2578	653	58	512
Neubert, Ernst. (See Rosenbaum and Neubert.)						
Neuburger, Albert, Kansas City, Mo. Electric elevator	468,253	Feb. 2	519	129 130	58	626
Neuert, Jacob, Cleveland, Ohio. Clutch	474,183	May 3	459	111	59	726
Nenhaus, Arnold, London, England. Combined cigar-lighting and advertising apparatus	468,452	Feb. 9	846	214	58	698
Neuls, George W., Kane, Pa. Currycomb	467,580	Dec. 6	556	143	61	1432
Neumann, John, Brooklyn, N. Y. Cooling and dispensing device for liquors	473,333	Apr. 19	2086	524 525	59	422
Neumann, John, Brooklyn, N. Y. Sectional interchangeable bar-fixtures	473,771	Apr. 26	2799	704	59	582
Neumann, John, Brooklyn, N. Y. Pump valve and case	479,299	July 19	1697	475	60	397
Neumann, John W., and J. R. Pfanz, Louisville, Ky. Car-brake	474,261	May 3	575	141	59	750
Neumann, John W., and J. R. Pfanz, Louisville, Ky. Car-brake	483,859	Oct. 4	504	125	61	104
Neumann, John W., and J. R. Pfanz, Louisville, Ky. Car-brake	487,151	Nov. 29	3181	815	61	1276
Neumann, Peter T., Galion, Ohio. Traction-engine	479,892	Aug. 2	88	23	60	599
Neustadt, Conrad, Dayton, Ohio. Butter-cutter	477,019	June 14	1227	297	59	1696
Neville, Adolph, St. Louis, Mo. Combined floss and belt	469,637	Feb. 23	2684	690	58	1076
Nevegold, Fred, Columbia, Pa. Metal-rolling mill	480,609	Aug. 9	1375	342	60	857
Nevel, Charles W., Towanda, Pa. Drawer	478,014	June 28	2860	716	59	2044
Nevel, William A., Will's Point, assignor of one-half to G. G. Kemper, Leonard, Tex. Cotton-chopper	487,935	Dec. 13	1147	287	61	1565
Neville, Asa G. (See Young and Neville.)						
Nevins, William S., Terre Haute, Ind. Folding bed	482,266	Sept. 6	563	133	60	1444
New Bremen Machine Company. (See Titus, John C., assignor.)						
New Departure Bell Company. (See Rockwell, Edward D., assignor.)						
New, Edward, Hamilton, Canada. Loading-barrow for brick-machines	472,138	Apr. 5	201	54	59	38
New Haven Clock Company. (See Porter, Wilson E., assignor.)						
New Process Nail Company. (See Miner, William W., assignor.)						
New York Air Brake Company. (See Ford, William H., assignor.)						
New York Air Brake Company. (See Manning, Harry G., assignor.)						
New York Air Brake Company. (See Massey, Albert P., assignor.)						
New York and Pennsylvania Company. (See Armstrong, Lewis D., assignor.)						
New York Belting and Packing Company. (See Straus, Alexander, assignor.)						
New York Condensed Milk Company. (See Knight, Charles A., assignor.)						
New York Condensed Milk Company. (See Ward, Anthony, assignor.)						
New York Electrical Device Company. (See Lundstedt, Olof E., assignor.)						
New York Electrical Device Company. (See Malmberg, Ernst R., assignor.)						
New York Electrical Device Company. (See Martindale and Malmberg, assignors.)						
New York Filter Company. (See Blessing, James H., assignor.)						
New York Filter Company. (See Deutsch, William M., assignor.)						
New York Wood Fibre Company. (See Hull and McEwan, assignors.)						
Newark Machine Company. (See Grube, Jefferson, assignor.)						
Newark Watch Case Material Company. (See Arthur, Charles, assignor.)						
Newark Watch Case Material Company. (See Richardson, Willis S., assignor.)						
Newberry, James J., Round Mountain, Ala. Suspended rack	479,523	July 26	2301	515	60	490

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Newbill, James, Trezevant, Tenn. Wagon-brake	485,332	Nov. 1	277	75	61	628
Newbury, Alfred J., New York, N. Y. Envelope-fastener	486,586	Nov. 22	2234	586	61	1071
Newbury, Alonzo, assignor to E. A. Newbury, Coxsackie, N. Y. Pipe-hanger	472,068	Apr. 5	88	24	59	19
Newbury, Emma A. (See Newbury, Alonzo, assignor.)						
Newbury, James G., Coxsackie, N. Y. Molding-disk	482,063	Sept. 6	227	54	60	1379
Newby, Albert S., Kansas City, Mo. Grate for cook-stoves or ranges	474,502	May 10	991	255	59	839
Newby, Albert S., Kansas City, Mo., assignor to J. Hobrecker, Jr., Omaha, Nebr. Stove-pipe-damper	476,674	June 7	669	163	59	1569
Newcomb, Albert E., Philadelphia, Pa. Bntton	484,810	Oct. 25	2014	517	61	446
Newcomb, Harry H., Boston, Mass. Apparatus for trimming photographic prints	476,481	June 7	397	92	59	1514
Newcomb, Henry, Corinth, Miss. Shoe	482,134	Sept. 6	340	81	60	1402
Newcomb, Ohadiah W., Welda, Kans. House-door letter-box	473,334	Apr. 19	2050	525	59	423
Newcomb, Thomas W., and D. F. Wiley, Wellfleet, Mass. Sail-reefing	471,847	Mar. 29	3400	867	58	1789
Newell Brothers Manufacturing Company. (See Beckwith, Francis E., Jr., assignor.)						
Newell, Charles E., San Francisco, Cal. Can-labeling machine	470,165	Mar. 1	782	193	58	1250
Newell, Charles E., assignor of one-half to P. Crittenden, San Francisco, Cal. Automatic fountain for pasting machines	470,164	Mar. 1	781	193	58	1250
Newell, Charles E., San Francisco, Cal., assignor to Pacific Labeling Company, of California. Can-labeling machine	470,166	Mar. 1	784	194	58	1251
Newell, Frank P., and H. Mohle, Stevens Point, Wis. Railway-switch stand	473,335	Apr. 19	2091	526	59	423
Newell, James L., assignor to W. B. and E. W. Pelton, Ashland, W. H. Webb, Superior, and A. C. Bossard, Kaukauna, Wis. Watch	479,376	July 19	2034	507	60	424
Newell, John, assignor of one-half to Sweet, Wallach & Co., Chicago, Ill. Scene-shifting apparatus	484,506	Oct. 18	1515	385	61	330
Newell, Joseph S., Thomaston, Conn. Machine for cutting ice	467,189	Jan. 19	1455	371	58	293
Newell, Otis K., Boston, Mass. Nursing-bottle	466,361	Jan. 5	80	21	58	18
Newell, Otis K., Boston, Mass. Nursing-bottle	484,811	Oct. 25	2015	517	61	446
Newey, James C., Birmingham, England. Spring-hook	484,336	Oct. 11	1244	317	61	265
Newgard, Gustav. (See Thorsen, Ludwig, assignor.)						
Newhall, George M., and C. L. Hamilton, Philadelphia, Pa. Black-ash dissolver	478,630	July 12	868	{ 213 214 }	60	187
Newhall, George M., and C. L. Hamilton, Philadelphia, Pa. Wood-pulp drainer	488,399	Dec. 20	1923	482	61	1737
Newhall, George M., and T. H. Müller, assignors to George M. Newhall Engineering Company, Limited, Philadelphia, Pa. Evaporator	477,442	June 21	1931	{ 477 478 }	59	1845
Newhouse, Frederick, Toledo, assignor to Harris Metal Wheel Company, Auburndale, Ohio. Wagon running-gear	469,504	Feb. 23	2497	640	58	1037
Newhouse, John E., Magnetic Springs, Ohio. Ice-cream freezer	485,646	Nov. 8	748	197	61	742
Newhouse, John W., Indianapolis, Ind. Trolley for electric railways	475,467	May 24	2521	642	59	1167
Newitt, Frederick, Kansas City, Mo. Compound pliers	468,005	Feb. 2	151	36	58	553
Newkirk, Isaac R., Philadelphia, Pa. Tire for wheels	467,015	Jan. 12	1146	291	58	226
Newkirk, Ninian M., Chatham, Canada. Fanning-mill	467,380	Jan. 19	1747	446	58	348
Newlove, John, Michigan City, Ind. Street-sweeper	469,030	Feb. 16	1777	453	58	892
Newman, Horace J., Fort Wayne, Ind. Hat-box	484,812	Oct. 25	2016	518	61	447
Newman, Hugo, New York, N. Y. Device for heating cars	471,016	Mar. 15	2140	549	58	1530
Newman, Ira W., Toledo, Ohio. Addressing attachment for printing-presses	479,917	Aug. 2	208	53	60	623
Newman, Jacob. (See Gregory, John H., assignor.)						
Newman, Nelson, assignor of two-thirds to G. A. Sanders and S. J. Willett, Springfield, Ill. Manhole-cover for steam-boilers	474,028	May 3	228	55	59	682
Newman, Nelson, assignor of two-thirds to S. J. Willett and G. A. Sanders, Springfield, Ill. Automatic switch	487,881	Dec. 13	1061	266	61	1549
Newman, Prentice A., Runge, Tex. Boiler feeder and indicator	485,976	Nov. 8	1258	332	61	847
Newman, Samuel, Cincinnati, Ohio. Display-stand	485,975	Nov. 8	1257	332	61	847
Newman, Samuel T., Danbury, Conn. Hat-packing ring	477,868	June 28	2638	659	59	2000
Newman, Socrates, <i>et al.</i> (See Coze, André, assignor.)						
Newman, Socrates, <i>et al.</i> (See Coze and Lencachez, assignors.)						
Newport, John J., <i>et al.</i> (See Wiley, Horace B., assignor.)						
Newton, Alvin E., Brooklyn, N. Y. Can-opener	476,164	May 31	3640	921	59	1401
Newton, Andrew L., assignor of one-half to M. A. Evans, Norwich, Conn. Mortising-auger	479,377	July 19	2035	508	60	424
Newton, Arthur, <i>et al.</i> (See Newton, John M., assignor.)						
Newton, Charles O., Homer, N. Y. Elevated electric conduit	468,388	Feb. 9	755	{ 187 188 }	58	679
Newton, Frederick P., <i>et al.</i> (See Garland, Frank M., assignor.)						
Newton, George, Chicago, Ill. Automatic steam-damper regulator	478,127	July 5	71	19	60	16
Newton, George, New York, N. Y. Bearing for balance-staffs of timepieces	482,565	Sept. 13	1110	268	60	1566
Newton, George M., Sharon, Ala. Pick-handle protector	483,977	Nov. 8	1260	332	61	847
Newton, James A., Kingston, Tenn. Sliding gate	485,212	Nov. 1	88	27	61	590
Newton, John M., assignor of five-twelfths to J. E. Gimson and A. Newton, Stalybridge, England. Apparatus for producing lettering, &c., in relief on sheets of ductile metal	482,267	Sept. 6	565	134	60	1445
Newton, Miron W., Battle Creek, Mich. Hydrostatic scale	473,772	Apr. 26	2801	704	59	582
Newton, Miron W., Battle Creek, Mich. Exercising apparatus	460,271	Aug. 9	844	215	60	756
Newton, Nelson A., Kalamazoo, Mich. Carriage-gear coupling	478,128	July 5	72	19	60	16
Newton, Robert, Providence, R. I. Sewer-trap	478,808	July 12	1147	284	60	243
Newton, Robert, Providence, R. I. Sewer-trap	488,365	Dec. 20	1870	468	61	1727
Newton, Robert W., Providence, R. I. Automatic sprinkler	478,809	July 12	1148	284	60	243
Newton, William H., assignor of one-half to A. M. McGee, Decatur, Ill. Dehorner	472,139	Apr. 5	202	54	59	38
Newton, William H., assignor of one-half to A. M. McGee, Decatur, Ill. Thill-coupling	474,503	May 10	992	256	59	839
Ney Manufacturing Company. (See Taylor, Bruce, assignor.)						
Neynaber, Charles, <i>et al.</i> (See Meyer, Henry, assignor.)						
Nibelius, Axel W., Hackettstown, N. J. Method of and apparatus for separating graphite or like substances from crushed rock	486,495	Nov. 22	2091	553	61	1044
Nichless, Anthony, Baileyville, Ill. Truck	483,006	Sept. 20	1771	418	60	1708
Nichol, John, Chicago, Ill. Steam-shovel	476,808	June 14	888	218	59	1628
Nichols, Abel P., Jordan Village, assignor of one-half to W. H. Troth, Vandalia, Ind. Fan attachment for chairs	484,603	Oct. 18	1656	{ 420 421 }	61	359
Nichols, Alvin L., Grove City, Ohio. Tally-sheet	479,449	July 26	2166	542	60	465
Nichols, Bradford W. (See Streeter and Nichols.)						
Nichols, Charles K. (See Crowley, David, assignor.)						
Nichols, Danton H., Boston, C. L. and C. A. Cotton, Dedham, Mass. System of lighting railway cars and platforms	485,647	Nov. 8	750	{ 197 198 199 }	61	742
Nichols, Emory I., San Francisco, Cal. Pulverizing-mill	466,864	Jan. 12	905	{ 231 232 233 }	58	182
Nichols, Emory I., San Francisco, Cal. Hydraulic motor	467,612	Jan. 26	2134	542	58	429
Nichols, Emory I., San Francisco, Cal. Ignitor for gas-engines	490,272	Aug. 9	845	215	60	756

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Nichols, Frederic B. (See Wellstood and Nichols.)						
Nichols, Frederic B., and A. T. Crane, New York, N. Y.; said Nichols assignor to said Crane. Producing ornamental enamel designs	47,568	June 21	2129	.....	59	1886
Nichols, George, Hailey, Idaho. Snow-plow	476,063	May 31	3472	876	59	1367
Nichols, Grant B., Wapakoneta, Ohio. Physician's operating-table	466,621	Jan. 5	498	128	58	96
Nichols, Grant B., Wapakoneta, Ohio. Gamo apparatus	471,883	Mar. 29	3449	880	58	1799
Nichols, Grant B., Wapakoneta, Ohio. Toy mortar	481,808	Aug. 30	3354	821	60	1921
Nichols, Henry, Hunslet, near Leeds, England. Guide-line for planting purposes	477,776	June 28	2478	620	59	1971
Nichols, James N. (See Harrah and Nichols.)						
Nichols, John B., Milwaukee, Wis. Attachment for mortising-machines	484,225	Oct. 11	1058	268	61	229
Nichols, Mathew S., Central Village, Conn. Dental-disk carrier	480,121	Aug. 2	573	145		
Nichols, Perrin W. (See Spofford, Jason, Jr., assignor.)						
Nichols, Robert F., Sr., Alturas, Cal. Motor	479,570	July 26	2368	590	60	502
Nichols, Walker B., Black River Falls, Wis. Hame and trace connector	471,188	Mar. 22	2406	612		
Nichols, William, assignor of one-half to W. S. Webb, Ozark, Ark. Bridle-bit	471,493	Mar. 22	2862	728	58	1681
Nichols, William A. (See Barnes, Lewis, assignor.)						
Nichols, William K., San Francisco, Cal. Cash-register	480,208	Aug. 2	718	182 183 184	60	718
Nicholson, Andrew B., deceased, New York, N. Y.; E. F. Nicholson, administratrix. Op- era-glass holder	478,350	July 5	455	111		
Nicholson, Charles W., Assamooosick, Va. Fertilizer-distributor	471,884	Mar. 29	3451	881	58	1800
Nicholson, Charles W., Assamooosick, Va. Water-wheel	473,773	Apr. 26	2802	704	59	582
Nicholson, Ethel F., administratrix. (See Nicholson, Andrew B.)						
Nicholson, Francis H. (See Nicholson, Josiah and F. H.)						
Nicholson, Francis T., assignor to C. Wolf, Philadelphia, Pa. Envelope-machine	486,233	Nov. 15	1680	444 445	61	948
Nicholson, Henry, Gibbsborough, N. J. Milk-cooler	469,407	Feb. 23	2345	602		
Nicholson, Jacob H., assignor to Roanoke Wood Novelty Company, Roanoke, Va. Swing	479,524	July 26	2302	575	60	496
Nicholson, James C., assignor of one-half to W. C. and F. Beindorf, Litchfield, Ill. Revers- ble valve gear	475,601	May 24	2729	691 692	59 1208	
Nicholson, John M., Deckerville, Mich. Plow	469,168	Feb. 16	1957	500	58	927
Nicholson, Josiah and F. H., Belvidere, N. C. System of drainage	483,236	Sept. 27	2128	541	60	1793
Nicholson, William F., Worcester, Mass. Hand implement for tooling stone surfaces	477,693	June 28	2250	587	59	1917
Nicholson, William H. (See Sutley and Nicholson.)						
Nickel, David, and E. W. Wainwright, Morris, assignors to Coleman Hardware Company, Chicago, Ill. Furniture-caster	467,952	Feb. 2	69	16	58	538
Nickerson, Charles F., Reading, and L. M. Fleet, Boston, Mass. Shutter-worker	484,972	Oct. 25	2278	588	61	498
Nickerson, Freeman, Jr., assignor to himself and H. McClusky, Fall River, Mass. Tail- board spring	473,774	Apr. 26	2803	705	59	583
Nicklès, Rodolphe, Petit Quevilly, France. Apparatus for dyeing	488,216	Dec. 20	1631	406 407	61	1681
Nickles, William O. (See Lybe and Nickles.)						
Nicol, Henry, and G. Ljung, San Francisco, Cal. Horseshoe-machine	474,918	May 17	1652	422 423	59	983
Nicol, Mathew J. (See Hagadorn and Nicol.)						
Nicol, Robert, Jr., Chicago, Ill. Curling-iron	469,375	Feb. 23	2295	591	58	1000
Nicolai, Ludwig, Dresden, Germany. Card-board tube	467,258	Jan. 19	1564	398	58	314
Niederer, John J., New York, N. Y. Fabric-holding frame for embroidering-machines	476,809	June 14	891	218	59	1628
Niederer, John J., New York, N. Y. Fabric-holding frame for embroidering-machines	477,261	June 21	1651	403	59	1791
Niekamp, John G., Fort Recovery, Ohio. Trousers-pattern	484,445	Oct. 18	1418	362	61	311
Nielsen, Niels P., Terre Haute, Ind. Knife	477,817	June 28	2548	637	59	1983
Nielson, John F. (See Martin, Morris, assignor.)						
Nielson, Walter, New York, N. Y. Skate	480,610	Aug. 9	1376	342	60	857
Nieman, Henry W., et al. (See Dickey, Foster, assignor.)						
Nieman, Hiram H., Cincinnati, Ohio, assignor to American Fire Engine Company, Seneca Falls, N. Y. Flue-protector for steam-boilers	485,112	Oct. 25	2493	640	61	542
Niemczyk, Anton, Leipsic, Germany. Gas or petroleum motor	480,737	Aug. 16	1589	397	60	913
Nierrmann, Franz H., Jefferson City, Mo. Revolving woodworking-rasp	474,680	May 10	1283	327	59	895
Nierrmann, Franz H., Jefferson, Mo. Wood turning and working machine	487,637	Dec. 6	645	165 166	61	1419
Niese, Elise. (See Niese, Julius, assignor.)						
Niese, Henry E., Jersey City, N. J., assignor to American Sugar Refining Company, New York, N. Y. Treating cane-juice and other saccharine liquors	471,060	Mar. 15	2197	.....	58	1541
Niese, Julius, assignor to E. Niese, St. Louis, Mo. Box-fastener	473,436	Apr. 19	2250	567	59	454
Niese, Julius, assignor to E. Niese, St. Louis, Mo. Soap	485,113	Oct. 25	2494	.....	61	543
Nieuwenhuys, Auguste, Brussels, Belgium. Dioptric lens for railway-carriage lights	478,015	June 23	2611	716	59	2045
Nightingale, Joseph O., Paterson, N. J. Neckscarf	483,693	Oct. 4	256	63	61	54
Nikirk, John H., Sharon, Pa. Walking-stick and flag	484,446	Oct. 18	1420	362	61	312
Niles, Arthur J., Lancaster, N. H. Water-closet	484,559	Oct. 18	1594	401	61	346
Niles, Milton C., Oak Park, Ill. Rail-joint	473,638	Apr. 26	2608	657	59	544
Niles, Milton C., Oak Park, Ill. Rail-joint	477,694	June 28	2351	587	59	1947
Niles, Milton C., Oak Park, Ill. Rail-joint	480,506	Aug. 9	1217	304	60	826
Niles, Milton C., Oak Park, Ill. Rail-joint	484,226	Oct. 11	1059	269	61	230
Niles, Milton C., Oak Park, Ill. Rail-joint	484,227	Oct. 11	1062	270	61	230
Niles, Milton C., Oak Park, Ill. Rail-joint	484,228	Oct. 11	1061	270	61	231
Niles, Milton C., Oak Park, Ill. Rail-joint	484,229	Oct. 11	1067	271	61	231
Niles, Peter H., Topeka, Kans. Sash-balance	487,290	Dec. 6	81	24	61	1338
Niles & Scott Company. (See Scott, Emmet H., assignor.)						
Nilier, Charles J., assignor to Novelty Electric Company, Philadelphia, Pa. Wire-gage	476,057	May 31	3462	874	59	1365
Nilsen, Anton J., Chicago, Ill. Combination traveler's case or valise	469,342	Feb. 23	2239	574 575	58	988
Nilson, Lars, Flushing, N. Y. Lamp-support	468,442	Feb. 9	830	210		
Nilson, Nils, Minneapolis, assignor of one-fourth to E. F. Quackenbush, Le Sueur, Minn. Automatic weighing-scale	476,810	June 14	892	219	59	1628
Nilson, Nils, Minneapolis, assignor of one-half to E. F. Quackenbush, Le Sueur, Minn. Steam trap	483,119	Sept. 20	1942	491	60	1744
Nilson, Olof, Salt Lake City, Utah Ter. Stove	484,230	Oct. 11	1067	271	61	232
Nirdlinger, Max, Minneapolis, Minn. Brick or fuel press	477,060	June 14	1295	315	59	1710
Nishwitz, Frederick, et al. (See Morrell, Robert, assignor.)						
Nissen, John J. (See Finnant and Nissen.)						
Nithack, Gustav, Obernigk, near Breslau, Germany. Label-holder	480,857	Aug. 16	1766	442	60	949

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr-g.	Vol.	Page.
Nittinger, August, Sr., Philadelphia, Pa. Hog-scraper and claw-hook	478,810	July 12	1150	284	60	243
Nivois, Victor, Brooklyn, N. Y. Watchcase	481,809	Aug. 30	3355	821	60	1281
Nix, Robert. (See Bogen and Nix.)						
Nixdorff, Charles E. (See Blueher, Ernst J., assignor.)						
Nixon, Arthur F., and L. L. Gibson, Everton, Mo. Latch and lock	475,089	May 17	1938	491	59	1037
Nixon, John, Farmland, Ind. Depurator	476,548	June 7	485	115	59	1533
Nixon, Samuel E. (See Merrill, John N., assignor.)						
Nixon, Thomas C. (See Ketchum and Nixon.)						
Nixon, William H., Plymouth, Ind. Weather-strip	482,022	Sept. 6	165	40	60	1368
Noble, Andrew, and C. H. Murray, assignors to Sir W. G. Armstrong, Mitchell & Company, Limited, Newcastle-upon-Tyne, England. Apparatus for working disappearing guns	484,374	Oct. 11	1295	330 331 332	61	276
Noble, Benjamin, et al. (See Weber, Adolph, assignor.)						
Noble, Butler G., deceased, Brooklyn, N. Y., L. S. Noble, administrator, and assignor, by mesne assignments, to Noble Mining and Milling Company, of New York. Amalgamating gold or silver with mercury	470,209	Mar. 8	870	215	58	1277
Noble, Cyrus F., West Baldwin, Me. Device for coupling chain-links	486,587	Nov. 22	2235	586	61	1071
Noble, Edward H., Salem, Mass. Insole	472,713	Apr. 12	1088	279	59	218
Noble, Edwin J. (See Prouty, Enoch, assignor.)						
Noble, Louis S., administrator. (See Noble, Butler G.)						
Noble Mining and Milling Company. (See Noble, Butler G., assignor.)						
Noble, Orville D. (See Rosenthal and Noble.)						
Noble, Samuel C., Overpeck, assignor of one-half to N. B. Tubbs, Hamilton, Ohio. Car-coupling	486,601	Nov. 22	2259	590	61	1075
Noble, William H., Chelsea, Mass. Sheet-metal pipe-elbow	471,620	Mar. 29	3037	773	58	1721
Noblet, Charles H., assignor of one-half to H. Albright, Bucyrus, Ohio. Roller for clod crushers or pulverizers	483,007	Sept. 20	1772	448	60	1709
Nock, George W., Philadelphia, Pa. Pulley	487,491	Dec. 6	428	110	61	1406
Noel, John A., Dunmore, W. Va. Cutter-bar for mowers	472,000	Mar. 29	3607	921	58	1830
Noelle, Ewald, Lüdenscheld, Germany, assignor to R. A. Panchaud, London, England. Button-setting tool	470,628	Mar. 8	1543	402	58	1405
Nolan, Patrick, Birmingham, Ala. Nut-locking washer	477,020	June 14	1228	298	59	1696
Nolan, William P., San Francisco, Cal. Ratchet-drill brace	484,231	Oct. 11	1071	272	61	232
Noland, Mary B., Independence, Mo. Broiling-pan	471,134	Mar. 22	2319	595	58	1577
Nolen, James G. (See Richter and Nolen.)						
Nolen, Stephen A., McCrory, Ark. Bridle	476,675	June 7	670	163	59	1570
Nolen, Stephen A., McCrory, Ark. Harness-saddle	478,205	July 5	213	53	60	44
Noll, Augustus, Mount Vernon, N. Y., assignor to A. J. Tower, trustee, Boston, Mass. Conduit for electric conductors	481,912	Aug. 30	3526	863	60	1314
Noll, Augustus, Mount Vernon, N. Y., assignor to A. J. Tower, trustee, Boston, Mass. Conduit for electric conductors	481,913	Aug. 30	3527	863	60	1315
Noll, Augustus, Mount Vernon, N. Y., assignor to A. J. Tower, trustee, Boston, Mass. Electric-circuit connection	481,914	Aug. 30	3528	863	60	1315
Noll, Charles, et al. (See Trendley, John, assignor.)						
Nolley, David D., assignor of one-half to A. J. Hines, Wilson, N. C. Cable-car grip	475,143	May 17	2012	508	59	1052
Nolley, David D., assignor to E. K. Wright, F. Rountree, and J. D. Farrier, Wilson, N. C. Portable burglar-alarm	484,232	Oct. 11	1073	272	61	233
Nolley, David D., assignor to E. K. Wright, F. Rountree, and J. D. Farrier, Wilson, N. C. Combined electric burglar and fire alarm	484,233	Oct. 11	1074	272	61	233
Nonantum Worsted Company. (See Ballantyne, James L., assignor.)						
Neppel, Emil, Philadelphia, Pa. Apparatus for purifying oil	477,061	June 14	1297	315	59	1710
Norcross, David P., Wilton, N. J. Alarm	480,273	Aug. 9	846	215	60	756
Nordberg, Bruno V., Milwaukee, Wis. Adjustable bearing	468,822	Feb. 16	1426	363	58	823
Nordberg, Bruno V., assignor to Bruno Nordberg Company, Milwaukee, Wis. Air-pump for condensers	482,315	Sept. 6	656	157	60	1464
Nordtmeier, Hermann, Breslau, Germany. Filter-pump	472,547	Apr. 12	843	215 216	59	174
Nordyke & Marmon Company. (See Thompson, Evert M., assignor.)						
Norfolk, Frederick C., Des Moines, assignor to Norfolk Manufacturing Company, Ottumwa, Iowa. Perfumed starch and making the same	480,660	Aug. 9	1479	.....	60	876
Norfolk Manufacturing Company. (See Norfolk, Frederick C., assignor.)						
Norfolk, Virginia, Peanut Company. (See Vellines, Benton H., assignor.)						
Norgrave, George B., Philadelphia, Pa., assignor to R. I. Brewster, New York, N. Y. Insulator	466,726	Jan. 5	670	172	58	127
Noriega, Eloy, Mexico, Mexico. Microphone	481,048	Aug. 16	2064	515	60	1007
Noriega, Eloy, Mexico, Mexico. Telephone	481,049	Aug. 16	2065	515	60	1007
Noriega, Eloy, Mexico, Mexico. Microphone	481,050	Aug. 16	2066	516	60	1008
Noriega, Eloy, Mexico, Mexico. Telephone	481,051	Aug. 16	2066	516	60	1008
Norman, Green B., Batesville, Ark. Bench dog or clamp	487,702	Dec. 13	802	219	61	1509
Norman, Oscar A. Boston Mass. Furniture-drawer	468,684	Feb. 9	1215	308 309	58	771
Norman, William W. (See Horn George W. and J. L., assignors.)						
Normand, Desiré, Providence R I Envelope	476,549	June 7	486	115	59	1534
Normand, Joseph E., Watertown assignor to C. G. Emery, New York, N. Y. Locomotive-driver brake	468,254	Feb. 2	527	130	58	627
Normann, Olaus A., St. Olof, Minn. Sleigh	467,826	Jan. 26	2469	627	58	493
Normanville, Samuel A. de, Liverpool England. Alarm-clock	468,255	Feb. 2	528	131	58	628
Norrrington, Henry H., West Bay City Mich. Perforating-punch	481,583	Aug. 30	2979	731	60	1209
Norris, Frederick. (See Bulmer, George D., assignor.)						
Norris, Henry D., et al. (See Shaw, Charles H., assignor.)						
Norris, James M., Pierceton, Ind. Plow-clevis	474,681	May 10	1284	327	59	895
Norris, John A. (See Atkinson, Henry C., assignor.)						
Norris, John W. (See Davis, Charles E., assignor.)						
Norris, William H., Spokane, Wash. Non-heat-conducting covering	488,248	Dec. 20	1679	419	61	1689
Norris, Willie P., Wayne, Me. Washing-machine	470,399	Mar. 8	1207	308	58	1338
Norman, Godfrey L., Atlanta, Ga. Jail-grating	481,915	Aug. 30	3530	864	60	1315
North, Alfred C., Benton Harbor, Mich. Tag-making machine	484,973	Oct. 25	2280	588 589 590	61	499
North and Judd Manufacturing Company. (See Herrick, Frank J., assignor.)						
North British Rubber Company. (See Cockburn, John, assignor.)						
North, Charles E. (See Howard and North.)						
North, Charles M., Montclair, N. J., assignor to Lidgerwood Manufacturing Company, New York, N. Y. Conveying apparatus	470,948	Mar. 15	2034	520	58	1509

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
North, Charles M., Montclair, N. J., assignor to Lidgerwood Manufacturing Company, New York, N. Y. Conveying apparatus.....	480,029	Aug. 2	436	110	60	664
North, Edward, Newhall, Cal. Check or order book.....	471,359	Mar. 22	2663	675 676	58	1643
North, Edward, Newhall, Cal. Check-book.....	472,741	Apr. 12	1126	289	59	226
North, George W., Clarkes, Oreg. Clothes-drier.....	482,269	Sept. 6	570	135	60	1446
North, John, Southington, Conn. Pump.....	477,569	June 21	2130	529 530	59	1886
North Pacific Indicator Company. (See Dillon, William S., assignor.)						
North, Paul, Cleveland, Ohio. Electrical releasing device for target-traps.....	469,905	Mar. 1	380	96	58	1174
North Western Toy and Manufacturing Company. (See Sharpneck, William S., assignor.)						
Northam, Edgar R., Raleigh, N. C. Yard-stick holder.....	481,188	Aug. 23	2318	571	60	1068
Northampton Cutlery Company. (See Feicker, Fredrick C., assignor.)						
Northcott, T. C. (See Lake, Judson N., assignor.)						
Northcott, T. C., et al. (See Clark, Jasper, assignor.)						
Northern Car Company. (See Wardwell, Fred S., assignor.)						
Northrop, Blancher D., et al. (See Huggins, Ulysses S., assignor.)						
Northrop, Henry B. (See Smith, Herbert W., assignor.)						
Northrop, James H., assignor to G. Draper & Sons, Hopedale, Mass. Loom.....	470,590	Mar. 8	1485	386 387	58	1394
Northrop Manufacturing Company. (See Copeland, Lucius D., assignor.)						
Northrup, Blancher D., Washington, Pa. Valve.....	479,450	July 26	2168	542	60	465
Northrup, John, et al. (See Lockwood, Morris C., assignor.)						
Northwestern Equipment Company. (See Barnes, David L., assignor.)						
Northwestern Manufacturing Company. (See Chambers, John W., assignor.)						
Norton, Arthur O. (See Sleeper, Francis H., assignor.)						
Norton, Benjamin F., assignor of one-half to J. H. Pattee, Perry, Iowa. Eaves-trough hanger.....	474,184	May 3	460	111	59	727
Norton, Edwin, et al. (See Curtis, Lewis E., assignor.)						
Norton, Edwin, et al. (See Foote, John B., assignor.)						
Norton, Edwin, et al. (See Hodgson, John G., assignor.)						
Norton, Edwin, Maywood, Ill. Elevated-railway system.....	485,708	Nov. 8	854	229 230	61	764
Norton, Edwin, Maywood, assignor to himself and O. W. Norton, Chicago, Ill. Tin can.....	475,336	May 24	2312	593	59	1129
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Die for drawing sheet metal.....	483,008	Sept. 20	1773	449	60	1709
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Sheet-metal roofing.....	484,640	Oct. 18	1721	437	61	371
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Pouring-nozzle for cans.....	485,295	Nov. 1	211	60	61	615
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Pouring-nozzle for cans.....	485,296	Nov. 1	213	60	61	615
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Tinning iron and steel plates.....	486,496	Nov. 22	2093		61	1045
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Cleaning tin-plate or metallic sheets.....	487,763	Dec. 13	863	219	61	1509
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Sheet-metal plate for tinning and its manufacture.....	488,151	Dec. 13	1515	380	61	1641
Norton, Edwin, Maywood, assignor to himself, and O. W. Norton, Chicago, Ill. Coating sheet metal.....	488,527	Dec. 20	2136	529	61	1779
Norton, Edwin, assignor to himself and O. W. Norton, Maywood, Ill. Device for seaming the heads upon cans.....	487,764	Dec. 13	865	220	61	1510
Norton, Edwin, and J. G. Hodgson, Maywood, assignors to said Norton and O. W. Norton, Chicago, Ill. Machine for drying and fluxing metal sheets.....	488,025	Dec. 13	1296	323 324	61	1596
Norton, Eliphalet C., Belvidere, Ill. Windmill-regulator.....	483,080	Sept. 20	1881	476	60	1731
Norton, Enoch B., Hartford, N. Y. Poison-dust distributor.....	468,685	Feb. 9	1216	309	58	771
Norton, Francis L., deceased, New York, N. Y.; B. L. Fairchild, executor. Vessel.....	473,406	Apr. 19	2213	555 556	59	447
Norton, Frank H. (See Conover, George M., assignor.)						
Norton, Fred O., Silver City, Idaho. Figure toy.....	469,169	Feb. 16	1658	501	58	928
Norton, George W., Yuma, Ariz. Ter. Automatic water-gate.....	487,961	Dec. 13	1184	295	61	1572
Norton, Harlan P. (See Street and Norton.)						
Norton, Joshua, Jr., Chatham, Canada. Acid-resisting composition for lining tanks.....	480,934	Aug. 16	1881		60	972
Norton, Lawrence A., Chicago, Ill. Screw-nozzle for cans.....	486,293	Nov. 15	1783	468	61	970
Norton, Oliver W. (See Norton, Edwin, assignor.)						
Norton, Oliver W. (See Norton and Hodgson, assignors.)						
Norton, Oliver W., et al. (See Curtis, Lewis E., assignor.)						
Norton, Oliver W., et al. (See Foote, John B., assignor.)						
Norton, Oliver W., et al. (See Hodgson, John G., assignor.)						
Norton, Robert R., and H. Hall, Sandy Hill, N. Y. Skate.....	486,120	Nov. 15	1513	401	61	914
Norton, Sheldon. (See Ball and Norton.)						
Norton, Wendell P., Mount Vernon, N. Y. Feed mechanism for screw-cutting lathes.....	470,591	Mar. 8	1487	387	58	1394
Norwegian Siphon Company. (See Hilditch, Jacob, assignor.)						
Norwell, Richard, South Norwalk, Conn. Lathe attachment for cutting screws.....	477,777	June 28	2479	620	59	1972
Norwood, John E., Sykesville, Md. Ball-bearing for railway-cars.....	478,351	July 5	457	112	60	92
Norwood, John E., Sykesville, Md. Portable railway-switch.....	486,497	Nov. 22	2034	554	61	1045
Noteman, Alonzo, Toledo, Ohio. Apparatus for making gas.....	485,877	Nov. 8	1091	290	61	812
Noteman, Alonzo, assignor to himself, S. T. Fisk, and W. Webster, Toledo, Ohio. Producing inflammable gases.....	468,956	Feb. 16	1646	419	58	864
Nourse, Charles C. P., Somerville, Mass. Washboiler.....	471,565	Mar. 29	2956	754	58	1707
Nourse, Rufus C., and T. W. Lane, Boston, Mass., assignors to Electric Gas-Lighting Company, Portland, Me. Automatic electric gas-lighting burner.....	469,408	Feb. 23	2346	603	58	1009
Novelty Electric Company. (See Miller, Charles J., assignor.)						
Novelty Electric Company. (See Niller, Charles J., assignor.)						
Novelty Iron Building Company. (See Wynne, Henry G., assignor.)						
Novelty Pearl Company. (See Cook, Walter E., assignor.)						
Novitsky, Simon. (See Mosher, George D., assignor.)						
Now, Frederick E., Cleveland, Ohio. Electrical transmitting system.....	475,468	May 24	2523	642	59	1167
Nowlin, Clifford E., Battle Creek, Mich. Railway-switch.....	468,256	Feb. 2	532	131 132	58	628
Nowotny, John S., Cincinnati, Ohio, assignor of one-fourth to W. H. Robinson, Covington, Ky. Electric battery.....	466,798	Jan. 12	792	205	58	160
Noxon, Charles P. L., Syracuse, N. Y. Electric-current indicator.....	487,093	Nov. 29	3090	794	61	1259
Noxon, Thomas H., Ingersoll, Canada. Cultivator.....	474,144	May 3	399	96, 97	59	715

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Nixon, Thomas H., Ingersoll, Canada. Driving-gear for seeding-machines	481,539	Aug. 23	2909	714	60	1180
Noyes, Bernice J., Boston, Mass. Signaling apparatus	474,852	May 17	1558	397	59	962
Noyes, Bernice J., Boston, Mass. Signaling apparatus	474,853	May 17	1560	397	59	963
Noyes, Charles T. (See Heintzelman and Noyes.)						
Noyes, Edward P., Boston, Mass. Plug-calk for horseshoes	480,611	Aug. 9	1377	342	60	857
Noyes, La Verne W., Chicago, Ill. Shaft-bearing for windmills	472,809	Apr. 12	1220	313	59	244
Noyes, Walter B., San Francisco, Cal. Folding bed	483,724	Oct. 4	296	74	61	62
Nudd, Thomas E., <i>et al.</i> (See Lee, George B., assignor.)						
Nugent, John P., Dubuque, Iowa. Planter attachment for plows	481,242	Aug. 23	2408	{ 594 595 }	{ 60	1086
Nugent, Richard C., assignor of two-thirds to J. Jenkins and A. Harbold, Harrisburg, Pa. Inside calipers	484,813	Oct. 25	2017	518	61	447
Nunamaker, Henry S., and L. D. Blanchard, Canton, Ohio. Thill-coupling	475,886	May 31	3208	812	59	1313
Nunn, Philip S., Cincinnati, Ohio. Hinge	470,350	Mar. 8	1125	288	58	1323
Nunneley, J. B., <i>et al.</i> (See Jackson and Reiger, assignors.)						
Nushawg, George W., Farmersville, Ohio. School desk and seat	467,557	Jan. 26	2060	520	53	415
Nutt, John K., <i>et al.</i> (See Basket, James M., assignor.)						
Nutter, Robert H., Georgetown, Ky. Fence	466,422	Jan. 5	181	47	58	35
Nutting, Abel, Quincy, Mass. Railway-track jack	467,706	Jan. 26	2282	579	58	456
Nutting, Freeman E., Florence, Mass. Rack	471,885	Mar. 29	3452	881	58	1800
Nye, Freeman M., Bellevue, Ohio. Railway-switch signal	480,825	Aug. 16	1723	{ 430 431 }	{ 60	940
Nye, Harold B., Cleveland, Ohio. Utilizing tin-scrap	488,796	Dec. 27	2552		61	1878
Nye, Henry C. (See Larsen, August, assignor.)						
Nye, Herman M., assignor to himself and F. Buesching, Avoca, Nebr. Measuring-faucet.	475,144	May 17	2014	509	59	1052
Nygaard, Knut S., Kelly's, N. D. Mower	474,798	May 10	1466	373	59	932
Nyquist, John Z., Tacoma, Wash. Journal-box	485,213	Nov. 1	88	27, 28	61	591
O'Brian, John, Thorn Hill, Canada. Adjustable sieve	469,488	Feb. 23	2474	635	58	1033
O'Brian, John T., Kearney, Nebr. Electric governor	468,686	Feb. 9	1217	{ 309 310 327 328 }	{ 58	772
O'Brien, Arthur, Helena, Mont. Water-closet	474,682	May 10	1286	338	59	895
O'Brien, Arthur, Helena, Mont. Flushing apparatus for water-closets	474,683	May 10	1287	{ 338 339 }	{ 59	896
O'Brien, Arthur, Helena, Mont. Air-compressor	477,381	June 21	1837	451	59	1827
O'Brien, E. S. (See Schofield, James M., assignor.)						
O'Brien, Elizabeth A., Kansas City, Mo. Folding bath-tub	477,443	June 21	1933	478	59	1845
O'Brien, John. (See Pickles, Charles K., assignor.)						
O'Brien, John. (See Pickles and O'Brien.)						
O'Brien, John, and C. K. Pickles, St. Louis, Mo. Steam-boiler attachment	477,145	June 14	1426	{ 347 348 }	{ 59	1735
O'Brien, John C. (See Flurey and O'Leary, assignors.)						
O'Brien, John F., Montreal, Canada. Advertising-program holder	474,919	May 17	1655	423	59	983
O'Brien, John G. (See Rosentreter and O'Brien.)						
O'Brien, Martin S., Pevely, Mo. Insect-trap or receptacle for disinfectants	471,273	Mar. 22	2534	643	58	1617
O'Brien, Michael D., Lorain, Ohio. Valve	473,707	Apr. 26	2713	683	59	564
O'Brien, Stephen, New York, N. Y. Forming-machine for sheet-metal articles	483,362	Sept. 27	2345	500	60	1831
O'Brien, Thomas, New York, N. Y. Bicycle	471,621	Mar. 29	3039	{ 774 775 }	{ 58	1722
O'Brien, Thomas, New York, N. Y. Bicycle	471,651	Mar. 29	3078	763	58	1729
O'Brien, Thomas W., Wilkes-Barré, Pa. Telephone system	469,865	Mar. 1	321	82	58	1163
O'Brien, William, Taunton, Mass. Attachment for the filling motions of looms	470,253	Mar. 8	933	{ 231 232 }	{ 58	1289
O'Brien, William P., St. Paul, Minn. Adjustable pipe-closer	475,793	May 31	3031	768	59	1279
O'Carroll, James M. (See Monday, Newton, assignor.)						
O'Carroll, Patrick, assignor of one-half to T. Crooks, Milwaukee, Wis. Game-board	483,788	Oct. 4	403	100	61	84
O'Connell, James. (See Leehey and O'Connell.)						
O'Connell, James, and G. E. Medcraft, Mount Sterling, Ky. Belting	487,855	Dec. 13	1022	256	61	1541
O'Connell, John, Plymouth, Mass. Heel-barnishing machine	468,428	Feb. 9	812	{ 203 204 }	{ 58	691
O'Connell, Joseph J., assignor to Western Electric Company, Chicago, Ill. Trunk-line system	474,854	May 17	1561	398	59	963
O'Connor, Daniel J., Columbus, Ga. Automatic grain-weigher	481,810	Aug. 30	3356	821	60	1281
O'Connor, Edmund, <i>et al.</i> (See Leahy, Matthew, assignor.)						
O'Connor, Edward, <i>et al.</i> (See Kenna and O'Connor, assignors.)						
O'Connor, Edward J., Springfield, Mass. Velocipede	468,823	Feb. 16	1428	363	58	822
O'Connor, James J., assignor of one-half to J. J. McDermott, Oakville, Canada. Sash-balance.	478,352	July 5	45	112	60	92
O'Connor, Patrick, and J. F. McNamara, assignors to James Reynolds Manufacturing Company, New Haven, Conn. Molding-machine	472,312	Apr. 5	479	{ 123 124 }	{ 59	90
O'Connor, Thomas F., New York, N. Y., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Joint for electric conductors	472,933	Apr. 12	1397	358	59	280
O'Connor, Thomas F., New York, N. Y., and J. W. Marsh, assignors to Standard Underground Cable Company, Pittsburgh, Pa. Means for drawing cables into conduits	482,270	Sept. 6	571	135	60	1446
O'Connor, William. (See Kenna and O'Connor.)						
O'Connor, William P., Milwaukee, Wis. Hat-ventilator	482,429	Sept. 13	858	206	60	1516
O'Dell, Stephen E., and C. Van Liew, Cedar Springs, Mich. Buggy spring-gearing	480,274	Aug. 9	847	215	60	757
O'Donnell, David J., Grafton, Nebr. Cab	479,300	July 19	1898	475	60	397
O'Donnell, Martin J., W. C. Smith, and H. Bound, Cleveland, Ohio. Safety attachment for elevators	478,169	July 5	157	40	60	33
O'Donnell, Michael J., assignor of three-fourths to G. G. Brandenburg and G. R. Walker, Chicago, Ill. Velocipede	481,118	Aug. 16	2188	542	60	1030
O'Donnell, Timothy J., Lawrence, Mass. Envelope or wrapper	487,581	Dec. 6	557	143	61	1432
O'Ferrall, John. (See Kubach, Charles D., assignor.)						
O'Gorman, Michael, Jersey City, N. J. Gas-regulator	474,481	May 10	959	{ 247 248 }	{ 59	833
O'Gorman, Michael, Jersey City, N. J. Heater, furnace, &c.	486,121	Nov. 15	1515	401	61	915
O'Grady, Gerald de C., and J. R. Collins, Toronto, Canada. Coin-holder	480,960	Aug. 16	1929	483	60	980
O'Haire, John, Cambridge, Mass. Car-coupling	485,878	Nov. 8	1092	290	61	812
O'Hara, Henry, <i>et al.</i> (See De Forest, Wyatt F., assignor.)						
O'Hara, William, Middletown, Conn. Pocket-knife	478,812	July 12	1152	285	60	244
O'Kelly, James M., New York, N. Y. Passenger-recorder for public-vehicles	478,016	June 28	2862	716	59	2045
O'Kelly, James M., assignor of three-fourths to F. Comas and J. A. Hermida, New York, N. Y. Motor tram-car	477,444	June 21	1934	{ 478 479 480 }	{ 59	1846

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volum.		Official Gazette.	
			Spec.	Dr. Pg.	Vol.	Page.
O'Lalor, John J., Boston, assignor of one-half to J. S. Maxwell, Medford, Mass. Electric battery	486,264	Nov. 15	1741	458	61	961
O'Leary, Arthur. (See Flurey and O'Leary.)						
O'Malley, John F., Manistee, Mich. Addressing-machine	481,052	Aug. 16	2067	516	60	1008
O'Meara, George E. (See Peck and O'Meara.)						
O'Neal, Elizabeth F., Philadelphia, Pa. Washing-powder	483,634	Oct. 4	174		61	36
O'Neil, Hugh J., Rochester, N. Y. Bracket	485,215	Nov. 1	92	29	61	591
O'Neil, James C., Cleveland, Ohio. Electric switch	485,558	Nov. 1	617	164 165	61	699
O'Neil, Stephen A., assignor of one-half to C. A. Japhet, Burlington, Kans. Pruning implement	474,505	May 10	995	256	59	839
O'Neil, William, et al. (See Soley and Perkins, assignors.)						
O'Neill, Augustus J. (See Bartlett and O'Neill.)						
O'Neill, Charles Z., assignor to W. Chapman, New York, N. Y. Street-sweeping machine	473,163	Apr. 19	1789	451	59	364
O'Neill, Ellis I. (See Paxton and O'Neill.)						
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,122	Aug. 2	574	146	60	692
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,123	Aug. 2	576	146 147	60	692
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register, indicator, and check-printer	480,124	Aug. 2	578	147 148	60	692
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,125	Aug. 2	583	148 149	60	693
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,126	Aug. 2	586	149	60	694
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,612	Aug. 9	1378	342 343	60	857
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,613	Aug. 9	1383	343 344	60	858
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register	480,614	Aug. 9	1387	344 345	60	859
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register and indicator	480,615	Aug. 9	1388	345 346	60	859
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register	480,616	Aug. 9	1390	346	60	859
O'Neill, Henry G., Louisville, Ky., assignor to Standard Register Company, Boston, Mass. Cash register, indicator, and check-printer	480,617	Aug. 9	1392	347	60	860
O'Neill, Henry G., Louisville, Ky., assignor to Standard Electric Heat, Light, and Power Company, of Maine. Alloy	485,423	Nov. 1	424		61	659
O'Neill, Henry G., Louisville, Ky., assignor to Standard Electric Heat, Light, and Power Company, of Maine. Electrical heater	485,424	Nov. 1	424	113	61	659
O'Neill, Henry G., Louisville, Ky., assignor to Standard Electric Heat, Light, and Power Company, of Maine. Electric intermutator	485,425	Nov. 1	426	113 114	61	659
O'Neill, James A., assignor of one-half to J. C. Hallings, Boston, Mass. Coupling for light-fixtures	488,946	Dec. 27	2793	689	61	1928
O'Neill, James F., assignor to Whiffen-Lake Lasting Machine Company, Hornellsville, N. Y. Lasting-nippers	473,015	Apr. 19	1545	394	59	321
O'Neill, James M., assignor of one-half to J. H. Reaper, Fostoria, Ohio. Milk-receptacle	469,711	Mar. 1	60	18	58	1110
O'Neill, William, et al. (See Carlinet, John G., assignor.)						
O'Rielly, Michael J., Buffalo, N. Y. Natural-gas burner for heating stoves, furnaces, boilers, &c.	468,155	Feb. 2	374	92	58	597
O'Rourke, John, Mandan, N. D. Journal-page file	473,775	Apr. 26	2804	705	59	583
O'Rourke, John F., New York, N. Y. Caisson	480,127	Aug. 2	587	149 150	60	694
O'Shaughnessy, Patrick F. (See Sprague and O'Shaughnessy.)						
O'Shea, John T., Cleveland, Ohio. Rail for railways	476,165	May 31	3642	922	59	1401
O'Sullivan, Denis, Spokane Falls, Wash. Sling-cinch	468,205	Feb. 2	449	111	58	612
O'Toole, Richard. (See Loy and O'Toole.)						
Oakes, Ben. (See Oakes, Henry, and B.)						
Oakes, Chandler A., New York, N. Y., and J. H. Jackson, Pen Argyl, Pa. Adding-machine	485,214	Nov. 1	89	28	61	591
Oakes, Henry, Silver City, N. Mex. Ter., and B. Oakes, Chicago, Ill. Thread holder and cutter	467,629	Jan. 26	2248	572	58	450
Oakes, Henry, Silver City, N. Mex. Ter., and B. Oakes, Chicago, Ill. Thread-cutter for spools	477,778	June 28	2480	621	59	1972
Oakes, Henry, Silver City, N. Mex. Ter., and B. Oakes, Chicago, Ill. Car-coupling	484,900	Oct. 25	2164	557	61	476
Oakey, John M., Salem, Va. Truss	481,584	Aug. 30	2981	731	60	1209
Oakley, George F., Toronto, Canada. Measuring-faucet	474,343	May 3	738	193	59	779
Oakman, Samuel, Melrose, Mass. Glass-mold	486,182	Nov. 15	1602	425	61	932
Oaks, Isaiah, assignor of one-half to E. Folkert, Union, Ohio. Wire fence	486,588	Nov. 22	2236	587	61	1071
Oat, Alfred A., Sr., Philadelphia, Pa. Lock-hinge	469,333	Feb. 23	2228	571	58	926
Obear, Clarence C., St. Louis, Mo. Tennis-glove	482,647	Sept. 13	1197	290	60	1582
Ober, Frank H., Denver, Colo. Pump-operating mechanism	477,629	June 21	2244	562	59	1907
Ober, Philip G. (See Dossmann and Ober.)						
Ober, William Y., Lynn, Mass., assignor to Boston Welt Machine Company, Portland, Me. Shoe-sewing machine	467,429	Jan. 19	1821	465	58	362
Ober, William Y., Lynn, Mass., assignor to Boston Welt Machine Company, Portland, Me. Sewing-machine	471,017	Mar. 15	2141	549 550	58	1530
Ober, William Y., Lynn, Mass., assignor to Boston Welt Machine Company, Portland, Me. Sewing-machine	471,494	Mar. 22	2863	728 729	58	1681
Oherbeck, George, Hoboken, N. J. Lock-hinge	475,145	May 17	2015	509	59	1052
Oberer, Frank A., and J. S. Kalb, Chillicothe, Ohio. Track-saddle	477,570	June 21	2131	580	59	1886
Oberländer, Carl, Stettin, assignor to R. Saalfeld, Berlin, Germany. Extension-table	469,214	Feb. 16	2046	523	58	912
Oberly, Virginia H., Washington, D. C. Corset	475,337	May 24	2315	593	59	1129
Obermann, August W., Pittsburg, Pa. Cooking utensil	487,291	Dec. 6	82	25	61	1338
Obermeyer, Alexander, Barmen, Germany. Lubricator	483,860	Oct. 4	505	126	61	105
Obetz, H. L. (See Hicks, Thomas H., assignor.)						
Oborn, Benjamin A. (See Baker and Oborn.)						
Ochs, Frederic. (See Maussner, Friedrich, assignor.)						
Ochs, Fritz, Firth, Germany. Machine for interlacing curled horse-hair, &c.	476,405	June 7	282	66	59	1493
Odell, Henry M., Detroit, Mich. Duplex arc lamp	488,696	Dec. 27	2405	596	61	1848
Odell, Jacob, Dresden, Tex. Washing compound	474,262	May 3	576		59	750
Odell, Roza I., and C. S. Howell, Baltimore, Md. Catamenial sack	476,676	June 7	671	163	59	1570

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Odgers, John P., assignor to A. M. Collius Manufacturing Company, Philadelphia, Pa. Feeding device for card-punching presses	482,981	Sept. 20	1731	{ 437 438 439 }	60	1700
Odcolek, Adolf, Vienna, Austria-Hungary. Quick-fire gun	486,938	Nov. 29	2848	{ 737 738 }	61	1210
Odorizzi, Joseph, assignor to Forbes Mine Car Appliance Company, Trinidad, Colo. Dump-car	481,811	Aug. 30	3359	822	60	1282
Oefinger, Michael, Bridgeport, Conn. Holder for soap cakes	487,094	Nov. 29	3092	794	61	1259
Oehler, Firm of K. (See Rudolph, Christian, assignor.)						
Oehlmann, Emil H. C., Berlin, Germany. Air-cooling apparatus	468,115	Feb. 2	311	75	58	584
Oehlstrom, William, Cleveland, Ohio. Smoke-consuming furnace	483,237	Sept. 27	2139	542	60	1793
Oehring, August J., Chicago, Ill. Universal joint	478,811	July 12	1151	285	60	214
Oehre, Emanuel, assignor to J. W. Bedford, Omaha, Nebr. Machine for making cement pipes	479,451	July 26	2169	{ 543 544 }	60	466
Oerther, Charles, and J. W. Dillingham, Blue Springs, Mo. Mole-trap	481,585	Aug. 30	2982	732	60	1210
Oerzen, Eleanor E., New York, N. Y. Tin can	479,015	July 19	1461	364	60	314
Oesterreich, Wilhelm, assignor to Mix & Genest, Berlin, Germany. Telephone-switchboard	479,107	July 19	1601	{ 400 401 }	60	340
Oettinger Brothers. (See Koonce, John W., assignor.)						
Oettinger, Solomon. (See Hay, John C., assignor.)						
Oetzmann, Arthur S., and S. J. Narracott, London, county of Middlesex, England. Apparatus for the manufacture of coverings for floors and other surfaces	473,519	Apr. 26	2402	{ 608 609 610 }	59	504
Offermann, Hubert L., Leipsic, and G. Ziegler, deceased, Mulhouse, Germany; Land Title and Trust Company, administrator. Combing-machine	481,812	Aug. 30	3359	{ 822 823 824 }	60	1282
Office Specialty Manufacturing Company. (See Jewell, Charles E., assignor.)						
Office Specialty Manufacturing Company. (See Lomb and Jewell, assignors.)						
Officer, Alexander V. (See Russell and Minor, assignors.)						
Ogborn, Harrison, Richmond, assignor of one-half to W. J. Shinn, Indianapolis, Ind. Washing-machine	478,707	July 12	970	241	60	208
Ogden, George H., Cleveland, Ohio. Blank book	467,892	Jan. 26	2579	653	58	512
Ogden, Henry. (See Atkinson, Francis F., assignor.)						
Ogden, Herbert G. (See Richard, Ogden, and Heath.)						
Ogden, John W., Brooklyn, N. Y. Valve-operating mechanism	486,263	Nov. 15	1739	458	61	960
Ogden, Robert A., Walton, Kans. Mail-crane	484,641	Oct. 18	1722	438	61	372
Ogden, William J., Baltimore, Md. Electric-railway system	468,575	Feb. 9	1054	268	58	739
Ogden, William P., Denver, Colo. Concentrator	488,528	Dec. 20	2137	529	61	1779
Ogg, Harvey W., Orrick, Mo. Weather-strip	467,621	Jan. 26	2146	545	58	431
Ogilvie, Frank P., Metropolis City, Ill. Steam-engine	474,456	May 10	931	239	59	826
Ogram, Thomas E., Washington, D. C. Atomizer	478,940	July 12	1333	331	60	279
Ohio Valley China Company. (See Zimmer and Hess, assignors.)						
Ohl, George A., Newark, N. J. Machine for profiling sheet metal	488,576	Dec. 27	2212	548	61	1811
Ohl, George A., Newark, N. J., assignor, by mesne assignments, to Bostwick Metal Lath Company, of New York. Machine for making metal lathing	475,700	May 24	2579	728	59	1236
Ohlander, Victor. (See Baumann, Friederich, assignor.)						
Ohlsson, Olaf, Newark, N. J. Centrifugal butter-extractor	487,055	Nov. 29	3025	777	61	1245
Ohlweiler, John, et al. (See Ward, William H., assignor.)						
Ohmart, Eli C., Detroit, Mich., assignor to M. L. Severy, Boston, Mass. Method of and apparatus for producing musical tones by electro-magnetism	472,019	Mar. 29	3633	929	58	1837
Ohmen, William H., San Francisco, Cal. Compound steam-engine	474,757	May 10	1392	352	59	917
Ohmer, Wilfred I., Dayton, Ohio. Letter-file	470,440	Mar. 8	1275	327	58	1351
Ohmer, Wilfred I., Dayton, Ohio. Cabinet	479,748	July 26	2664	661	60	556
Ohmer, Wilfred I., Dayton, Ohio. Paper-file	487,230	Nov. 29	3333	849	61	1303
Ohmer, Wilfred I., assignor to M. Ohmer's Sons' Company, Dayton, Ohio. File-box	487,150	Nov. 29	3180	814	61	1276
Ohmer, Wilfred I., and T. L. Wayne, assignors to M. Ohmer's Sons' Company, Dayton, Ohio. File-box	487,006	Nov. 29	2955	762	61	1231
Ohnstrand, Enoch, Jamestown, N. Y. Lamp-burner	480,826	Aug. 16	1725	431	60	941
Okey, Joseph B., assignor of one-half to J. W. Redman, Indianapolis, Ind. Sash-holder	485,131	Oct. 25	2520	648	61	547
Olán, Johan W. T., assignor of one-half to E. H. Johnson, New York, N. Y. Electric-current meter	470,441	Mar. 8	1277	327	58	1352
Olander, Nils. (See Johnson and Olander.)						
Olbright, Benjamin, Brooklyn, N. Y. Trolley for conduit-railways	486,985	Nov. 29	2924	754	61	1225
Old, Robert H. (See Old, William W. and R. H.)						
Old, William W. and R. H., Leadville, Colo. Metallic ceiling	481,813	Aug. 30	3364	824	60	1282
Oldenbusch, Ernest, Jersey City, assignor to W. Schimper & Co., Hoboken, N. J. Frame for pocket-books, &c	484,111	Oct. 11	872	222	61	193
Oldershaw, John B., Baltimore, Md. Chimney-cowl	483,619	Oct. 4	155	38	61	32
Oldfield, Edwin, and P. Flynn, Norwich, Conn. Kink-preventer for silk-spinning machinery	487,334	Dec. 6	156	45	61	1351
Oldfield, John, Medford, Mass. Woven fabric for machine-belt	478,941	July 12	1335	331	60	279
Oldfield, Joseph, assignor to R. J. Oldfield and F. R. James, Toronto, Canada. Duplicating check-book	488,926	Dec. 27	2758	681	61	1921
Oldfield, Joseph, assignor to F. R. James, R. J. Oldfield, Toronto, and R. Hocken, Chatham, New Brunswick, Canada. Duplicating check-book	485,132	Oct. 25	2522	648	61	548
Oldfield, Rosa J., et al. (See Oldfield, Joseph, assignor.)						
Oldham, Carrick P., Knoxville, Tenn. Advertising-machine	474,504	May 10	993	256	59	839
Oldham, Joseph and O., Denton, England. Machine for brushing felt hats	471,018	Mar. 15	2143	551	58	1531
Oldham, Orlando. (See Oldham, Joseph and O.)						
Olds, Charles H., Sayre, Pa. Car-coupling	473,951	May 3	107	25	59	657
Olds, Henry G. (See Andersen, Peter, assignor.)						
Oleson, Carl, Roland, Iowa. Vehicle-seat	476,811	June 14	895	219	59	1629
Olin, Erick, Grant, Nebr. Fire-escape	467,690	Jan. 26	2249	572	58	450
Olin, Millard M., Lanark, Ill. Clothes-pounder	475,887	May 31	3209	812	59	1313
Oliphant, William H. (See Mirfield, Samuel, assignor.)						
Oliver Aluminum Company et al. (See Oliver, John S., assignor.)						
Oliver Ames & Sons Corporation. (See Johnson, William H., assignor.)						
Oliver, David B., Allegheny, Pa. Bolster-plate	486,890	Nov. 29	2751	714	61	1191
Oliver, Charles H., Sedalia, Mo. Furnace-door opener	475,338	May 24	2317	594	59	1130
Oliver, Doctor F., Oakland, Cal. Cultivator	470,502	Mar. 8	1367	357	58	1359
Oliver, Doctor F., Oakland, Cal. Paper-holder	476,482	June 7	398	92	59	1515
Oliver, Doctor F., Oakland, Cal. Lamp-support	488,971	Dec. 27	2831	698	61	1937
Oliver, Elam A., Belleville, Wis. Sulky	474,684	May 10	1288	329	59	896
Oliver, Frank, Economy, Pa. Oscillating steam-engine	467,766	Jan. 26	2375	{ 603 604 }	58	474
Oliver Iron and Steel Company. (See Alker, John H., assignor.)						
Oliver, James, assignor to South Bend Iron Works, South Bend, Ind. Plow	468,026	Feb. 2	184	45	58	569

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Oliver, John S., Brooklyn, N. Y., assignor to J. Brooks, Boston, Mass., and Oliver Aluminum Company, of West Virginia. Smelting-furnace.....	480,699	Aug. 9	1528	{ 379 } { 320 }	{ 60 }	886
Oliver, Joseph W., Grand Rapids, Mich. Dado-head.....	476,677	June 7	672	163	59	1570
Oliver, Moses F., Holyoke, Mass. Square for leveling and aligning shatting.....	467,016	Jan. 12	1147	291	58	226
Oliver, Orville C. (See Pierce, Desisle, and Oliver.)						
Oliver, Robert, Brooklyn, N. Y. Mariner's compass.....	478,017	June 28	2862	717	59	2045
Oliver & Roberts Wire Company. (See Vermeulen, John, assignor.)						
Oliver, Samuel A., Houston, Tex. Substructure.....	487,582	Dec. 6	558	143	61	1432
Oliver, Julius von, Munich, Germany. Elastic wheel.....	480,738	Aug. 16	1589	398	60	913
Ollendorff, Carl, Bonn, Germany. Closure for bottles.....	485,052	Oct. 25	2409	630	61	524
Oliver, Gaston, assignor of three-fourths to L. U. Mayo, Coleman's Falls, Va. Railway nut-lock.....						
	484,755	Oct. 18	1908	486	61	412
Olmsted, David, Minneapolis, Minn. Pendulum-scale.....	489,831	Sept. 20	1485	370	60	1652
Olsen, Carl, Long Island City, N. Y. Invalid-bed.....	467,017	Jan. 12	1149	292	58	226
Olsen, Christian, Canton, Miss. Brick-elevator.....	466,542	Jan. 5	370	92	58	71
Olsen, Englebrecht, Walkerville, Mont. Signal-bell.....	485,297	Nov. 1	214	60	61	616
Olsen, Henry, Winona, Minn. Fifth-wheel.....	481,655	Aug. 30	3091	753	60	1230
Olsen, Neil, Portland, Oreg. Wagon-axle.....	479,918	Aug. 2	209	53	60	623
Olsen, Ole, Elgin, Ill. Watch balance-spring.....	469,914	Mar. 1	396	99	58	1177
Olson, Alfred, Galveston, Tex. Plating-machine.....	469,170	Feb. 16	1959	501	58	928
Olson, Andrew, Quincy, Mass. Hoisting device.....	482,618	Sept. 13	1197	291	60	1562
Olson, Andrew B., Kansas City, Mo. Portable corn-popper.....	478,353	July 5	460	112	60	92
Olson, Andrew B., Kansas City, Mo. Corn-popper. (Reissue).....	11,290	Nov. 29	3350	553	61	1306
Olson, Charles O. (See Olson, Nelson B., assignor.)						
Olson, Hecolem, Henderson Grove, assignor of one-half to J. O. Lander, Knoxville, Ill. Horseshoe.....						
Olson, Nelson B., Kansas City, Mo., assignor to C. O. Olson, Savonburg, Kans. Corn-popping apparatus.....	481,716	Aug. 30	3189	779	60	1249
Olson, Otto. (See Johnson and Olson)						
Olzendam, G. A., et al. (See Craggy, Benjamin J., assignor.)						
Omer, Wilson, Cainsville, Mo. Motor for churns.....	471,886	Mar. 29	3453	881	58	1800
Onderdonk, Charles S., Philadelphia, Pa. Condenser-head.....	487,036	Nov. 29	2999	772	61	1239
Onderdonk, Frank A., Grand Rapids, Mich. Paper-jogger.....	487,152	Nov. 29	3183	815	61	1277
Onderdonk Heating and Ventilating Company. (See Buckelew, Albert H., assignor.)						
Oneal, Bernard G., Washington, Pa. Rock-drill.....	467,190	Jan. 19	1457	372	58	293
Oneida Community. (See Ellis, Ferrand F., assignor.)						
Oneida Community. (See Kelley, Harry E., assignor.)						
Oneida Community, Limited. (See Eldridge, Herbert M., assignor.)						
Ong, Harlon F., Newberg, Oreg. Electric motor.....	478,962	July 12	1380	{ 339 } { 340 }	{ 60 }	287
Oostendorp, Hubert. (See Ahrens and Oostendorp.)						
Openshaw, George, and C. A. Carr, Bury, England. Attachment for velocipedes.....	482,271	Sept. 6	573	136	60	1446
Operti, Albert, New York, N. Y. Folding picture.....	466,216	Nov. 15	1654	437	61	942
Opitz, Charles. (See Kramer, William, assignor.)						
Oppenheimer, Milton E., New York, N. Y. Shirt-stud.....	473,336	Apr. 19	2092	526	59	423
Oppenrud, Joseph, and J. I. Brorby, Madison, S. D. Windmill.....	488,087	Dec. 13	1410	{ 350 } { 351 }	{ 61 }	1620
Opson, Ole C., and J. V. Hooper, Pittsburg, Pa. Reaming and drilling machine.....	481,418	Aug. 23	2710	667	60	1140
Orcutt, Jerome, assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Cartridge-priming pin.....	474,607	May 10	1160	295	59	871
Orcutt, William C. (See Atwood and Orcutt.)						
Ord, Edward O. C., U. S. Army. Front sight in small-arms.....	472,069	Apr. 5	89	24	59	19
Ordway, Arthur D., Newburyport, Mass. Baker's oven.....	475,045	May 17	1860	472	59	1092
Orenstein, Max, Berlin, Germany. Axle-box.....	466,622	Jan. 5	499	128	58	96
Ormerod, John, Brooklyn, N. Y., assignor to American Soda Fountain Company, of New Jersey. Acid-feeder for soda-water apparatus.....	484,604	Oct. 18	1658	421	61	360
Ormerod, John, Brooklyn, N. Y., assignor to American Soda Fountain Company, of New Jersey. Sectional supporting-frame.....	487,765	Dec. 13	866	220	61	1510
Ormsby, John H., Bolton Landing, N. Y. Door-knob fastening.....	470,072	Mar. 1	643	159	58	1223
Ormsby, John W., Milwaukee, Wis. Tent.....	471,848	Mar. 29	3401	867	58	1790
Ormsby, John W., Milwaukee, Wis. Lamp or lantern.....	483,386	Sept. 27	2391	600	60	1839
Orndorff, Thomas C., Worcester, Mass. Embossing-machine.....	477,062	June 14	1298	{ 315 } { 316 }	{ 59 }	1710
Orr, James M., New York, N. Y. Coach-door latch.....	472,388	Apr. 5	600	152	59	112
Orr, John B., assignor to R. P. Ernst, Covington, Ky. Bottle-stopper.....	479,833	Aug. 2	90	23	60	599
Orr, Jonathan G., Danville, Ala. Portable fence.....	488,217	Dec. 20	1632	407	61	1681
Orr, Joseph L., administrator. (See Corley, James J.)						
Orr, William, Trenton, N. J. Fireproof construction.....	471,772	Mar. 29	3277	{ 836 } { 837 }	{ 58 }	1766
Orr, William, Trenton, N. J. Fireproof-floor construction.....	481,243	Aug. 23	2412	{ 595 } { 596 }	{ 60 }	1086
Orswell, Edmund W., et al. (See Keene, Samuel D., assignor.)						
Ortega, Paulino, Mexico, Mexico. Photoscopic advertiser.....	469,171	Feb. 16	1960	501	58	928
Ortega y Espinosa, José, Mexico, Mexico. Device for indicating washouts in railway-beds.....	479,834	Aug. 2	91	23	60	600
Ortelli, Erminio, Cadenabbia, Italy. Electric battery.....	470,073	Mar. 1	643	159	58	1224
Orth, Claus, Grand Rapids, Mich. Latch.....	487,153	Nov. 29	3184	815	61	1277
Orth, Ludwig von, Berlin, Germany. Apparatus for synchronizing clocks.....	466,518	Jan. 5	337	84	58	65
Orthlieb, Jacob, Winfield, and C. E. Garey, New York, N. Y. Change-receiver.....	470,592	Mar. 8	1490	387	58	1395
Ortuann, Emil. (See Albrecht and Ortuann.)						
Ortuann, John H. W., Hamburg, Germany. Machine for making loops for wiring bottles.....	488,612	Dec. 27	2265	562	61	1822
Ortmann, Paul, Zittau, assignor of one-half to M. Rost, Dresden, Germany. Suspenders.....	488,529	Dec. 20	2139	529	61	1779
Orton, George H. (See Orton, Hanes, and Orton.)						
Orton, Wilber B., Nickerson, Kans. Draw-bar attachment for cars.....	487,583	Dec. 6	559	143	61	1432
Orton, William H., J. D. Hanes, and G. H. Orton, Glens Falls, N. Y. Automatic weather-strip.....	474,920	May 17	1656	423	59	983
Orvis, Orel D. (See Orvis, Orland D. and O. D.)						
Orvis, Orel D., Chicago, Ill. Steam-boiler.....	471,135	Mar. 22	2320	596	58	1578
Orvis, Orland D., Chicago, Ill. Coin-controlled spirometer.....	481,965	Sept. 6	63	16, 17	60	1347
Orvis, Orland D. and O. D., Chicago, Ill. Downdraft-furnace.....	486,122	Nov. 15	1518	{ 401 } { 402 }	{ 61 }	915
Osborn, Calvin, Flagstaff, Ariz. Ter. Washing-machine.....	483,861	Oct. 4	506	126	61	105
Osborn, Benjamin F., near Nora, Ind. Truss-rail fence.....	470,442	Mar. 8	1279	327	58	1352

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Osborn, Benjamin F., Nora and J. R. Harcourt, Augusta, Ind. Farrowing-pen for swine.	488,739	Dec. 27	2465	612	61	1860
Osborn, Clarence T., <i>et al.</i> (See Fish, Warren E., assignor.)						
Osborn, Clinton S. (See Morgan and Osborn.)						
Osborn, Francis C., Detroit, Mich. Calculating-machine.	484,814	Oct. 25	2019	518	61	447
Osborn, Francis C., Detroit, Mich., assignor of three-fourths to G. Maitland, J. A. Marsh, R. A. Parker, and C. F. Burton. Power-transmitter.	472,222	Apr. 5	339	88	59	63
Osborn, Francis C., Detroit, Mich., assignor of three-fourths to G. Maitland, J. A. Marsh, R. A. Parker, and C. F. Burton. Power-transmitter.	472,223	Apr. 5	340	88	59	64
Osborn, Frank. (See Belt, Perley P., assignor.)						
Osborn, Robert O., Paris, Mo. Hand-cultivator.	482,693	Sept. 13	1272	312	60	1597
Osborne, Burns, <i>et al.</i> (See Willis, William H., assignor.)						
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Hinge.	481,732	Aug. 30	3223	786	60	1255
Osborne & Co., D. M. (See Stroud and Corey, assignors.)						
Osborne, Frank F., Sharpsville, Pa. Blotter-bath for copying-presses.	472,681	Apr. 12	1031	266	59	207
Osborne, L. W., <i>et al.</i> (See Long, Montgomery, assignor.)						
Osborne, Rufus, Tekonsha, Mich. Railway-tie.	470,700	Mar. 15	1652	429	58	1436
Osbourne, Thomas R., Philadelphia, Pa. Coke-oven.	469,866	Mar. 1	323	82, 83	58	1164
Osbourne, Thomas R., Philadelphia, Pa. Apparatus for quenching coke.	469,867	Mar. 1	325	83	58	1164
Osbourne, Thomas R., Philadelphia, Pa. Apparatus for quenching coke.	469,868	Mar. 1	326	83	58	1164
Osbourne, David K., St. Paul, Minn. Jail or vault construction.	485,506	Nov. 1	540	143 } 144 }	61	682
Osbourne, David K., St. Paul, Minn. Construction of jails.	485,559	Nov. 1	618	165	61	699
Osbourne, David K., St. Paul, Minn. Jail.	487,448	Dec. 6	365	95, 96	61	1393
Osburn, Harry G., Chicago, Ill. Electrode for secondary batteries.	478,018	June 28	2865	717	59	2045
Osburn, Harry G., Chicago, Ill. Storage-battery plate.	479,235	Aug. 2	92	24	60	600
Osburn, Harry G., Chicago, Ill. Lightning-arrester.	486,498	Nov. 22	2095	554	61	1045
Osenbrück, Adolf, <i>et al.</i> (See Munsch, Bernhard H., assignor.)						
Osenbrück, Wilhelm, <i>et al.</i> (See Munsch, Bernhard H., assignor.)						
Osgood, Everett B., Vineland, N. J. Baking-pan.	486,734	Nov. 22	2469	644	61	1119
Osgood, Joseph H., Peabody, Mass. Ribbon and ribbon attachment for type-writing machines.	467,191	Jan. 19	1457	372	58	294
Osgood, Richard P., Methuen, Mass. Electric battery.	476,296	June 7	106	25	59	1459
Osgood, Richard P., Methuen, Mass. Thrust-collar for axles of electrically-propelled vehicles.	477,695	June 28	2352	588	59	1948
Osgood, Stephen. (See Graf, Anton, assignor.)						
Osmer, William H., St. Louis, Mo. Fly-net.	478,708	July 12	971	241	60	209
Osner, William, Chicago, Ill. Electric-railway crossing.	466,362	Jan. 5	81	21, 22	58	18
Osorio, Justo, Brooklyn, N. Y. Appliance for teaching chemistry.	480,275	Aug. 9	848	216	60	577
Osswald, Alfred J., Chicago, Ill. Planette.	468,606	Feb. 9	1092	278 } 279 }	58	746
Osten, George, Denver, Colo. Seeding-machine.	474,758	May 10	1395	353	59	917
Osterloh, Adolph, Richmond, Va. Tobacco-pipe.	480,209	Aug. 2	729	184	60	730
Ostertag, John, Jr., Chicago, Ill. Barrel or keg counter.	486,735	Nov. 22	2470	645	61	1119
Ostrander, Allen, <i>et al.</i> (See Campbell, Lawrence S., assignor.)						
Ostrander, Edward W. (See Snedeker, Charles W., assignor.)						
Ostrander Repeating Gun Company. (See Ostrander, Willis H., assignor.) (Reissue.)						
Ostrander, Willie. (See Abell and Ostrander.)						
Ostrander, Willis H., Merced, Cal. Magazine-shotgun.	469,900	Mar. 1	374	94	58	1173
Ostrander, Willis H., Merced, assignor to Ostrander Repeating Gun Company, San Francisco, Cal. Repeating breech-loading gun. (Reissue.)	11,295	Dec. 13	1554	390	61	1649
Oswald, William C., Rock Island, Ill. Vehicle-tongue.	467,622	Jan. 26	2147	545	58	431
Oswalt, John H. (See Miller and Oswalt.)						
Otis Brothers & Company. (See Bassett, Norman C., assignor.)						
Otis Brothers & Company. (See Hall, Milan W., assignor.)						
Otis Brothers & Company. (See Kuechle, Edward, assignor.)						
Otis Brothers & Company. (See Smith, Rudolph C., assignor.)						
Otis, Norton P., and R. C. Smith, Yonkers, N. Y., assignors, by mesne assignments, to National Company, Chicago, Ill. Electric elevator.	467,192	Jan. 19	1459	373	58	294
Otis, Samuel L., Amsterdam, N. Y. Feeding mechanism for knitting-machines.	471,566	Mar. 29	2957	754	58	1707
Otis, William F., Norwalk, Ohio. Oil-burner.	488,660	Dec. 27	2344	580	61	1836
Ott, John F. (See Edison and Ott.)						
Ott, John F. (See Kennelly and Ott.)						
Ott, John F., Orange, assignor to T. A. Edison, Llewellyn Park, N. J. Attachment for phonographs.	466,922	Jan. 12	1004	237	58	200
Ott, John F., Orange, assignor to T. A. Edison, Llewellyn Park, N. J. Coin-controlled device for phonographs.	478,709	July 12	972	242	60	209
Ott, John F., and A. E. Kennelly, Orange, N. J., assignors to Edison General Electric Company, New York, N. Y. Electric meter.	479,171	July 19	1700	426	60	359
Ott, John F. and A. E. Kennelly, Orange, N. J., assignors to Edison General Electric Company, New York, N. Y. Electric-current meter.	479,172	July 19	1702	427	60	359
Ottawa Glass Company. (See Zellers, Theodor A., assignor.)						
Ottenberg, Simon, <i>et al.</i> (See Besthoff, Samuel J., assignor.)						
Otto, August, Saginaw, Mich. Animal-catcher.	486,939	Nov. 29	2857	739	61	1212
Otto, Friedrich E., Dortmund, Germany. Apparatus for drying spent grain and the like.	475,602	May 24	2731	692	59	1208
Otto, Henry, <i>et al.</i> (See Otto, Peter, assignor.)						
Otto, Johannes, Kaltwasser, Germany. Wheelbarrow.	469,265	Feb. 23	2121	545	58	965
Otto, Josiah J., Altoona, Pa. Washing-machine.	475,339	May 24	2318	594	59	1130
Otto, Paul, Berlin, Germany. Machine for engraving in rilievo.	469,047	Feb. 16	1798	459 } 460 }	58	895
Otto, Peter, assignor to H. Otto, H. Kolbe, and A. Wagner, Chicago, Ill. Window-platform.	477,602	June 21	2181	541	59	1896
Otto, Theodor, Schkeuditz, assignor to J. Pohlig, Cologne, Germany. Cable-grip.	469,318	Feb. 23	2204	565 } 566 }	58	981
Otto, Theodor, Schkeuditz, assignor to J. Pohlig, Cologne, Germany. Cable-grip.	474,185	May 3	461	112	59	727
Ottstadt, Karl W., Koestheim, and R. Wirth, Frankfurt, Germany. Saw.	469,172	Feb. 16	1960	501	58	928
Old, Marion H. (See Mahan, John H., assignor.)						
Oulton, Daniel L., assignor to Oulton Manufacturing Company, Haverhill, Mass. Combined sofa and bed.	468,930	Feb. 16	1600	405	58	856
Oulton, James W., assignor of one-half to W. MacNeil, Lynn, Mass. Fan attachment for rocking-chairs.	466,363	Jan. 5	82	22	58	18
Oulton Manufacturing Company. (See Oulton, Daniel L., assignor.)						
Ovatt, Nelson C., <i>et al.</i> (See Coulter, William B., assignor.)						
Oven, John von, and C. F. Pankin, Charleston, S. C. Machine for decorticating fiber-bearing plants.	475,794	May 31	3032	768	59	1279
Ovenshire, Elijah A., assignor to E. Bement & Sons, Lansing, Mich. Wheel-cultivator.	487,882	Dec. 13	1063	267	61	1549

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Over, Willis D., Bryan, Ohio. Dry closet	476,166	May 31	3643	922	59	1401
Overall, George W. (See Zempter, Manning, and Overall.)						
Overcash, Luther J. (See Rogers, Charles S., assignor.)						
Overfelt, William S., J. R. Evans, and C. J. Capp, Duncan's Bridge, Mo. Device for supporting vehicles	486,790	Nov. 22	2564	668	61	1137
Overholt, Frank, Harlan, Iowa. Extension-chandelier	481,814	Aug. 30	3365	825	60	1282
Overlin, Thomas W., Benjamin, Mo. Corn-planter	485,560	Nov. 1	619	165	61	699
Overman, Albert H., Springfield, Mass., assignor to Overman Wheel Company, Hartford, Conn. Cycle-lamp	480,210	Aug. 2	730	185	60	720
Overman, George E., Rock Island, Ill. Coffee-steepers	484,447	Oct. 18	1421	362	61	312
Overman Wheel Company. (See Hadley, Charles E., assignor.)						
Overman Wheel Company. (See Overman, Albert H., assignor.)						
Overman Wheel Company. (See Woodward, Charles E. W., assignor.)						
Overpeck, Edson L., et al. (See Overpeck, Isaac E., assignor.)						
Overpeck, Isaac E., assignor to E. L. Overpeck and F. M. Wehr, Overpeck, Ohio. Grinding-mill	483,363	Sept. 27	2346	590	60	1832
Overs, Curtis E., Ashland, Ohio. Bicycle-support	476,297	June 7	107	25	59	1459
Overton, Frank, and J. Fought, La Grange, Ind. Cistern-cleaner	476,678	June 7	673	164	59	1571
Oveson, Carl A., Chicago, Ill. Mangle	482,410	Sept. 13	823	198	60	1510
Owells, Frank S., Morrisoo, Ill. Faucet	488,401	Dec. 20	1924	482	61	1737
Owen, Emert D., Oahe, S. D. Cultivator	480,128	Aug. 2	588	150	60	694
Owen, Frederick D., Washington, D. C. Brake for bicycles	478,206	July 5	214	53	60	44
Owen, Herbert S., Washington, D. C. Velocipede	481,053	Aug. 10	2069	516	60	1009
Owen, James L., assignor of one-half to J. L. Johnson, Cummings, S. C. Spark-arrester ..	477,954	June 28	2766	692	59	2026
Owen, Louis H. (See Prewitt, William Q., assignor.)						
Owen, Robert A., Coral, Mich. Cylinder and cylinder-cap	486,680	Nov. 22	2383	623	61	1101
Owen, Theodore M., Alexandria, Ohio. Locking-rod for end-gates	487,766	Dec. 13	867	220	61	1511
Owens, Ira B., Glen Elder, Kans. Washing-machine	481,419	Aug. 23	2712	667	60	1140
Owens, Ira B., and D. C. Ball, Glen Elder, Kans. Wagon running-gear	486,351	Nov. 15	1870	492	61	966
Owens, Michael J., Findlay, Ohio. Apparatus for mechanically operating paste-glass molds	482,526	Sept. 13	1024	247	60	1549
Owens, Robert P. (See Carse, Blackburn, and Owens.)						
Owens, William A. (See Haney and Owens.)						
Ownby, William R. (See Knight and Ownby.)						
Owsley, Harry B., Chicago, Ill. Bicycle	466,983	Jan. 12	1102	279	58	218
Oxley, Charles H., Norfolk, Nebr. Hydraulic drill	470,593	Mar. 8	1491	388	58	1395
Ozborn, Marshal M. (See Reasons and Ozborn.)						
Ozley, John H., Cane Ridge, La. Fertilizer-distributor	473,952	May 3	110	25	59	658
Ozone Manufacturing Company. (See Dittrich and Grumbacher, assignors.)						
P. & F. Corbin. (See Arens, August, assignor.)						
P. & F. Corbin. (See Case, Cromwell O., assignor.)						
Paalzow, Wilhelm, Revel, Russia. Mash-distilling apparatus	467,430	Jan. 19	1824	466	58	363
Pahl, John B., and J. B. Gaudelas, New York, N. Y. Stippling implement	477,603	June 21	2182	541	59	1896
Pabst, Charles, Philadelphia, Pa. Wick-raiser for lamp-burners	487,076	Nov. 29	3060	785	61	1252
Pacific Labeling Company. (See Newell, Charles E., assignor.)						
Pacific Rolling Mills Company. (See Harris, Silas, assignor.)						
Pack, John W., San Francisco, Cal. Hydraulic motor	469,589	Feb. 23	2628	674	58	1063
Packham, William H., assignor of one-half to W. H. Bright, Buffalo, N. Y. Damper ..	485,053	Oct. 25	2410	620	61	524
Packard, Jerome L. (See Harrigan and Packard.)						
Packard, Jerome L., Boston, assignor to J. W. Brooks, trustee, Cambridge, Mass. Ranging-guard	473,428	Apr. 19	2243	564	59	452
Packer, George W., Rock Falls, assignor to Keystone Manufacturing Company, Sterling, Ill. Disk harrow and seeder	470,363	Mar. 8	1148	294	58	1328
Packer, John H. (See Ewing and Packer.)						
Packer, John H., assignor to Wheeling Corrugating Company, Wheeling, W. Va. Metallic ceiling	469,186	Feb. 16	1985	507	58	933
Paddock, James R., Cincinnati, Ohio. Machine for the manufacture of sheet-metal articles.	488,633	Dec. 27	2301	570	61	1828
Paddock, James A., et al. (See Cartwright, Edward, assignor.)						
Paddon, Edwin F., London, England. Furnace	475,603	May 24	2733	692	59	1208
Padgett, Charles E., et al. (See Gellenbeck, Frank C., assignor.)						
Padgett, John C., Alta Vista, and W. E. Bolton, Greensburg, Kans. Printing-press	473,520	Apr. 26	2405	609	59	505
Padgett, Thomas B., Dallas, Tex. Vehicle-seat	482,064	Sept. 6	228	55	60	1380
Pagan, Orestes, Philadelphia, Pa. Tube-expander	471,678	Mar. 29	3127	797	58	1738
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Latch	477,445	June 21	1936	480	59	1846
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Latch	477,446	June 21	1937	480	59	1846
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Door-spring	478,354	July 5	464	113	60	93
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Door-spring	478,355	July 5	465	113	60	93
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Sash-fastener	485,474	Nov. 1	499	132	61	673
Page, Albert N. (See Page, Daniel S., assignor.)						
Page, Albert N. (See Page and Bertsch, assignors.)						
Page, Almon D., Newark, N. J. Circuit-changing apparatus	481,281	Aug. 23	2491	613	60	1100
Page, Arthur, Minneapolis, Minn. Compound triangle	482,023	Sept. 6	166	40	60	1368
Page, Arthur T., Minneapolis, Minn. T-square and drawing-board attachment	475,741	May 24	2948	747	59	1248
Page, Caleb D., Tacoma, Wash. Dump-car	467,772	Jan. 26	2383	606	58	476
Page, Charles L., Akron, Kans. Letter or paper file	470,336	Mar. 8	1101	220	58	1319
Page, Daniel S., assignor to himself and A. N. Page, Malden, Mass. Electric-light fixture.	484,450	Oct. 18	1425	364	61	313
Page, Daniel S., Malden, and J. L. Bertsch, Cambridge, assignors to D. S. and A. N. Page, Malden, Mass. Lantern for electric lighting	484,449	Oct. 18	1424	363	61	313
Page, Enoch, Lancaster, Pa. Belt-stretcher	485,216	Nov. 1	93	29	61	592
Page, Friend C., Creston, Iowa. Electrical burglar-alarm for windows	469,266	Feb. 23	2122	545	58	965
Page, James C., Akron, Kans. Terret	488,249	Dec. 20	1680	420	61	1690
Page, Thomas L., and J. Aptel, Victoria, Tex. Medical compound	481,815	Aug. 30	3366		60	1253
Page, Truman E., La Crosse, Wis. Combined buckle and snap-hook	486,536	Nov. 22	2146	566	61	1055
Page, William B., Dixon, Ill. Can-testing machine	469,302	Feb. 23	2184	560	58	977
Page, William E., and L. J. Buchanan, Kansas City, Mo. Pneumatic letter-press	474,401	May 10	831	218	59	809
Page, William H., Philadelphia, Pa. Crossing for underground cable railways	481,966	Sept. 6	66	17	60	1347
Paggett, Philip C., Wilmington, Ohio. Plow	475,604	May 24	2734	693	59	1208
Pagliughi, John and J. A., New York, N. Y., and F. De Camio, Union Hill, N. J. Drying-line support	479,898	Aug. 2	186	46	60	618
Pagliughi, Joseph A. (See Pagliughi and De Camio.)						
Pahtz, Ernst J., Boston, Mass. Screw-propulsion of vessels	471,274	Mar. 22	2534	644	58	1618
Paige, Arthur E., Philadelphia, Pa. Photographic-plate holder	477,696	June 28	2353	588	59	1948
Paige, Charles F., Denver, Colo. Refrigerator	470,167	Mar. 1	786	194	58	1251

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Paige, Elam R., Chicago, Ill. Finger-tapering device.....	478,356	July 5	466	113	60	93
Paige, Frederick O., Detroit, Mich. Paper-bag-closing device.....	468,257	Feb. 2	534	132	58	628
Paige, Frederick O., Detroit, Mich. Moth-proof bag.....	473,337	Apr. 19	2093	526	59	423
Paige, Howe, Minneapolis, Minn. Elevated-street-railway car and truck.....	466,364	Jan. 5	83	23	58	19
Paige, William H., Brockton, Mass. Sole fitting and channeling machine.....	474,608	May 10	1161	295 296	59	871
Paillard, Alfred E. (See Sneur, Alfred, assignor.)						
Paillard & Co., M. J. (See Sneur, Alfred, assignor.)						
Paillard & Co., M. J. (See Tuller, Eugène, assignor.)						
Pain, Henry J., New York, N. Y. Pyrotechnic suit.....	479,899	Aug. 2	188	46	60	619
Pain, Robert W., New York, N. Y. Musical instrument.....	468,482	Dec. 20	2057	511	61	1765
Paine, Ansel W., Boston, Mass. Door-spring.....	477,571	June 21	2132	530	59	1886
Paine, Birdsall D., Philadelphia, Pa. Hook and eye.....	478,357	July 5	468	113	60	93
Paine, Channing, New York, N. Y. Check-printing machine.....	475,605	May 24	2735	693 694	59	1209
Paine, Channing, New York, N. Y. Cash registering and adding machine.....	483,009	Sept. 20	1774	440 450	60	1709
Paine, Frederick H., Paris, France, assignor to Hotchkiss Ordnance Company, Limited, London, England. Depth-regulating mechanism for marine torpedoes and other vessels.....	478,813	July 12	1153	285 286 287	60	244
Paine, Frederick H., Paris, France, assignor to Hotchkiss Ordnance Company, Limited, London, England. Speed-regulating mechanism for torpedoes and other vessels.....	478,814	July 12	1160	288	60	245
Painter, Alonzo J., Pasadena, Cal. Motor for street-cars.....	468,824	Feb. 16	1432	364	58	824
Painter, Gwynne E., Baltimore, Md. Non-sparking electric switch.....	488,899	Dec. 27	2706	670	61	1910
Painter, Gwynne E., assignor of one-half to J. F. Morrison, Baltimore, Md. Electric switch.....	466,508	Jan. 5	323	81	58	61
Painter, Gwynne E., assignor of one-half to J. F. Morrison, Baltimore, Md. Electric drop-light.....	466,509	Jan. 5	324	81	58	62
Painter, Gwynne E., assignor of one-half to J. F. Morrison, Baltimore, Md. Electric-lamp-socket switch.....	466,510	Jan. 5	326	81	58	62
Painter, Gwynne E., assignor of one-half to J. F. Morrison, Baltimore, Md. Electric-lamp-socket switch.....	466,511	Jan. 5	327	81	58	63
Painter, Robert F., assignor to Warner Manufacturing Company, Greenfield, Mass. Canopy-rod holder.....	477,146	June 14	1428	348	59	1736
Painter, William, Baltimore, Md. Bottle-sealing device.....	471,317	Mar. 22	2595	659	58	1630
Painter, William, Baltimore, Md. Bottle-sealing device.....	468,226	Feb. 2	476	117	58	618
Painter, William, Baltimore, Md. Bottle-sealing device.....	468,258	Feb. 2	535	132	58	629
Painter, William, Baltimore, Md. Bottle-sealing device.....	468,259	Feb. 2	541	133	58	629
Painter, William, Baltimore, Md. Method of and means for bottling liquids and sealing bottles.....	473,776	Apr. 26	2805	705 706 707	59	583
Paiste, Harry T., West Chester, Pa. Electric switch.....	483,862	Oct. 4	507	126 127	61	105
Pakas, Solomon L., New York, N. Y. Fire-box divider.....	480,276	Aug. 9	849	216	60	757
Palica, Frank J., Racine, Wis. Telescopic trunk.....	479,153	July 19	1675	419	60	354
Palm, Carl S., near Foster, La. Derrick.....	475,221	May 17	2127	538	59	1075
Palm, John M. (See Akin, James H., assignor.)						
Palm, John M., and J. H. Akin, Arkansas City, Kans. Bench-vise.....	467,781	Jan. 26	2396	609	58	479
Palmer, Alexander C. (See Grisham, Wiley M., assignor.)						
Palmer, Amos B., Port Allegany, Pa. Sawmill-carriage feed.....	475,046	May 17	1862	472 473	59	1023
Palmer, Arthur, assignor of two-thirds to A. Hausold, Pittsburg, Pa. Merry-go-round.....	475,742	May 24	2952	748	59	1249
Palmer, Austin D., Coshocton, Ohio. Combined paper-weight and calendar.....	485,133	Oct. 25	2523	649	61	548
Palmer, Charles O., Cleveland, Ohio. Mining-machine.....	472,177	Apr. 5	259	68, 69	59	49
Palmer, Charles O., Cleveland, Ohio. Driving-machine.....	472,178	Apr. 5	263	69, 70	59	50
Palmer, Edwin C., Cleveland, Ohio. Stamp-affixing machine.....	484,448	Oct. 18	1422	362 363	61	312
Palmer, Elizabeth R., Philadelphia, Pa. Trunk-elevator.....	474,145	May 3	400	97	59	715
Palmer, Frank, <i>et al.</i> (See Miltmore, Alonzo E., assignor.)						
Palmer, Frank H., Brooklyn, N. Y. Box.....	477,572	June 21	2133	530	59	1886
Palmer, Frank H., Brooklyn, N. Y. Package-carrier.....	480,618	Aug. 9	1397	348	60	861
Palmer, Frank H., Brooklyn, N. Y. Mucilage-holder.....	482,750	Sept. 20	1371	339	60	1628
Palmer, Fred S., Boston, Mass., and L. H. Desisle, Lamoine, assignors to Electric Heat Alarm Company, Bangor, Me. Automatic electric heat-alarm.....	475,340	May 24	2320	594	59	1130
Palmer, Henry F., Norwich, Conn. Street-sweeper.....	481,054	Ang. 16	2075	517 518	60	1009
Palmer, Henry H., deceased, (S. D. Palmer, administrator,) and S. D. Palmer, Rockford, Ill. Washing-machine.....	473,521	Apr. 26	2407	610	59	505
Palmer, Henry H., deceased, Rockford, Ill.; S. D. Palmer, administrator. Crupper.....	486,537	Nov. 22	2147	567	61	1055
Palmer, Herbert R., Cleveland, Ohio. Hoisting and conveying apparatus.....	486,645	Nov. 22	2330	610	61	1091
Palmer, Ida M., Kansas City, Mo. Corn-popper.....	482,832	Nov. 20	1487	370	60	1652
Palmer, Irenas J., assignor of one-half to T. Storrs, Olean, N. Y. Stair-curve.....	468,940	Nov. 29	2858	739	61	1212
Palmer, Irenas J., assignor of two-thirds to O. F. Carley and T. Storrs, Olean, N. Y. Hatchet.....	468,892	Feb. 16	1533	390	58	843
Palmer, Isaac E., Middletown, Conn. Hammock-spreader.....	468,576	Feb. 9	1055	268	58	739
Palmer, Isaac E., Middletown, Conn. Hammock-spreader.....	469,869	Mar. 1	328	84	58	1165
Palmer, Isaac E., Middletown, Conn. Woven valance for hammocks.....	474,997	May 17	1789	453	59	1008
Palmer, Joel R., assignor of one-half to O. Palmer, Salisbury, Mo. Gravity-latch.....	474,263	May 3	577	142	59	750
Palmer, John C. (See Parsons, Richmond, assignor.)						
Palmer, John F., Chicago, Ill. Pneumatic tire.....	467,642	Jan. 26	2174	553	58	436
Palmer, John F., Riverside, Ill. Pneumatic tire.....	476,679	June 7	674	164	59	1571
Palmer, John F., Riverside, Ill. Pneumatic tire.....	476,680	June 7	676	164	59	1571
Palmer, John F., Riverside, Ill. Pneumatic tire.....	476,681	June 7	679	164 165	59	1572
Palmer, John H., West New Brighton, N. Y. Paint. (Reissue).....	11,255	July 26	2724		60	570
Palmer, John H., Boston, Mass., assignor of one-half to R. Smith, Sherbrooke, Canada. Electric motor.....	467,048	Jan. 12	1207	304 305	58	237
Palmer, John S. (See Watrons and Palmer.)						
Palmer, John S., West Duluth, Minn. Road-scraper.....	483,081	Sept. 20	1883	477	60	1732
Palmer, John S., Stonington, and C. R. Watrons, Ledyard, Conn. Lobster-trap.....	483,471	Sept. 27	2495	628	60	1861
Palmer, Maro V. (See Wilkinson and Palmer.)						
Palmer, Oscar. (See Palmer, Joel R., assignor.)						
Palmer, Philip A., Chicago, Ill. Means for protecting buildings from fire.....	466,831	Jan. 12	838	216	58	170
Palmer, Philip A., Chicago, Ill. Fire-escape ladder and means for raising the same.....	481,967	Sept. 6	67	17, 18	60	1348
Palmer, Raymond L., Tacoma, Wash. Safety-lock for hammerless guns.....	476,064	May 31	3473	876	59	1368

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Palmer, Samuel D., administrator. (See Palmer, Henry H.)						
Palmer, Samuel D., administrator. (See Palmer, Henry H. and S. D.)						
Palmer, Stephen. (See Thompson, Charles E., assignor.)						
Palmer, Wesley, Sedalia, Mo. Tidy-holder	469,590	Feb. 23	2629	674	58	1063
Palmer, Wesley, assignor of one-half to J. Williams, Dayton, Ohio. Lamp-lighter	443,967	Oct. 4	667	167	61	138
Palmer, William H., and W. H. Daniel, Chicago, Ill. Stallion-shield	471,567	Mar. 29	2958	754	58	1708
Palmiter, Frank M., Milton, Wis. Chopping-knife	468,893	Feb. 16	1534	390	58	843
Palson, Magnus J., assignor of two-thirds to W. H. Perkins and L. B. Haskell, Gloucester, Mass. Ice-machine	482,694	Sept. 13	1273	312	60	1597
Panchaud, Robert A. (See Noelle, Ewald, assignor.)						
Panchaud, Robert A., and W. G. Temple, London, England; said Temple assignor to said Panchaud. Apparatus for dispensing liquids	476,760	June 7	797	196	59	1596
Pancoast, Richard M., Camden, N. J. Ventilator or chimney-cowl	476,682	June 7	681	105	59	1572
Pangle, Robert K., assignor to E. J. Williams and J. Story, Springfield, Ohio. Nozzle	470,410	Mar. 8	1235	313	58	1341
Panknin, Charles F. (See Oven and Panknin.)						
Pannell, Vincent J., Farmington, Mo. Furnace	482,458	Sept. 13	903	219	60	1524
Paoli, John, Hoboken, N. J. Tripod-head for engineers' transits and analogous instruments.	479,196	July 19	1746	438	60	366
Pape, Charles. (See Schneider, Henry J., assignor.)						
Pape, Hermann, and W. Henneberg, Hamburg, Germany. Means for dry separation of materials of different specific weight and different size	472,082	Apr. 12	1032	266	59	207
Papot, James A., Baker's Mill, Fla. Churn	485,749	Nov. 8	916	245	61	777
Paquette, Octave, and I. La Chapelle, Haverhill, Mass. Machine for pulling tacks	473,708	Apr. 26	2714	683	59	564
Paramore, Edward C., Philadelphia, Pa., assignor, by mesne assignments, to Paramore Electric Company, of West Virginia. Secondary-battery plate	476,483	June 7	399	92	59	1515
Paramore Electric Company. (See Paramore, Edward C., assignor.)						
Paramore, Heber S., et al. (See Cook, Thomas R., assignor.)						
Parcelle, Albert L., Boston, Mass. Device for controlling electric motors	469,712	Mar. 1	61	18	58	1110
Parcelle, Albert L., Boston, Mass. Armature for dynamo-electric machines	486,234	Nov. 15	1683	445	61	948
Pardee, William H., Antigo, Wis. Thill-coupling	485,978	Nov. 8	1261	333	61	847
Partridge, William E. (See Underwood, William D., assignor.)						
Parenteau, Maxime O., Springfield, Mass. Antifriction-bearing	488,697	Dec. 27	2408	596	61	1848
Parham, Marshall E., Burr Oak, Mich. Barrel-truck	478,710	July 12	974	242	60	210
Parish, Newton J., Blair, Nebr. Car-coupling	473,588	Apr. 26	2534	639	59	530
Parish, Richard, Philadelphia, Pa. Pipe connection or coupling	471,735	Mar. 29	3925	821	58	1755
Parish, Rufus A., Yorkville, S. C. Measuring-faucet	474,583	May 10	1126	288	59	865
Parisher, Lemuel A., Shreveport, La. Compressing apparatus	473,472	Apr. 26	2325	588	59	490
Park, Allan G., Madison, Wis. Bill-holder	485,750	Nov. 8	917	245	61	777
Park, Charles S., Deerfield, Mass. Car-coupling	485,804	Nov. 8	981	263	61	791
Park, Edward E., San Francisco, Cal. Dental-disk holder	471,887	Mar. 29	3455	681	58	1801
Park, Francis, Montague City, assignor of one-half to W. M. King, Orange, Mass. Harness-ferret	473,632	July 12	871	214	60	188
Park, Gilbert, Wales, assignor of one-half to J. G. Avery, Spencer, Mass. Positive let-off mechanism for looms	469,267	Feb. 23	2123	546	58	966
Park, Harvey S., Chicago, Ill. Faucet	476,167	May 31	3645	922	59	1401
Park, William R., Philadelphia, Pa. Toy	480,619	Aug. 9	1398	348	60	861
Parke, John H., assignor of one-half to O. D. McClellan, Philadelphia, Pa. Apparatus for drying or cremating garbage and fecal matter	481,147	Aug. 16	2249	554	60	1040
Parke, Robert A., New York, N. Y. Apparatus for heating compressed air	481,623	Aug. 30	3041	743	60	1220
Parke, Robert A., New York, N. Y., assignor of one-half to H. H. Westinghouse, Pittsburgh, Pa. Slack-adjuster for car-brakes	480,341	Aug. 9	949	241	60	775
Parker, Ananias S., Moline, Ill. Spring-motor	471,888	Mar. 29	3455	882	58	1801
Parker, Arthur A., Jersey City, N. J. Fence-stay	487,374	Dec. 6	222	61	61	1364
Parker, Arthur J., and R. G. Hunter, Williamston, Mich. Gasoline-heater	487,373	Dec. 6	221	60	61	1364
Parker, Charles E., Duluth, Minn., assignor of one-half to E. L. Whittington. Portable and adjustable track for moving safes	469,591	Feb. 23	2630	614	58	1064
Parker, Charles F., assignor to A. White, Lowell, Mass. Cash and parcel carrier apparatus	468,443	Feb. 9	831	211	58	695
Parker, Daniel H., Pleasantville, Pa. Churn	477,063	June 14	1301	316	59	1711
Parker, Edward M., New York, N. Y. Conveyor for grain-driers	481,672	Aug. 30	3115	760	60	1234
Parker, Edward P., Arehdale, N. C. Holdback for vehicles	488,613	Dec. 27	2267	562	61	1822
Parker, Francis H., Grapeland, Tex. Combined cotton clipper and planter	484,337	Oct. 11	1244	317	61	266
Parker, Frank P., Goshen, Ind., S. C. Jones, and N. F. Coffey, Carrollton, assignors to St. Joseph Folding Bed Company, St. Joseph, Mo. Wardrobe-bed	479,719	July 26	2610	648	60	546
Parker, Fred K. (See Fisher, Edmond T., assignor.)						
Parker, George F., and C. E. Crapo, assignors of one-half to E. S. Hayward, Jr., Rochester, N. Y. Secondary battery	470,701	Mar. 15	1653	429	58	1436
Parker, George J., and C. B. Walker, Trinidad, Colo. Ore-concentrator	467,569	Jan. 26	2072	523	58	417
Parker, George S., Salem, Mass. Game apparatus	469,089	Feb. 16	1855	474	58	907
Parker, George W., San Francisco, Cal. Floor or roof for buildings	477,147	June 14	1429	348	59	1736
Parker, George W., San Francisco, Cal. Light-transmitting floor or sidewalk	477,148	June 14	1430	349	59	1736
Parker, Gilbert L. (See Grantland, John W., assignor.)						
Parker, James J., Fulton, N. Y. Dice-caster	485,709	Nov. 8	855	230	61	765
Parker, James W., Viola, Ill. Corn-harvester	471,889	Mar. 29	3457	882	58	1801
Parker, John, Clinton, Conn. Invalid's adjustable back-rest	484,974	Oct. 25	2287	590	61	500
Parker, John, and F. E. Clark, Sturgeon Falls, Canada. Balanced slide-valve	487,962	Dec. 13	1185	295	61	1573
Parker, John B. (See Sweet and Parker.)						
Parker, John M., Pawtucket, R. I. Spool-boring mechanism	479,173	July 19	1704	427	60	360
Parker, John M., Pawtucket, R. I. Spool-boring machine	483,576	Oct. 4	88	23	61	20
Parker, John W. (See Moore and Parker.)						
Parker, Joseph R., assignor of one-half to A. M. Horton, Milford, Tex. Hand-car	474,855	May 17	1563	398	59	963
Parker, Josiah A., St. Louis, Mo., and L. L. Summers, Chicago, Ill.; said Summers assignor to said Parker. Telegraphic apparatus	487,154	Nov. 29	3185	816	61	1277
Parker, Lemon, St. Louis, Mo. Electric-arc lamp	477,221	June 21	1571	386	59	1777
Parker, Lewis C., Indianapolis, Ind. Apparatus for the manufacture of gas	480,211	Aug. 2	732	185	60	720
Parker, Ralzemond A., et al. (See Osborn, Francis C., assignor.)						
Parker, Richard. (See Johnston, Abner and W. A., assignors.)						
Parker, Rienzi B., Vernon, Conn. Spindle-lubricator	472,269	Apr. 5	410	105	59	77
Parker, Robert, and S. W. Le Neve, Ludlow, Ill. School-desk	480,020	Aug. 9	1399	348	60	861
Parker, Robert W., Camp Huachuca, Ariz. Ter. Rifle-sight	468,206	Feb. 2	450	112	58	613

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Parker, Stearns & Sutton. (See Sutton, Benjamin F., assignor.)						
Parker, Thomas, assignor to Electric Construction Corporation, Limited, Newbridge, England. Electrical furnace	482,586	Sept. 13	1112	269	60	1566
Parker, Thomas J. (See Wallace and Parker.)						
Parker, Thomas M. (See Vining, George, assignor.)						
Parker, William D., assignor of three-fourths to E. H. White, Meriden, Conn. Automatic piano	470,323	Mar. 8	1078	275 276 277	58	1315
Parker, William D., assignor of three-fourths to E. H. White, Meriden, Conn. Automatic governor for pneumatic motors	473,338	Apr. 19	2095	526	59	424
Parke, Florence M., et al. (See Parkes, John F., assignor.)						
Parkes, John F., North Tonawanda, assignor to F. M. and J. L. Parkes, Buffalo, N. Y. Split pulley	488,947	Dec. 27	2794	689	61	1928
Parkes, John L., et al. (See Parkes, John F., assignor.)						
Parkes, Walter, Reading, England. Spring-joint for bicycle-handles	469,592	Feb. 23	2631	674	58	1064
Parkes, William, Birmingham, and T. Hadley, Oldbury, England. Tellurian	470,074	Mar. 1	644	160	58	1224
Parkhurst, Edward B., Woburn, assignor to Complete Combustion Company, Boston, Mass. Furnace-boiler	482,188	Sept. 6	440	106	60	1421
Parkhurst, Edward B., and F. Ham, Woburn, Mass., assignors to National Cash Register Company, Dayton, Ohio. Cash indicator and register	483,010	Sept. 20	1781	450 451	60	1710
Parkin, Joseph W., Philadelphia, Pa. Pulley	472,769	Apr. 12	1165	298	59	233
Parkinson, Arthur, Vian, Indian Ter. Car-coupling	471,019	Mar. 15	2145	551	58	1531
Parkinson, Arthur E. (See Bennett and Parkinson.)						
Parkinson, Frederick G., and A. H. Mercer, assignors of one-third to W. J. Parkinson, Buffalo, N. Y. Safety device for steam-boilers	466,365	Jan. 5	85	24	58	19
Parkinson, John, Philadelphia, Pa. Hammer for forging car-wheels	478,631	July 12	869	214	60	188
Parkinson, John, Elizabeth, N. J., assignor to G. R. Bidwell, New York, N. Y. Heater for cementing rubber tires	471,802	Mar. 29	3340	850	58	1777
Parkinson, Walter. (See Bardsley and Parkinson.)						
Parkinson, William J. (See Parkinson and Mercer, assignors.)						
Parkison, Allen R., Monongahela City, Pa. Heel	482,561	Sept. 13	1080	262	60	1559
Parkison, John E., Denver, assignor of two-thirds to W. S. Parkison, Glenwood Springs, and S. Bertenshaw, Denver, Colo. Hitching device	472,934	Apr. 12	1400	358 359	59	280
Parkison, John E., Aspen, assignor of two-thirds to S. Bertenshaw, Denver, and W. S. Parkison, Glenwood Springs, Colo. Hitching device	476,812	June 14	895	220	59	1629
Parkison, Will S. (See Bertenshaw, Silas, assignor.)						
Parkison, Will S., et al. (See Parkison, John E., assignor.)						
Parks, Charles E., Locke, N. Y. Double mold-board plow	482,380	Sept. 13	782	188	60	1502
Parks, Charles W., Troy, N. Y. Railway-track	479,836	Aug. 2	94	24	60	600
Parks, Clarence W., Lowell, Mich. Refrigerator	468,523	Feb. 9	968	246	58	732
Parks, Dana, assignor of four-fifths to M. Stone, C. H. Schofield, H. Goldberg, and B. A. Andrews, Boston, Mass. Automatic leveling ship's berth	472,070	Apr. 5	90	25	59	19
Parks, Dana, assignor of four-fifths to M. Stone, C. H. Schofield, H. Goldberg, and B. A. Andrews, Boston, Mass. Steamer, lawn, or invalid chair	481,119	Aug. 16	2191	542	60	1030
Parks, David O., Denver, Colo., assignor of one-half to W. Groves, Camden, N. J. Collar-button	488,026	Dec. 13	1302	324	61	1598
Parks, James C. (See Kline and Parks.)						
Parks, William R., Palmer, Mass. Boiler-furnace	486,955	Nov. 29	2878	743	61	1216
Parmelee, Seth, Portland, Oreg. Oil for hand-saws	480,621	Aug. 9	1401	348	60	862
Parmelee, Arthur W., assignor to Wire Goods Company, Worcester, Mass. Wire coat and hat hook	486,791	Nov. 22	2565	669	61	1137
Parmelee, Erskine M. (See Hopkins, Henry T., assignor.)						
Parmelee, Wilbur F., Middletown, Conn. Ironing-table	479,301	July 19	1899	475	60	397
Parmelee, Wilbur F., Middletown, Conn. Combined wash-bench and wringer-support	484,160	Oct. 1	956	246	61	209
Parmelee, Wolcott J. (See Marshall, James, assignor.)						
Parmelee, Wolcott J., Wilkes-Barré, Pa. Machine for trimming the flash from axles	471,136	Mar. 22	2322	597	58	1578
Parmelee, Wolcott J., Wilkes-Barré, Pa. Manufacture of axles	472,329	Apr. 5	602	152	59	113
Parmenter, James S., Woodstock, Canada. Railway-signal	466,423	Jan. 5	182	47	58	35
Parmenter, James S., Woodstock, Canada. Drying-kiln	469,268	Feb. 23	2126	547	58	966
Parmenter, William H., et al. (See Schiemer, Jacob, assignor.)						
Parmley, Arthur. (See Gritten and Parmley.)						
Parmley, Joseph W., Ipswich, S. D. Pocket-protector	486,352	Nov. 15	1872	493	61	986
Parmly, Samuel P., Chicago, Ill. Carbon-holder for arc lamps	468,411	Feb. 9	791	196	58	687
Parnall, Alfred N., assignor to Hollands Manufacturing Company, Erie, Pa. Pipe-wrench	486,235	Nov. 15	1626	446	61	949
Parpart, Otto, Akron, Ohio. Clearance-cutting machinery for twist-drills	488,218	Dec. 20	1635	407	61	1681
Parr, John H. (See Doro and Tapley, assignors.)						
Parris, James J., Beaver Falls, Pa. Carbureting apparatus	484,721	Oct. 18	1846	469	61	397
Parrish, Rob Roy, Portland, Oreg. Furniture-caster	477,573	June 21	2134	531	59	1887
Parrot, Waters B., Elizabeth, N. J. Nut-lock	477,149	June 14	1431	349	59	1737
Parrott, Benjamin F., Lynn, Mass. Skylight	470,896	Mar. 15	1953	500	58	1494
Parrow, Edward W., Plymouth, Mass. Car-coupling	464,451	Oct. 18	1427	364	61	313
Parry, Augustus N., Amesbury, Mass. Carriage	467,518	Jan. 26	1980	503	58	401
Parry, Augustus N., Amesbury, Mass. Carriage	474,029	May 3	229	55	59	682
Parry, Augustus N., Amesbury, Mass. Carriage	476,298	June 7	109	26	59	1459
Parry, Augustus N., Amesbury, Mass. Carriage	482,189	Sept. 6	442	106 107	60	1422
Parry, George T., Philadelphia, Pa. Miner's safety-lamp	467,193	Jan. 19	1460	373	58	294
Parry Manufacturing Company. (See Parry and Baker, assignors.)						
Parry Manufacturing Company. (See Parry and Hull, assignors.)						
Parry, Thomas H., and C. C. Hull, assignors to Parry Manufacturing Company, Indianapolis, Ind. Valve for vehicle-tops	474,457	May 10	932	239	59	827
Parry, Thomas H., and T. J. Baker, assignors to Parry Manufacturing Company, Indianapolis, Ind. Iron for vehicle-tongues	475,986	May 31	3359	847	59	1342
Parshall, Charles H., Detroit, Mich. Refrigerating apparatus	485,217	Nov. 1	94	29	61	592
Parshall, Horace F., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Commutator for electro-magnetic machines	480,739	Aug. 16	1590	398	60	913
Parshall, Horace F., Schenectady, assignor to Edison General Electric Company, New York, N. Y. Armature for dynamo-electric machines	480,740	Aug. 16	1591	398	60	914
Parsley, Levi, Bengay, Ark. Detonating fire-alarm	479,837	Aug. 2	94	24	60	600
Parsons, Arthur H. (See Parsons, Frederick W. and E. P., assignors.)						
Parsons, Ernest P. (See Parsons, Frederick W. and E. P.)						
Parsons, Frank W. (See Safford and Parsons.)						
Parsons, Fred W. (See Bechtol, George T., assignor.)						
Parsons, Frederick W. and E. P., assignors of one-fourth to A. H. Parsons, Cleveland, Ohio. Tool-head for iron planers and shapers	471,189	Mar. 22	2407	612	58	1593

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Parsons, George S., Cherry Flats, Pa. Bridle-bit	477,779	June 28	2482	621	59	1972
Parsons, J. Burton, <i>et al.</i> (See Huston, John B., assignor.)						
Parsons, John E., <i>et al.</i> , executors. (See Baird, John.)						
Parsons, John H. (See Gay and Parsons.)						
Parsons, John H., Wichita, Kans. Signal-lantern	477,697	June 28	2354	588	59	1948
Parsons-Miller, George, Hawesville, Ky. Bridge	467,013	Jan. 12	1144	290	58	225
Parsons, Richmond, Philadelphia, assignor to J. C. Palmer, Ridley Park, Pa. Lathe-dog	484,668	Oct. 18	1776	452	61	383
Parsons, Robert T., <i>et al.</i> (See Brown, William T., assignor.)						
Parsons, William F., and A. Davis, New Kamille, Wash. Wrench	467,381	Jan. 19	1748	446	58	348
Partridge, Benjamin S., Jacksonville, Fla. Water-motor	478,457	July 5	604	147	60	119
Partridge, Benjamin S., Jacksonville, Fla. Motor	487,584	Dec. 6	560	144	61	1432
Partridge, Charles S., assignor to A. N. Kellogg Newspaper Company, Chicago, Ill. Stereotype-box	466,366	Jan. 5	87	24	58	19
Partz, August F. W., Philadelphia, Pa. Process of and apparatus for manufacturing wire rope	482,190	Sept. 6	443	107	60	1422
Pascalar, Fridolin, Rochester, N. Y. Fountain	475,146	May 17	2016	509	59	1053
Paschal, Ezekiel F., assignor of one-half to E. A. Devenish, High Point, N. C. Andiron	475,701	May 24	2880	728	59	1237
Paschall, W. G., <i>et al.</i> (See Jones and Ashley, assignors.)						
Pass, James, and A. P. Seymour, Syracuse, N. Y. Porcelain insulator	476,813	June 14	897	220	59	1630
Pass, James, and A. P. Seymour, Syracuse, N. Y. Ceiling-rosette cut-out	481,624	Aug. 30	3043	743	60	1220
Passano, Louis D., <i>et al.</i> (See Welch, Rosia W., assignor.)						
Passmore, Edwin, Somerville, Mass. Machine for cutting and polishing precious stones ..	479,452	July 26	2175	544	60	467
Passmore, Jason, <i>et al.</i> (See Shoemaker, Milton, assignor.)						
Patenall, Thomas H., Rahway, N. J. Locking device for switch and signal operating mechanism	474,528	May 10	1036	266	59	847
Patenall, Thomas H., Rahway, N. J. Block-signal apparatus	480,411	Aug. 9	1064	266	60	795
Patenall, Thomas H., Rahway, N. J. Circuit closing and breaking device for railway-tracks	480,507	Aug. 9	1219	305	60	826
Patenall, Thomas H., Rahway, N. J. Signal-repeater	488,285	Dec. 20	1739	438	61	1701
Patent Button Company. (See Jackson, Wallace E., assignor.)						
Paterson, Alexander, Allegheny, Pa. Roll-bearing	477,818	June 28	2549	638	59	1984
Paterson, Edward L., Chicago, Ill. Railway safety-gate	485,771	Nov. 8	943	253	61	783
Paterson, Mark P., New Rochelle, N. Y. Carpenter's square	476,683	June 7	682	165	59	1572
Patin, Octave, Paris, France. Electric-arc lamp	473,076	Apr. 19	1641	413	59	338
Patnoe, George W., assignor to himself, J. H. Shepard, and J. Dolese, Chicago, Ill. Portable derrick	482,528	Sept. 13	1026	248	60	1550
Patnoe, George W., assignor to himself, J. H. Shepard, and J. Dolese, Chicago, Ill. Turntable	486,589	Nov. 22	2236	587	61	1072
Patrolli, Phillip, Dayton, Ohio. Colander for mashing vegetables	482,982	Sept. 20	1734	438	60	1700
Pattee, Davis, Des Moines, Iowa. Valve for steam-engines	473,953	May 3	111	26	59	658
Pattee, Henry H., Monmouth, Ill. Time-registering apparatus for electricity	478,237	July 5	277	68, 69	60	56
Pattee, Herbert H., Washington, D. C. Umbrella-support	473,016	Apr. 19	1546	394	59	321
Pattee, John H. (See Norton, Benjamin F., assignor.)						
Patten, Edward K., Whitesborough, N. Y., assignor to Seaman Drawer Fitting Machine Company, Milwaukee, Wis. Combined cutting and scouring device	479,332	July 19	1939	485	60	405
Patten, Enos, assignor to Lynn Lasting Machine Company, Lynn, Mass. Lasting-machine	467,877	Jan. 26	2551	646	58	508
Patten, Enos, assignor to Lynn Lasting Machine Company, Lynn, Mass. Sewing-machine	481,266	Aug. 23	2460	606	60	1095
Patten, Enos, assignor to Lynn Lasting Machine Company, Lynn, Mass. Mechanism	481,508	Aug. 23	2850	700	60	1168
Patten, Enos, assignor to Lynn Lasting Machine Company, Lynn, Mass. Tack-driving machine	483,747	Oct. 4	337	85	61	70
Pattin, James S., Baltimore, Md. Axle-lubricator	475,147	May 17	2017	509	59	1053
Pattin, James S., Baltimore, Md. Axle-lubricator	479,677	July 19	1553	388	60	331
Pattin, James S., assignor of three-fourths to J. Holland, Baltimore, Md. Shutter-worker	482,562	Sept. 13	1081	262	60	1560
Pattin, John, New York, N. Y. Starting and stopping mechanism for machinery	469,713	Mar. 1	63	18	58	1111
Patterson, David M. (See Lawrence, Patterson, and Sand.)						
Patterson, David M., <i>et al.</i> (See Sand, John, Q. A., assignor.)						
Patterson, Elisha G., Titusville, Pa. Supporter for railway-rails	472,071	Apr. 5	91	25	59	19
Patterson, Elisha G., Titusville, Pa. Tamping railway-ties	472,072	Apr. 5	93	25	59	19
Patterson, George F., <i>et al.</i> (See Wharton, Richard, assignor.)						
Patterson, George W., assignor of one-half to G. W. Miller, Philadelphia, Pa. Scholar's companion	469,593	Feb. 23	2632	675	58	1064
Patterson, Gilbert. (See Brousseau and Patterson.)						
Patterson, Henry C., Marshall, Mo. Wiping-rod	470,254	Mar. 8	934	232	58	1289
Patterson, James B., <i>et al.</i> (See Wharton, Richard, assignor.)						
Patterson, James W., New York, N. Y. Opera-glass-rental apparatus	475,412	May 24	2431	620	59	1150
Patterson, James W., New York, N. Y. Auditorium-chair	488,533	Dec. 20	2144	530	61	1780
Patterson, John C., and J. Kirby, Jr., Dayton, Ohio, assignors, by mesne assignments, to O. Kinsey, trustee. Lamp	480,412	Aug. 9	1069	267	60	796
Patterson, Lemuel. (See Hold and Patterson.)						
Patterson, Ralph J., Gertrude, Ga. Ventilated barrel	473,589	Apr. 26	2535	640	59	531
Patterson, Robert I., Muncie, Ind. Jar-fastening	477,955	June 28	2766	693	59	2027
Patterson, Will. (See Swenson, Lorens, assignor.)						
Patterson, Will. and L. Swenson, Cresco, Iowa. Vehicle-thill	480,129	Aug. 2	590	150	60	695
Patterson, William R., Chicago, Ill. Electric conductor	472,643	Apr. 12	979	253	59	199
Patterson, William R., Manistee, Mich. Draft-indicator for vessels	484,642	Oct. 18	1723	438	61	372
Patterson, William R., assignor to Western Electric Company, Chicago, Ill. Electric cable	476,484	June 7	400	93	59	1515
Pattin, Douglas P. (See Pattin, Morse and Pattin.)						
Pattin, Winfield S., W. M. Morse, and D. P. Pattin, Marietta, Ohio. Steam-engine valve	469,173	Feb. 16	1961	502	58	929
Pattison, Charles E., Boston, Mass. Electrical switch	488,740	Dec. 27	2466	613	61	1860
Pattison, Thomas P., St. Joseph, Mo. Bookkeeping apparatus	486,386	Nov. 15	1919	509	61	997
Pattison, Walter. (See Hallenbeck, Witt, and Pattison.)						
Patton, Charles W., Clarksville, Ind., assignor of two-thirds to J. J. and T. J. Ramsey, Shelbyville, Ky. Car-coupling	485,218	Nov. 1	96	29	61	592
Patton, Harry E. (See Fulbright, William D., assignor.)						
Patton, John M., Hannibal, Mo. Voting-booth	472,907	Apr. 12	1356	349	59	272
Patton Motor Company. (See Patton, William H., assignor.)						
Patton, Robert M. (See McCormack and Patton.)						
Patton, Rufus D., Kansas City, Mo. Thill-coupling	480,622	Aug. 9	1402	349	60	862
Patton, William H., Chicago, Ill., assignor to Patton Motor Company, Pueblo, Colo. Electric-motor car	475,702	May 24	2882	729	59	1237

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Paugh, Benjamin H., Philippi, W. Va. Car-coupling	482,526	Sept. 20	1641	413	60	1682
Paugh, Benjamin H., and G. W. Findley, Philippi, W. Va. Running-gear for vehicles	478,758	July 12	1056	261	60	225
Paul, Charles A., Fort Wayne, Ind. Pulley	466,948	Jan. 12	1045	265	58	207
Paul, Charles A., Fort Wayne, Ind. Pulley	466,949	Jan. 12	1046	266	58	207
Paul, George, Cuyahoga Falls, Ohio. Letter-press and cabinet	481,586	Aug. 30	2983	732	60	1210
Paul, George J. F., assignor of one-half to H. Paul, Sr., Philadelphia, Pa. Wagon-shaft	488,772	Dec. 27	2512	624	61	1869
Paul, Henry, Sr. (See Paul, George J. F., assignor.)						
Paul, Michel J., London, England. Hoisting apparatus	475,888	May 31	3210	812	59	1313
Paul, Thomas H., Frostburg, Md. Apparatus for making illuminating-gas	470,629	Mar. 8	1544	402	58	1405
Paull, Archibald W., Wheeling, W. Va. Lamp	467,194	Jan. 19	1461	{ 373 374 }	58	294
Paull, Archibald W., Wheeling, W. Va. Lamp	477,332	June 21	1758	430	59	1812
Paullin, Joseph A., Kansas City, Mo. Spark-arrester	473,235	Apr. 19	1924	484	59	390
Pauls, August, Brooklyn, N. Y. Pocket-knife	472,390	Apr. 5	604	153	59	113
Pauls, Carl F., Chicago, Ill. Enameling	467,356	Jan. 19	1713		58	342
Pauls, John J., Lyons, Iowa. Writing and drawing device	478,129	July 5	73	19	60	17
Paulsen, Erik, Larchwood, Iowa. Plow-shovel	470,503	Mar. 8	1369	357	58	1369
Paulsen, Erik, Larchwood, Iowa. Plow	487,539	Dec. 6	502	131	61	1420
Paulus, Christopher. (See Goodhue, William F., assignor.)						
Paulus, George W. (See Hougen and Paulus.)						
Pauly Jail Building and Manufacturing Company. (See Pauly, Peter J., Jr., assignor.)						
Pauly Jail Building and Manufacturing Company. (See Pauly, Peter J., Sr., assignor.)						
Pauly Jail Building and Manufacturing Company. (See Pauly, Peter J., Sr., and Peter J., Jr., assignors.)						
Pauly, Peter J., Jr., assignor to Pauly Jail Building and Manufacturing Company, St. Louis, Mo. File-case	477,574	June 21	2135	531	59	1887
Pauly, Peter J., Sr., assignor to Pauly Jail Building and Manufacturing Company, St. Louis, Mo. Jail-grating	480,700	Aug. 9	1529	380	60	886
Pauly, Peter J., Sr., and Peter J., Jr., assignors to Pauly Jail Building and Manufacturing Company, St. Louis, Mo. Mechanism for opening, closing, and locking jail-doors	480,476	Aug. 9	1175	{ 295 296 }	60	817
Pauly, Peter J., Sr., and Peter J., Jr., assignors to Pauly Jail Building and Manufacturing Company, St. Louis, Mo. Mechanism for opening and closing jail-doors	482,316	Sept. 6	658	157	60	1464
Pauthonier, Casimir, Boston, Mass., assignor to A. Ladenburg, New York, N. Y., and R. T. McDonald, Fort Wayne, Ind. Manufacture of incandescent electric lamps	487,890	Dec. 13	1074	269	61	1551
Pavyer, Benjamin J., and T. Burns, assignors to J. G. Pavyer, St. Louis, Mo. Paper-cutting machine	479,302	July 19	1900	475	60	397
Pavyer, Benjamin J., and T. Burns, St. Louis, Mo.; said Burns assignor to said Pavyer. Paper-cutter	485,586	Nov. 1	662	176	61	709
Pavyer, James G. (See Pavyer and Burns, assignors.)						
Pavyer, James G., St. Louis, Mo. Type casting and dressing machine	471,890	Mar. 29	3458	{ 882 883 }	58	1801
Pawling, William M., Hagaman's Mills, N. Y., assignor to G. J. Torrance, Harrison, N. J. Machine for balling slivers	487,891	Dec. 13	1076	{ 269 270 }	61	1552
Paxton, John B. (See Slack, Graff, and Paxton.)						
Paxton, John B., and E. I. O'Neill, Philadelphia, Pa. Web-holder for knitting-machines	468,137	Feb. 2	348	86	58	592
Payler, John W., Detroit, Mich. Handle for files or other tools	472,140	Apr. 5	203	55	59	38
Payn, Lucien, Paris, France. Captive balloon	476,893	June 14	1028	249	59	1655
Payne, Arthur C. (See Aylsworth and Payne.)						
Payne, Augustus F., Hamilton, N. Y. Wall-paper exhibitor	485,648	Nov. 8	752	198	61	743
Payne, Benjamin N., Elmira, N. Y. Railway-chair	485,298	Nov. 1	215	61	61	616
Payne, Benjamin N., Elmira, N. Y. Belt-tightener	488,698	Dec. 27	2409	597	61	1848
Payne, Hiram E. (See Robinson, Laurence B., assignor.)						
Payne, Hiram E., Milton, Tex. Plow	466,701	Jan. 5	611	159	58	118
Payne, John R., assignor of one-half to G. W. Jean, Freedom, Ind. Sliding gate	488,481	Dec. 20	2056	511	61	1764
Payne, Joseph, Dwight, Ill. Dental process	474,967	May 17	1738	441	59	999
Payne, Joseph, Dwight, Ill. Dental articulator	474,968	May 17	1742	442	59	1000
Payne, Richard H., Aquone, N. C. Steam-engine governor	475,148	May 17	2018	510	59	1053
Payne, Thomas, Grand Rapids, Mich. Washing-machine	469,528	Feb. 23	2534	652	58	1045
Payne, Walter S., Fostoria, Ohio. Machine for tapping mains	478,711	Fr 7 12	975	{ 242 243 }	60	210
Payne, William H., assignor, by mesne assignments, to A. E. Hoskins, Philadelphia, Pa. Pocket powder-puff and inhaler device	478,358	July 5	469	114	60	93
Payne, William H., assignor to C. P. Hoskins and G. G. Altorfer, Philadelphia, Pa. Fluid can or vessel stopper	483,082	Sept. 20	1684	477	60	1732
Payne, William J. (See Movers, James M., assignor.)						
Payson, Edward, Chicago, Ill. Transom-lifter	482,024	Sept. 6	167	40	60	1368
Peabody, William W., et al. (See Schenck, John D. P., assignor.)						
Peace, John G., Salem, Mo. Box-fastener	468,687	Feb. 9	1219	310	58	772
Peace, Joseph W., Rhea Springs, Tenn. Bridle attachment	483,472	Sept. 27	2496	628	60	1861
Peacock, Benjamin F., Auauiston, Ala., and F. T. Peacock, Sparrow's Point, Md. Manufacture of axles shafts, &c.	475,969	May 31	3332	840	59	1337
Peacock, Dred, et al. (See Vernon, Archer T., assignor.)						
Peacock, Edward F., et al. (See Reagan, Harry C., Jr., assignor.)						
Peacock, Ernest A., London, England. Stirrup	478,633	July 12	871	214	60	188
Peacock, Francis T. (See Peacock, Benjamin F. and F. T.)						
Peacock, Thomas B. (See Dudley, George B., assignor.)						
Peacock, Thomas B., et al. (See Brazier, Edwin, assignor.)						
Peacock, William, Chicago, Ill. Vise	468,825	Feb. 16	1433	364	58	824
Pear, Isaac S., Cambridge, Mass. Device for facilitating the counting of ballots	468,972	Feb. 16	1675	427	58	870
Pearce, Charles E. (See Creelins, Louis J., assignor.)						
Pearce, Frederick, New York, N. Y. Dial-transmitter	482,877	Sept. 20	1561	{ 390 391 }	60	1667
Pearce, Jacob A., assignor to Mechanics Milling and Amalgamating Company, Denver, Colo. Ore-pulverizer	469,065	Feb. 16	1823	466	58	900
Pearce, James, Wilmerding, assignor of four-fifths to S. H. Johnson, Pittsburg, C. Horrocks, Wilmerding, J. Horrocks, Millvale, and H. E. Weiskopf, Allegheny, Pa. Brake-beam	467,234	Jan. 19	1523	389	58	306
Pearce, Richard, Denver, Colo. Ore-roasting furnace	488,797	Dec. 27	2554	{ 633 634 }	61	1878
Pearce, Thomas A., et al. (See Ealy, John C., assignor.)						
Pearce, William, assignor of one-half to M. N. Woodruff, Southington, Conn. Ox-shoe	471,513	Mar. 22	2885	734	58	1685
Pearce, William, Plantsville, assignor of three-fourths to M. N. Woodruff, N. A. Barnes, and J. H. Pratt, Southington, Conn. Horseshoe-calk	470,702	Mar. 15	1654	429	58	1436
Pearce, William A., Houghton, Mich. Chimney-cap	482,851	Sept. 20	1517	377	60	1650
Pearce, William J., Pilot Point, Tex. Gate	473,777	Apr. 26	2815	707	59	584

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Pearce, George R., Lynn, assignor of one-half to E. L. Sprague, Boston, Mass. Sewing-machine	467,878	Jan. 26	2558	648	58	509
Pearce, Joseph, <i>et al.</i> (See Witte, Frank, assignor.)						
Pearl, Coroden E., North Bangor, N. Y. Vehicle-spring	485,649	Nov. 8	753	{ 198 199 305 }	61	743
Pearl, Eugene, New York, N. Y. Corset-shield	467,049	Jan. 12	1209	305	58	238
Pearn, Frank. (See Young and Pearn.)						
Pearson, Fred, Philadelphia, Pa. Woven pile fabric	484,541	Oct. 18	1569	399	61	341
Pearson, Fred, Philadelphia, Pa. Woven pile fabric	484,605	Oct. 18	1659	421	61	360
Pearson, Fred, Philadelphia, Pa. Woven pile fabric	484,606	Oct. 18	1661	421	61	361
Pearson, Fred, Philadelphia, Pa. Double pile fabric	484,607	Oct. 18	1663	422	61	361
Pearson, Harriet N., Corsicana, Tex. Stovepipe attachment	475,149	May 17	2020	510	59	1054
Pearson, James B., Pittsburg, and V. Sperle, Allegheny, assignors of one-third to D. Blickenstorfer, Pittsburg, Pa. Watch-chain holder and badge	486,419	Nov. 15	1977	524	61	1003
Pearson, John, Pullman, Ill. Grain-car door	468,894	Feb. 16	1534	{ 390 391 261 262 }	58	843
Pearson, Marshall H., Leicester, England. Eyeletting-machine	478,759	July 12	1057	{ 261 262 }	60	226
Pearson, Marshall H., Leicester, England, assignor to John O'Flaherty Company, Montreal, Canada. Sewing-machine	479,838	Aug. 2	96	24, 25	60	601
Pearson, Marshall H., Leicester, England, assignor to John O'Flaherty Company, Montreal, Canada. Waxing device for sewing-machines	483,083	Sept. 20	1886	477	60	1732
Pearson, Martin, Robbinsdale, Minn. Carpet stretcher and tacker	467,864	Jan. 26	2534	{ 642 643 }	58	504
Pearson, Paul, assignor of one-half to Z. F. Milbourn, Kearney, Mo. Combined fence post and brace	482,381	Sept. 13	783	188	60	1502
Pearson, Robert P., Camden, N. J. Bobbin-lock for loom-shuttles	470,703	Mar. 15	1655	429	58	1436
Pearson, Thomas S., Cassville, Ind. Grain-weigher	468,466	Feh. 9	870	{ 221 222 }	58	703
Pearsons, William B. C., <i>et al.</i> (See Holly, Edgar P., assignor.)						
Pease, Allen, Trumansburg, N. Y. Combined cultivator, harrow, horse-hoe, and vine-puller	476,299	June 7	109	26	59	1459
Pease, Calvin E., Dayton, Ohio. Lathe-chuck	470,075	Mar. 1	646	160	58	1224
Pease, Edwin O., Jersey City, N. J. Sweeping-machine	478,942	July 12	1336	332	60	279
Pease, Jacob, Brooklyn, assignor to W. Brookfield, New York, N. Y. Apparatus for finishing the edges of glass vessels	477,447	June 21	1938	480	59	1846
Pease, James L., Louisville, Ky. Rack for doors	475,948	May 31	3300	833	59	1331
Pease, Leroy B. (See Lewis, Everett C., assignor.)						
Pease, Lewis E., Cambridge, Mass. Electrically-heated sand-box	475,703	May 24	2825	730	59	1237
Pease, Roger S., Rose, Minn. Sporting-trap	480,130	Ang. 2	591	{ 150 151 152 }	60	695
Pease, Roger S., Rose, Minn. Melting-pot	484,161	Oct. 11	958	246	61	210
Pease, Roger S., Rose, Minn. Preparing glass metal	487,425	Dec. 6	321	82	61	1385
Pease, Roger S., Rose, Minn. Apparatus for molding glass, metal, &c.	487,426	Dec. 6	323	82, 83	61	1385
Peck, Anna C., San Francisco, Cal. Carving-brace	472,742	Apr. 12	1127	299	59	226
Peck, Albert S., Geneva, Ill. Corn-harvester	466,512	Jan. 5	328	82	58	63
Peck, Cassius C., Warsaw, N. Y. Generation of steam-power	479,454	July 26	2179	545	60	467
Peck, Edmund E., Brooklyn, N. Y. Carpet-sweeper	469,714	Mar. 1	65	18, 19	58	1111
Peck, Edmund E., Brooklyn, N. Y. Reclining-chair	488,773	Dec. 27	2513	625	61	1870
Peck, Edward G., and G. E. O'Meara, Seymour, Conn. Fountain-pen	484,542	Oct. 18	1571	399	61	342
Peck, Franklin H., Des Moines, Iowa, assignor to Mosler Bank Safe Company, Cincinnati, Ohio. Thine-lock attachment	472,224	Apr. 5	341	89	59	64
Peck, Frederic M., Hartford, Conn. Package for butter	479,095	July 19	1585	396	60	337
Peck, Fremont P. (See Sturgis and Peck.)						
Peck, George F., New York, N. Y. Cuff or sleeve button	470,411	Mar. 8	1226	313	58	1341
Peck, James A., Brewster, N. Y. Can-crimping machine	477,575	June 21	2136	531	59	1887
Peck, Leman B., and F. L. Sterner, Cardington, Ohio. Nut-lock	477,222	June 21	1576	387	59	1777
Peck Manufacturing Company. (See Stephens, George, assignor.)						
Peck, Melinda. (See Peck, Orrin B., assignor.)						
Peck, Melvin D., <i>et al.</i> (See Reiley, Matthew S., assignor.)						
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Treating finely divided or powdered substances of different degrees of specific gravity	468,688	Feb. 9	1221	{ 310 311 }	58	772
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for treating finely divided or powdered substances of different degrees of specific gravity	468,689	Feb. 9	1222	311	58	773
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Machine for centrifugally treating molten material	473,473	Apr. 26	2327	589	59	491
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Separating particles of different degrees of specific gravity	479,453	July 26	2178	544	60	467
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Separating powdered or finely-divided particles, &c.	479,455	July 26	2182	{ 545 546 547 }	60	468
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator	479,456	July 26	2184	{ 546 547 }	60	468
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Separating powdered or finely-divided particles	479,953	Aug. 2	278	68, 69	60	635
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator	479,954	Aug. 2	280	69, 70	60	635
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator	479,955	Aug. 2	282	70, 71	60	636
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Apparatus for separating molten materials of different specific gravity	484,452	Oct. 18	1428	364	61	314
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Centrifugal ore-separator	485,475	Nov. 1	500	132	61	673
Peck, Orrin B., assignor to M. Peck, Chicago, Ill. Belt	485,476	Nov. 1	502	132	61	674
Pecker, Carlo von, Vienna, Austria-Hungary. Revolving firearm	467,558	Jan. 26	2061	521	58	415
Peckham, Edgar, New York, N. Y. Car-truck gear	481,704	Aug. 30	3167	774	60	1244
Peckham, Edgar, New York, N. Y. Car-axle box	485,219	Nov. 1	97	30	61	593
Peckham, Edgar, assignor, by mesne assignments, to Peckham Motor Truck and Wheel Company, Kingston, N. Y. Car-brake	467,896	Jan. 26	2586	655	58	514
Peckham, Edgar, assignor, by mesne assignments, to Peckham Motor Truck and Wheel Company, Kingston, N. Y. Car-truck	471,061	Mar. 15	2198	565	58	1541
Peckham, Edgar, assignor, by mesne assignments, to Peckham Motor Truck and Wheel Company, Kingston, N. Y. Car-truck	471,062	Mar. 15	2200	566	58	1542
Peckham Motor Truck and Wheel Company. (See Peckham, Edgar, assignor.)						
Peckham Seamless Ring Manufacturing Company. (See Peckham, William H., assignor.)						
Peckham, William H., Jersey City, N. J., assignor to Peckham Seamless Ring Manufacturing Company, New York, N. Y. Machine for marking or stamping finger-rings	484,918	Oct. 25	2201	567	61	483
Pedder, John, Pittsburg, Pa. Furnace for treating steel	483,577	Oct. 4	92	24	61	21

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Podder, John, Pittsburg, Pa. Furnace for treating steel	483,578	Oct. 4	96	24	61	21
Pedersen, Johannes T., assignor to W. E. Wells, New York, N. Y. Coupling for dental-engine shafts and hand-pieces	472,683	Apr. 12	1034	267	59	208
Pederson, Ole, Aurora, Ill. Radiator	476,894	June 14	1029	249	59	1655
Pedrick, Joseph E., Columbus, Ind. Corn-planter attachment	485,710	Nov. 8	858	230	61	765
Peebles, Joseph N., Danville, Ill. Blowpipe	473,197	Apr. 19	1861	469	59	376
Peek, Samuel W., Hartwell, Ga. Check-punch	472,391	Apr. 5	604	153	59	113
Peel, Benjamin W., Chicago, Ill. Draft-regulator for fireplaces	485,172	Nov. 8	945	253	61	783
Peel, Lawson G., Hazlehurst, Miss. Hay-press	466,623	Jan. 5	500	128	58	96
Peer, John, Claremont, Ill. Device for holding bags	488,449	Dec. 20	2004	500	61	1754
Peerdt, Rudolph te, Berlin, Germany. Almanac	467,559	Jan. 26	2062	521		
Peerless Manufacturing Company. (See Fitch, William E., assignor.)						
Peerless Manufacturing Company. (See McClymonds, Louis K., assignor.)						
Peet, Benjamin F., Springfield, Mass. Saddle for velocipedes	479,656	July 26	2494	621	60	525
Peet, Walter B. (See Banks and Peet.)						
Pegues, William T., et al. (See Pitts, William W., assignor.)						
Peifer, George W., Jr., and R. Johnston, Wilkes-Barré, Pa. Torpedo-placer	484,264	Oct. 25	2100	541	61	464
Peifer, John W. (See Walker and Peifer.)						
Peirce, Almy L., Grand Rapids, Mich., assignor to Wilson Improved Store Service Company, of Kentucky. Autographic copying and recording apparatus	472,743	Apr. 12	1128	290	59	226
Peirce, Almy L., Grand Rapids, Mich., and C. E. King, Cincinnati, Ohio. Registering-faucet	474,564	May 10	1101	281	59	860
Peirce, Charles E., Altamonte Springs, Fla. Refrigerating apparatus	483,500	Sept. 27	2536	637	60	1869
Peirce, Charles L., Milwaukee, Wis., assignor to D. S. Wegg, Chicago, Ill. Speaking-tube	486,681	Nov. 22	2385	623		
Peirce, Charles L., Milwaukee, Wis., assignor to D. S. Wegg, Chicago, Ill. Speaking-tube	486,682	Nov. 22	2387	624	61	1102
Peisier, Gustave, Paris, France. Apparatus for feeding poultry	484,453	Oct. 18	1428	364	61	314
Pellias, Frederic A. (See Elieson, Chaimsonovitz P., assignor.)				365		
Pellican, Levi, Southborough, Mass. Ash-sifter	487,350	Dec. 6	183	50	61	1357
Peloubet, Jarvis, assignor to Lyon & Healy, Chicago, Ill. Pneumatic action for organs	487,767	Dec. 13	868	226	61	1511
Pelton, Everitt W., et al. (See Newell, James L., assignor.)				221		
Pelton, George W., assignor of one-half to J. Fitzgerald, Muscatine, Iowa. Crank-handle	471,328	Mar. 22	2610	662	58	1633
Pelton, George W., assignor of one-half to J. Fitzgerald, Muscatine, Iowa. Domestic press	473,407	Apr. 19	2214	556	59	447
Pelton, Phineas, Persia, Iowa. Combined air-brake and car-coupling	482,362	Sept. 13	784	189	60	1502
Pelton, Walter B., et al. (See Newell, James L., assignor.)						
Penberthy Injector Company. (See Downes, William A., assignor.)						
Penberthy, William, Leadville, Colo. Automatic restarting-injector	484,044	Oct. 11	786	198	61	176
Pence, Charles, Galena, Kans. Truss	474,402	May 10	833	218	59	809
Pendleton, Bradford H., Evanston, Ill. Lighting device	482,587	Sept. 13	1113	269	60	1567
Pendleton, Bradford H., Chicago, Ill. Lighting device	486,499	Nov. 22	2097	554	61	1045
Pendleton, Edward B. (See Young, John G., Jr., assignor.)						
Pendleton, Grant and M. C., McComb, Ohio. Corn-harvester	469,174	Feb. 16	1963	502	58	929
Pendleton, John H. (See Bryson, Pendleton, and Benn.)						
Pendleton, John H., et al. (See Thomas, Charles W., assignor.)						
Pendleton, John H., Brooklyn, N. Y. Electric-railway system	484,919	Oct. 25	2204	567	61	483
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Cable railway	479,919	Aug. 2	210	53, 54		
Pendleton, John H., Brooklyn, assignor to Rapid Transit Cable Company, New York, N. Y. Cable railway	479,920	Aug. 2	215	54, 55	60	624
Pendleton, John H., Brooklyn, and A. Bryson, assignors to Rapid Transit Cable Company, New York, N. Y. Cable railway	479,921	Aug. 2	224	55	60	626
Pendleton, John M. (See Madden, Albert F., assignor.)				56		
Pendleton, John T., and J. S. Wilson, Buffalo, Mo. Blank form for warranty-deeds, tax-receipts, &c.	485,561	Nov. 1	622	166	61	700
Pendleton, McClellan C. (See Pendleton, Grant and M. C.)						
Penfield, Charles R., Duluth, Minn. Furnace for burning granular fuel	469,749	Mar. 1	127	33, 34	58	1124
Penfield, Edward C., Denver, Colo. Combination-lock	468,429	Feb. 9	813	204	58	691
Penfield, James W., Willoughby, Ohio. Brick-kiln	480,935	Aug. 16	1882	205		
Penfield, James W., Willoughby, Ohio. Brick-kiln	480,936	Aug. 16	1884	469	60	972
Penfield, Raymond C. (See Wallace and Penfield.)				470		
Penfield, Raymond C., Willoughby, Ohio. Disintegrating-roller	480,937	Aug. 16	1885	471	60	973
Penfield & Son, J. W. (See Larman, William H., assignor.)						
Penfield & Son, J. W. (See Wallace and Penfield, assignors.)						
Penman, William, London, England. Note-hook or the like	472,073	Apr. 5	94	25	59	20
Penn, Alfred E. (See Penn, Thomas and A. E.)						
Penn Lamp and Lighting Company. (See Penn, Thomas and A. E., assignors.)						
Penn, Richard L., Basham's Gap, Ala. Gang-plow	478,634	July 12	872	215	60	188
Penn, Thomas, Reidsville, N. C. Car-coupling	476,168	May 31	3647	923	59	1402
Penn, Thomas and A. E., London, assignors to Penn Lamp and Lighting Company, Limited, Abchurch, England. Device for controlling the distribution of oils to lamps and means for lighting and extinguishing the same	477,150	June 14	1433	349	59	1737
Pennebaker, Francis M. (See Stoner and Pennebaker.)				350		
Pennell, Arthur, Kansas City, Mo. Water-purifier	474,685	May 10	1289	329	59	896
Pennney, Joseph, Grand Rapids, Mich. Folding bed	484,722	Oct. 18	1847	470	61	398
Pennney, Mark A., Perris, Cal. Brake-shoe	471,891	Mar. 29	3460	883	58	1802
Pennie, John C. (See Speir, Stuart G., assignor.)						
Penniman, George D., et al. (See Silkman, Edward J., assignor.)						
Penniman, Russell S., Dover, N. J., assignor to Atlantic Dynamite Company, San Francisco, Cal. Apparatus for the final concentration of oil of vitriol	459,439	Feb. 23	2386	612	58	1017
Penniman, Russell S., assignor of two-thirds to J. C. Schrader, Dover, N. J., and W. C. Wood, Washington, D. C. Manufacturing nitrate of ammonia	478,067	June 28	2941	734	59	2059
Pennock, John D. (See Bradburn, Trump, and Pennock.)						
Pennock, Willard, Minerva, Ohio. Metallic car	466,624	Jan. 5	501	128	58	96
Pennock, Willard, Minerva, Ohio. Draw-gear for cars	480,827	Aug. 16	1726	129		
				431	60	941

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Pennsylvania Industrial Development Company. (See Henry Frank, assignor.)						
Pennsylvania Iron Works Company. (See Grist, Benjamin W., assignor.)						
Penrose, Halleck A. (See Dunbar, John W., assignor.)						
Penrose, Halleck A. (See Hebbard, Albert H., assignor.)						
Pentz, Charles B., assignor of one-half to M. T. Johnson, Walton, Kans. Car-coupling.	476,169	May 31	3648	923	59	1402
Pentz, James A. (See Reckenmann, Anthony, assignor.)						
Pentz, Levi, Canton, Ohio. Burglar-alarm.	469,365	Feb. 23	2274	584	58	595
Peoples, Alonzo E. (See Peoples, Henry C. and A. E.)						
Peoples, Erasmus O. (See Williams and Peoples.)						
Peoples, Henry C. and A. E. Eskridge, Kans. Corn-harvester.	482,005	Sept. 6	229	55, 56	60	1380
Peper, Christian, St. Louis, Mo. Angle-strip for tobacco caddies or boxes.	467,827	Jan. 26	2470	627	58	493
Peple, Gustavus A. (See Mayo and Peple.)						
Pepper, David, Jr., Philadelphia, Pa. Armature-core for electric motors.	473,077	Apr. 19	1643	418	59	338
Pepper, David, Jr., Philadelphia, Pa. Armature-ring.	473,078	Apr. 19	1644	418	59	338
Pepper, David, Jr., Philadelphia, Pa. Dynamo-electric machine.	485,220	Nov. 1	100	30	61	543
Pepper, James W. (See Soistmann and Pepper.)						
Pepper, William H., Lake Village, N. H. Knit fabric.	473,474	Apr. 26	2328	589 } 590 }	59	491
Pequegnat, Frank, St. Louis, Mich. Chronometer-escapement.	474,301	May 3	646	163	59	762
Percy, Edwin H. (See Evans, Percy, and Perry.)						
Peregrine, Seymour W. (See Stockwell, Millard E., assignor.)						
Peregrine, Seymour W., Grand Rapids, Mich. Drying-kiln.	467,953	Feb. 2	70	17	58	539
Peregrine, Seymour W., Grand Rapids, Mich. Tilting seat.	480,961	Aug. 16	1930	483	60	981
Pereira, Alfons, Stuttgart, Germany. Painting with distemper and other colors.	481,282	Aug. 23	2493	.....	60	1101
Perfection Manufacturing Company. (See Gleason, Albert H., assignor.)						
Perhacs & Gibbs Manufacturing Company. (See Gibbs, Charles, assignor.)						
Pertine, David M., Baltimore, Md. Cash-dish.	473,339	Apr. 19	2096	527	59	424
Perkes, Thomas, London, England. Ejector mechanism for breakdown guns.	467,300	Jan. 19	1629	414	58	326
Perkes, Thomas, London, England. Ejector mechanism for breakdown guns.	467,301	Jan. 19	1630	415	58	326
Perkes, Thomas, London, England. Ejector mechanism for breech-loading guns.	476,485	June 7	401	93	59	1515
Perkins, Adam C. (See Winkelmann and Perkins.)						
Perkins, Albert. (See Curtis and Perkins.)						
Perkins, Albert, Chicopee, Mass., assignor to A. G. Spalding & Brothers, New York, N. Y., and Lamb Knitting Machine Manufacturing Company, Chicopee Falls, Mass. Bicycle-brake.	474,759	May 10	1398	354	59	918
Perkins, Alfred T., Alameda, Cal. Fruit-car.	474,998	May 17	1790	453 } 454 }	59	1009
Perkins, Alice M., La Crosse, Wis. Circular-knitting machine.	466,424	Jan. 5	183	48	58	35
Perkins, Amos H., Chicago, Ill., assignor to Western Paving and Supply Company, of Illinois. Asphalt-paving apparatus.	476,814	June 14	898	220 } 221 }	59	1630
Perkins, Charles E. (See Fuller and Perkins.)						
Perkins, Charles G., Hartford, Conn. Electric switch.	471,760	Mar. 29	3258	830	58	1762
Perkins, Charles H., et al. (See Soverhill, Charles W., assignor.)						
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Method of and means for making blanks for horseshoes.	470,351	Mar. 8	1127	289	58	1323
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Horseshoe-blank bar.	470,352	Mar. 8	1129	289	58	1324
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Roll for making horseshoe-blanks.	470,353	Mar. 8	1130	289	58	1324
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Die-roll for making side-weighted horseshoe-blank bars.	470,364	Mar. 8	1150	294	58	1328
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Method of and apparatus for manufacturing blanks and blank-bars for side-weighted horseshoes.	470,365	Mar. 8	1152	295	58	1329
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Side-weighted blank and blank-bar for use in making side-weighted horseshoes.	470,400	Mar. 8	1208	309	58	1338
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Horseshoe-blank bar.	487,056	Nov. 29	3027	778	61	1245
Perkins, Charles H., Providence, R. I., assignor to Rhode Island Perkins Horse Shoe Company, Jersey City, N. J. Roll for making horseshoe-blank bars.	487,057	Nov. 29	3030	778	61	1246
Perkins, Charles R. (See Gordon and Perkins.)						
Perkins, Duane T., assignor to himself, F. Zuchtman, and P. A. Knappe, Springfield, Mass. Fountain-pen.	467,519	Jan. 26	1981	503	58	401
Perkins, Duane T., assignor to himself, F. Zuchtman, and P. A. Knappe, Springfield, Mass. Fountain-pen.	478,635	July 12	873	215	60	189
Perkins Electric Switch and Manufacturing Company. (See Gibbs, Jacob S., assignor.)						
Perkins, Elnathan W., North Berwick, Me. Blacking-box holder.	466,895	Jan. 12	963	246	58	193
Perkins, Ernest C., Geneva, N. Y. Eyeglass-holder.	482,191	Sept. 6	444	107	60	1422
Perkins, Fred B., and C. S. Jones, assignors to Toledo Electric Heating Company, Toledo, Ohio. Electric heater.	483,940	Oct. 4	619	157	61	128
Perkins, George A., Cambridge, Mass. Saddle-spring for velocipedes.	486,294	Nov. 15	1784	469	61	970
Perkins, George J., Truckee, Cal. Locomotive steam-boiler.	483,473	Sept. 27	2497	629	60	1861
Perkins, Jacob B. (See Miller, Frank., assignor.)						
Perkins, Jacob B., et al. (See Glossop, Gilbert, assignor.)						
Perkins, John D., Kenton, Ohio. Latch and lock.	468,895	Feb. 16	1536	391	58	843
Perkins, John O., et al. (See Stovall, Philip, assignor.)						
Perkins, Judson C., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Window-shade fixture.	479,766	July 26	2696	671	60	563
Perkins, Judson C., assignor to Meriden Curtain Fixture Company, Meriden, Conn. Spring shade-roller.	481,733	Aug. 30	3224	787	60	1255
Perkins, Judson C., and L. E. Leigh, assignors to Meriden Curtain Fixture Company, Meriden, Conn. Spindle-tip for spring shade-rollers.	482,563	Sept. 13	1082	263	60	1560
Perkins, Nathaniel S. (See White, Albert M., assignor.)						
Perkins, Nelson W., et al. (See Stovall, Philip, assignor.)						
Perkins, Palmer C., Mishawaka, Ind. Metal tower.	485,879	Nov. 8	1094	291	61	813
Perkins, Richard B., Hornellsville, assignor of one-half to C. A. Ball, Wellsville, N. Y. Fence.	478,170	July 5	159	40	60	34
Perkins, Richard B., Hornellsville, assignor of one-half to C. A. Ball, Wellsville, N. Y. Wire fence.	484,756	Oct. 18	1909	486	61	412
Perkins, Shadrack F., et al. (See Stovall, Philip, assignor.)						
Perkins, Willard H., and W. L. Cronenberg, Long Beach, Cal. Cultivator.	484,815	Oct. 25	2022	518	61	448
Perkins, William C., New Haven, Conn. Coat-hanger.	472,508	Apr. 5	788	201	59	150

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Perkins, William H., <i>et al.</i> (See Palsen, Magnus J., assignor.)						
Perkins, William W. (See Soley and Perkins.)						
Perkins, Willis J., Grand Rapids, Mich. Shingle-machine	469,976	Mar. 1	504	{ 125 126 }	58	1196
Peron, John A., Perris, Cal. Inhaler and respirator	469,594	Feb. 23	2633	675	58	1064
Perpente, William, New Haven, Conn. Speaking-tube	465,979	Nov. 8	1262	333	61	848
Perrenoud, Gustave F., <i>et al.</i> (See Harvey, George H., assignor.)						
Perrine, Frederic A. C., assignor to John A. Roebling's Sons Company, Trenton, N. J. Electric conductor	479,525	July 26	2303	575	60	490
Perrine, Frederic A. C., assignor to John A. Roebling's Sons Company, Trenton, N. J. Electric-cable splice	484,045	Oct. 11	788	198	61	176
Perrine, George H., Waterbury, Conn. Button	485,848	Nov. 8	1047	280	61	803
Perrins, John B., assignor to Seymour Manufacturing Company, Seymour, Conn. Machine for finishing the edges of tube-blanks	469,977	Mar. 1	509	126	58	1197
Perry, Aaron. (See Trask, Leo B., assignor.)						
Perry, Alvy G., Coldwater, Miss. Cotton-harvester	480,131	Aug. 2	593	{ 151 152 }	60	695
Perry, Bethune. (See Evans, Percy, and Perry.)						
Perry, Charles. (See Fisher and Perry.)						
Perry, Charles E. (See Coates and Perry.)						
Perry, Charles E., Miles City, Mont. Separable button	468,037	Feb. 2	198	49	58	563
Perry, Edward L., Paterson, N. J. Manufacturing hollow rubber articles	472,225	Apr. 5	344	89	59	64
Perry, Edward L., Paterson, N. J. Bellows-fold coupling for car-vestibules	473,954	May 3	112	26	59	658
Perry, Frank X., Worcester, Mass. Hame	472,270	Apr. 5	411	106	59	77
Perry, George R. and W. H., Concord, N. H. Air-circulating mechanism for railway-cars	472,195	Jan. 19	1464	374	58	295
Perry, George R. and W. H., and C. K. George, Concord, N. H. Adjustable saddle-bar for bicycles	475,020	May 17	1826	463	59	1015
Perry, Howard E., Chicago, Ill. Coin-controlled mechanism	481,816	Aug. 30	3366	325	60	1283
Perry, James, Brooklyn, N. Y. Folding crib	484,975	Oct. 25	2289	591	61	500
Perry, James L., assignor to J. L. Perry Machine Company, Chicago, Ill. Sandpapering-machine	474,686	May 10	1290	{ 330 331 }	59	897
Perry, John, London, England. Electric meter	486,123	Nov. 15	1521	402	61	916
Perry, John G., Wakefield, R. I. Nut-lock and bolt-tightener	482,906	Sept. 20	1617	405	60	1676
Perry, John G., Wakefield, R. I. Nut-lock	482,907	Sept. 20	1618	405	60	1676
Perry, Joseph R., Wilkes-Barré, Pa. Piano-action	485,650	Nov. 8	753	199	61	743
Perry, Joseph R., Wilkes-Barré, Pa. Violin-bow	485,651	Nov. 8	755	199	61	743
Perry, Nelson W., Cincinnati, Ohio. System of electric distribution for railways	466,367	Jan. 5	88	24, 25	58	20
Perry, Nelson W., Cincinnati, Ohio. System of electric distribution for moving translating devices	466,368	Jan. 5	92	25, 26	58	20
Perry, Nelson W., Cincinnati, Ohio. System of electric distribution	467,997	Jan. 26	2586	655	58	514
Perry, Richard D., Elyria, Ohio. Luggage-carrier for velocipedes	469,715	Mar. 1	68	19, 20	58	1112
Perry, Richard D., Elyria, Ohio. Clamp for luggage-carriers for velocipedes	476,948	June 14	1125	270	59	1674
Perry, Samuel R., Scranton, Pa. Piano-action	468,918	Feb. 16	1578	400	58	852
Perry, Sarah L., Medicine Lodge, Kans. Flexible fire-escape ladder	471,329	Mar. 22	2611	662	58	1633
Perry, Thomas O., Chicago, Ill. Pneumatic pump	485,880	Nov. 8	1095	{ 291 292 }	61	813
Perry, Thomas O., Chicago, Ill. Windmill air-compressor	485,881	Nov. 8	1100	{ 292 293 }	61	814
Perry, Thomas O., Chicago, Ill. Pneumatic pumping-engine	485,882	Nov. 8	1105	{ 293 294 }	61	815
Perry, Thomas O., Chicago, Ill. Tilting-tower for windmills	485,883	Nov. 8	1111	294	61	816
Perry, Thomas O., Chicago, Ill. Valve-operating mechanism for pneumatic pumps	485,884	Nov. 8	1114	{ 294 295 }	61	816
Perry, William H. (See Perry, George R. and W. H.)						
Perry, William H. (See Perry and George.)						
Perry, William H., Chicago, Ill. Automatic guest-call	471,686	Mar. 29	3139	800	58	1740
Perryman, Frank R., Chicago, Ill. Caterer's tray-table	468,038	Feb. 2	199	49	58	563
Peru Plow and Wheel Company. (See Edwards, James, assignor.)						
Pessano, Antonio C. (See Stirling, Archibald, assignor.)						
Peteler, Frank C., Minneapolis, Minn. Combination hot-water and hot-air heater	473,475	Apr. 26	2330	590	59	491
Peterlein, Charles F. E., Binghamton, N. Y. Back-knife gage-lathe	474,856	May 17	1563	{ 398 399 }	59	964
Peters, Fred A., Scio, Mich. Thimble for stovepipes	476,300	June 7	111	26, 27	59	1460
Peters, George T., assignor to himself and C. Shaw, Jersey City, N. J. Sash-balance	479,657	July 26	2496	621	60	526
Peters, Harry T., Woodland, Pa. Shaving-case	483,579	Oct. 4	99	24	61	22
Peters, James. (See Metzger, Edward, assignor.)						
Peters, Myron J. (See Carruthers, John, assignor.)						
Peters Pump Company. (See Wistrand, Peter E., assignor.)						
Peters, William A., San Francisco, Cal. Apparatus for making malt	483,748	Oct. 4	338	85	61	71
Peters, Winfield S., <i>et al.</i> (See Molloy, Frank, assignor.)						
Petersen, Edward A. C., Chicago, Ill. Cake-cutter	467,828	Jan. 26	2470	627	58	493
Petersen, Edward A. C., Chicago, Ill. Revolving dough-divider	475,607	May 24	2739	695	59	1210
Petersen, Ernest, Kertch, Russia. Tubular steam-boiler	475,150	May 17	2021	510	59	1054
Petersen, Henry, New York, N. Y. Propeller	473,017	Apr. 19	1548	394	59	321
Petersen, William, St. Louis, Mo. Bed-lounge	469,657	Feb. 23	2718	{ 698 699 }	58	1084
Peterson, Alfred, Hinesborough, Ill. Elevator and dump	471,137	Mar. 22	2323	597	58	1578
Peterson, Alfred, Orion, Ill. Gate	479,457	July 26	2186	{ 547 548 }	60	469
Peterson, Charles H., and O. C. Ruze, St. Louis, Mo. Compound for cleaning and scouring	475,413	May 24	2434	.....	59	1150
Peterson, Charles J., assignor of one-half to R. T. Gillespie, Tirzah, S. C. Guano-distributor	468,826	Feb. 16	1434	365	58	825
Peterson, Emanuel, Boston, Mass. Music-desk for pianos	468,027	Feb. 2	185	45	58	560
Peterson, George A. (See Ethridge, Frank N., assignor.)						
Peterson, George W., Leonardville, Kans. Broom-corn harvester	485,711	Nov. 8	859	{ 230 231 }	61	765
Peterson, J. W., <i>et al.</i> (See Hartman, Henry, assignor.)						
Peterson, John H., Portland, Oreg. Lath-bolter	477,956	June 28	2768	693	59	2027
Peterson, John P., Worthington, Minn. Grain-dump	483,011	Sept. 20	1787	451	60	1712
Peterson, Ole H., Grove City, Minn. Grindstone-hanger	486,217	Nov. 15	1655	437	61	942
Peterson, Robert. (See Langer and Peterson.)						
Peterson, Sivert, and A. Baland, Menominee, Wis. Railway-switch	481,267	Aug. 23	2461	606	60	1695

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Peterson, Swan, assignor of one-half to A. Johnson, Gibson City, Ill. Motor	478,068	June 28	2943	735	59	2060
Peterson, Theodore, Akron, Ohio. Parallel bars	481,509	Aug. 23	2852	701	60	1168
Peterson, Theodore, assignor to Schumacher Gymnasium Company, Akron, Ohio. Gymnasium-locker	471,138	Mar. 22	2325	598	58	1579
Peterson, Theodore, assignor to Schumacher Gymnasium Company, Akron, Ohio. Liner-fastener for exercising apparatus	474,760	May 10	1399	354	59	918
Peterson, William, Genesee, Minn. Pump	482,588	Sept. 13	1115	269	60	1567
Petit, Ademar N., New York, N. Y. Type-writing machine	482,317	Sept. 6	661	158	60	1465
Petit, Paul. (See Broyer and Petit.)						
Petit, Theodore F., Hudsonale, Pa. Music-leaf turner	474,458	May 10	933	{ 239 240 }	59	827
Petraeus, Carl V. (See Lewis and Petraeus.)						
Petrie, Charles L. (See Harris, Orrin C., assignor.)						
Petrie, Charles. (See Squires and Petrie.)						
Petrie, Helen, Boston, Mass. Seaside-seat	470,255	Mar. 8	935	232	58	1289
Petrie, Homer, Omaha, Nebr. Apparatus for heating mortar	466,425	Jan. 5	185	48	58	35
Petroleum Light and Heat Company. (See Beidelman, Robert M., assignor.)						
Pett, John H., Redruth, England. Churn	470,210	Mar. 8	872	215	58	1277
Pottee, Lyman F., Brooklyn, N. Y. Device for separating the white and yolk of eggs	479,016	July 19	1463	364	60	314
Pettigrew, Swithen C., assignor of one-half to D. E. Vandegrift, Bayard, Kans. Nut-lock	478,019	June 28	2866	717	59	2045
Petterson, Albert, St. Paul, Minn. Adjustable stovepipe-support	476,815	June 14	900	221	59	1630
Petterson, Charles E., assignor to himself and H. E. Audette, Providence, R. I. Hose-coupling	475,704	May 24	2856	730	59	1238
Petterson, Johannes, and L. H. Liebeck, New York, N. Y. Water-still	478,458	July 5	606	148	60	120
Pettet, Charles A., Belleville, Canada. Straw or ensilage cutter	480,508	Aug. 9	1221	305	60	826
Pettet, Robert S., Atlantic City, N. J. Coupling and conduit for railway-train-heating apparatus	488,717	Dec. 27	2434	604	61	1854
Pettibone, John C., Ansonia, Conn. Garment-supporter	488,088	Dec. 13	1412	351	61	1621
Pettibone, John H., Burlington, Iowa. Receipt and collection-report book	480,623	Aug. 9	1403	349	60	862
Pettibone Manufacturing Company. (See Hoppe, Charles, assignor.)						
Pettibone-Mulliken & Company. (See Ericson, Richard W., assignor.)						
Pettie, Charles A., Brooklyn, N. Y. Horse-collar	475,606	May 24	2738	694	59	1210
Pettingill, William A., Knowlesville, N. Y. Axle-cutter	473,340	Apr. 19	2097	527	59	424
Pettit, Elihu R., Philadelphia, Pa. Anti-rattler	476,406	June 7	283	67	59	1493
Pettit, James, Albany, N. Y. Awning-frame	480,437	Aug. 9	1108	277	60	803
Pew, Frederick S. (See Pew, James H. and F. S.)						
Pow, James H. and F. S., Andover, S. D. Spreader for reins	478,712	July 12	977	243	60	210
Peypaud, Pierre, Le Caillan, France. Musical instrument	471,225	Mar. 22	2465	626	58	1605
Peyton, Lilburn. (See Jarrett and Peyton.)						
Pfaltzgraff & Co., J. K. (See Yingling, George S., assignor.)						
Pfannkuche, Alfred. (See Pfannkuche, Gustav and A.)						
Pfannkuche, Gustav, assignor to Brush Electric Company, Cleveland, Ohio. Electric converter	466,937	Jan. 12	1024	261	58	204
Pfannkuche, Gustav, assignor to Brush Electric Company, Cleveland, Ohio. Regulator for electric-current generators	468,260	Feb. 2	543	133	58	629
Pfannkuche, Gustav, assignor to Brush Electric Company, Cleveland, Ohio. Electric switch	474,921	May 17	1657	{ 423 424 }	59	984
Pfannkuche, Gustav, assignor to Brush Electric Company, Cleveland, Ohio. Commutator for ring-armatures	480,780	Aug. 16	1650	413	60	926
Pfannkuche, Gustav, assignor to Brush Electric Company, Cleveland, Ohio. Regulation of alternating-current generators	485,054	Oct. 25	2410	620	61	525
Pfannkuche, Gustav, Exeter, N. H., and A. Pfannkuche, assignors to Brush Electric Company, Cleveland, Ohio. Electric converter	476,816	June 14	901	{ 221 222 }	59	1631
Pfandler, John M., Rochester, N. Y. Lamp	478,815	July 12	1163	288	60	246
Pfeiffer, John F., Cincinnati, Ohio. Cash register and indicator	468,944	Feb. 16	1619	{ 410 411 412 413 414 415 }	58	860
Pfeiffer, John F., Cincinnati, Ohio. Cash-register	468,945	Feb. 16	1626	{ 414 415 }	58	861
Pfeifer, Charles A., Wapello, Iowa. Plow	482,751	Sept. 20	1372	340	60	1628
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Cash register, indicator, and recorder	479,720	July 26	2612	{ 649 650 }	60	547
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	484,643	Oct. 18	1725	{ 438 439 }	61	372
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	484,644	Oct. 18	1732	440	61	374
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	488,900	Dec. 27	2708	670	61	1911
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	488,901	Dec. 27	2711	{ 670 671 }	61	1911
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Autographic register	488,902	Dec. 27	2713	671	61	1912
Pfeifer, John, assignor to National Cash Register Company, Dayton, Ohio. Cash register, indicator, recorder, and check-printer	488,903	Dec. 27	2715	{ 671 672 673 }	61	1912
Pfeifer, William, et al. (See Sobinski, Charles O., assignor.)						
Pfeiffer, George L., Williamstown, N. J. Fruit-jar	488,614	Dec. 27	2268	563	61	1822
Pfeiffer, John W., New York, N. Y. Feed-bag support	472,908	Apr. 12	1357	349	59	272
Pfeil, George H., assignor to National Switch and Signal Company, Easton, Pa. Switch and signal operating apparatus	470,916	Mar. 15	1983	{ 506 507 508 }	58	1500
Pfeil, George H., assignor to National Switch and Signal Company, Easton, Pa. Interlocking switch and signal mechanism	472,393	Apr. 5	608	154	59	114
Pfeil, George H., assignor to National Switch and Signal Company, Easton, Pa. Switch and signal operating apparatus	472,464	Apr. 5	711	181	59	135
Pfeil, Henry S., Philadelphia, assignor of one-half to National Switch and Signal Company, Easton, Pa. Tang-end jaw	472,392	Apr. 5	607	154	59	114
Pfenninger, John J., St. Louis, Mo. Baker's oven	473,018	Apr. 19	1550	395	59	321
Pfiffner, Jacob, and J. Kriebbs, Dubuque, Iowa. Harness ornament	473,079	Apr. 19	1645	419	59	333
Pfingst, Louis, Boston, Mass. Truck for electrically-propelled vehicles	474,403	May 10	834	218	59	809
Pfingst, Louis, Boston, Mass. Car-spring	485,652	Nov. 8	756	199	61	744
Pfingst, Louis, Boeton, Mass. Car-brake	487,763	Dec. 13	870	221	61	1511

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Pfingst, Louis, Boston, and S. A. Bemis, Springfield, Mass. Truck for railway-cars.....	472,271	Apr. 5	413	106	59	77
Pfanz, John R. (See Neumann and Pfanz.)						
Pfieger, John, Minneapolis, Minn. Velocipede.....	479,839	Aug. 2	98	25	60	691
Pfeiderer, Paul, London, England, and H. Werner, Cannstatt, near Stuttgart, Germany. Baking-oven.....	487,638	Dec. 6	648	{ 166 167 }	{ 61 61 }	1450
Pfeiger, Jacob K., Richland Centre, Pa. Thill-coupling.....	485,426	Nov. 1	427	114	61	660
Pfeiger, John H., Johnstown, Pa. Car-brake.....	486,792	Nov. 22	2566	669	61	1138
Pfueger, Ernest F., Akron, Ohio. Slack-line attachment for fishing rods.....	468,227	Feb. 2	480	118	58	618
Pfueger, Ernest F., Akron, Ohio. Artificial fish-bait.....	468,361	Feb. 9	715	177	58	672
Pfueger, Ernest F., Akron, Ohio. Spoon-bait.....	480,132	Aug. 2	598	152	60	696
Pfueger, Ernest F., Akron, Ohio. Fish scaler and dresser.....	486,295	Nov. 15	1784	469	61	970
Pfueger, George A., St. Paul, Minn. Eye-letting-machine.....	468,261	Feb. 2	546	134	58	630
Pfuger, Charles A., Chicago, Ill. Line-wire tightening device for electric-lamp supports.....	482,486	Sept. 13	945	230	60	1532
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Arc-light globe-holder.....	468,412	Feb. 9	792	197	58	667
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Arc-light hanger for inside use.....	468,413	Feb. 9	793	197	58	668
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Arc-light hanger.....	470,766	Mar. 15	1748	{ 450 451 }	{ 58 58 }	1455
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Carbon-holder for arc lamps.....	471,190	Mar. 22	2408	613	58	1593
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Arc-light hanger.....	472,935	Apr. 12	1403	359	59	281
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Electric-arc lamp.....	473,955	May 3	113	26	59	659
Pfuger, Charles A., Chicago, Ill., assignor to Standard Electric Company, of Illinois. Electric-arc lamp.....	473,956	May 3	114	26, 27	59	659
Pfuger, Charles A., Chicago, Ill., assignor, by mesne assignments, of one-half to Standard Electric Company, of Illinois. Hanger for electric-arc lamps.....	479,017	July 19	1464	364	60	314
Pforr, George J., Chicago, Ill. Corset-clasp.....	477,819	June 28	2550	638	59	1984
Pfortner, Ignatz, New York, N. Y. Tobacco pipe.....	486,296	Nov. 15	1785	469	61	970
Pfounts, George L., Philadelphia, Pa. Holder for metallic staples.....	484,608	Oct. 18	1665	422	61	361
Pfounts, Leroy S., Canton, Ohio. Adjustable electric-light holder.....	487,022	Nov. 29	2977	767	61	1235
Pfounts, Leroy S. and L. D. Ball, Canton, Ohio. Sole.....	483,580	Oct. 4	100	25	61	22
Pfretzschner, Adolf. (See Lässig and Pfretzschner.)						
Phare, John J., assignor of one-third to H. R. and A. H. Mills, Independence, Mo. Combined badge and pen-holder.....	469,529	Feb. 23	2536	652	58	1045
Pharr, Walter, assignor of one-half to W. T. Carter, Barnum, Tex. Flue-cleaner.....	477,957	June 28	2769	694	59	2027
Phegley, William T., assignor of one-half to W. D. Ilgenfritz, Sedalia, Mo. Soot-removing compound.....	477,333	June 21	1759		59	1812
Phelan, John, assignor of two-thirds to W. Trimble and J. H. Jones, Pittsburg, Pa. Galley-lock.....	479,840	Aug. 2	99	25	60	801
Phelan, John T., Cambridge, Mass. Fumigator.....	480,624	Aug. 9	1405	{ 349 350 }	{ 60 60 }	862
Phelps, Augustus, Newark, N. J. Button-machine.....	484,976	Oct. 25	2290	591	61	500
Phelps, Edwin S., Leavenworth, Kans. Cover for barrels, &c.....	476,407	June 7	284	67	59	1493
Phelps, Edwin S., Leavenworth, Kans. Time-lock.....	486,603	Nov. 22	2261	591	61	1076
Phelps, Eugene M. (See Thomson and Phelps.)						
Phelps, Eugene M., Lynn, Mass., assignor to Hand Method Finishing Machine Company, Nashua, N. H. Sewing-machine for over stitching buttonhole-thrums.....	484,744	Oct. 18	1889	{ 481 482 }	{ 61 61 }	408
Phelps, Eugene M., and R. W. Thomson, Lynn, Mass., assignors to Consolidated Button Hole Finishing Machine Company, Nashua, N. H. Sewing-machine for finishing button-holes.....	473,178	Apr. 19	1828	461	59	370
Phelps, Frank, Auburn, N. Y. Carpenter's plane.....	468,362	Feb. 9	716	177	58	672
Phelps, Frederick A., Jr. (See Henderson and Phelps.)						
Phelps, George H., et al. (See Smith, Edward S., assignor.)						
Phelps, James H., Sharon, Wis. Pianoforte-action.....	486,500	Nov. 22	2098	555	61	1045
Phelps, James R., Sacramento, Cal. Leg-spreader for horses.....	480,625	Aug. 9	1407	530	60	863
Phelps, Lucius J., Passaic, N. J. Carbureting apparatus.....	471,773	Mar. 29	3280	{ 837 838 }	{ 58 58 }	1766
Phelps, Lucius J., Passaic, N. J. Pneumatic tire.....	472,484	Apr. 5	746	190	59	142
Phelps, Lucius J., Passaic, N. J. Inflatable tube.....	472,485	Apr. 5	747	190	59	142
Phelps, Lucius J., Passaic, N. J. Bicycle.....	481,734	Aug. 30	3226	787	60	1256
Phelps, Lucius J., Passaic, N. J. Pneumatic tire.....	482,487	Sept. 13	946	231	60	1533
Phelps, Lucius J., Passaic, N. J. Gas-machine.....	485,134	Oct. 25	2524	649	61	548
Phelps, Walter J., Baltimore, Md. Apparatus for soldering metallic vessels.....	468,896	Feb. 16	1538	391	58	844
Phelps, William J., Elmwood, Ill. Commutator-cleaning device.....	469,319	Feb. 23	2206	566	58	981
Phelps, William S., San Francisco, Cal. Rail-fastening device.....	469,947	Mar. 1	453	114	58	1187
Philadelphia Barring Machine Company. (See Kemp, Horace L., assignor.)						
Philadelphia Engineering Works. (See Gordon, Frederick W., assignor.)						
Philadelphia Textile Machinery Company. (See Proctor, Josiah K., assignor.)						
Philbrick, Frank A., Chicago, Ill. Drawbridge-gate.....	486,793	Nov. 22	2568	669	61	1138
Philbrick, Solon, et al. (See Wilskey, Frank A., assignor.)						
Philes, Charles E., assignor of one-half to J. J. Smith, Stockton, Cal. Crushing-mill.....	475,284	May 17	2227	571	59	1096
Philion, Achille, New York, N. Y. Steam-carriage.....	482,649	Sept. 13	1198	{ 291 292 }	{ 60 60 }	1582
Philipps, Martin, Buffalo, N. Y. Transposing keyboard for musical instruments.....	466,907	Jan. 12	980	251	58	195
Philips, Frank C., Healdsburg, Cal. Fruit-pitting machine.....	462,272	Sept. 6	573	136	60	1446
Philips, Robert F., San Diego, Cal. Dental mouth-mirror.....	470,211	Mar. 8	873	216	58	1277
Philipsborn, Alexander, and W. Reichel, assignors to Siemens & Halske, Berlin, Germany. Electric-railway-wire suspension.....	472,810	Apr. 19	1221	313	59	244
Phillipson, William. (See Swain and Phillipson.)						
Philleo, William M., et al. (See Scofield, Charles H., assignor.)						
Phillippi, Frank A., Philadelphia, Pa. Check-valve.....	486,501	Nov. 22	2099	555	61	1046
Phillips, Adelbert M., assignor to H. S. Chapman and C. A. Barnes, Lockport, N. Y. Combined pump and mixer.....	479,378	July 19	2037	508	60	424
Phillips, Arthur J. (See Hutt and Phillips.)						
Phillips, Augustus K., St. Louis, Mo. Boring and shaping mechanism.....	481,307	Aug. 23	2534	{ 622 623 }	{ 60 60 }	1107
Phillips, Austin M. (See Johnson and Phillips.)						
Phillips, Charles B. (See Lewis and Phillips.)						
Phillips, Charles H., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Milling-machine.....	484,455	Oct. 18	1430	365	61	314

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Phillips, Edward, assignor of two-thirds to E. T. Gilbert and L. Sevigne, Detroit, Mich. } Screw cutting and pointing machine.	468,524	Feb. 9	970	{ 247 248 249 }	58	722
Phillips, Edward, assignor of two-thirds to E. T. Gilbert and L. Sevigne, Detroit, Mich. } Chuck	468,525	Feb. 9	975	250	58	723
Phillips, Edwin G., assignor of one-half to S. Weiskopf, Charleston, S. C. Table-leaf sup- port	484,723	Oct. 18	1850	470	61	398
Phillips, Elbert B., Cleveland, Ohio. Electric-motor car	466,832	Jan. 12	840	216	58	170
Phillips, Elbert B., Cleveland, Ohio. Motor-gearing for electric cars	468,526	Feb. 9	976	{ 250 251 }	58	723
Phillips, Elbert B., Cleveland, Ohio. Electric-motor mechanism	474,857	May 17	1567	{ 399 400 }	59	964
Phillips, Francis V., assignor to Chicago Sash Pulley Company, Chicago, Ill. Sash-pulley. Phillips, Francis V., assignor to Smith & Phillips Manufacturing Company, Chicago, Ill. } Sash-pulley	472,074	Apr. 5	95	26	59	20
Phillips, Francis V., assignor to Smith & Phillips Manufacturing Company, Chicago, Ill. } Window-frame pocket	481,510	Aug. 23	2853	701	60	1168
Phillips, James T. (See Brenner, David H., assignor.)	483,968	Oct. 4	668	167	61	138
Phillips, James W. (See Carll and Phillips.)						
Phillips, James W., Geeville, Miss. Cultivator	467,829	Jan. 26	2471	628	58	494
Phillips, Jennie E., et al. (See Hunter, Joseph, assignor.)						
Phillips, John, Williamstown, Pa. Weather-strip	484,454	Oct. 18	1429	365	61	335
Phillips, John, London, England. Drawing and stippling pen	484,523	Oct. 18	1540	{ 390 391 }	61	314
Phillips, John E. (See Marsh and Phillips.)						
Phillips, John H., assignor of two-thirds to W. Davis, Wheeling, W. Va., and J. Ablett, Pittsburg, Pa. Expanding-reamer	478,069	June 28	2944	735	59	2060
Phillips, Joseph A., Baltimore, Md. Adjusting-strap for garments	475,515	May 24	2601	661	59	1182
Phillips, Maurice W. (See Kellom, Charles F., assignor.)						
Phillips, Orson D., and G. H. Littlewood, Lisle, N. Y. Locking device for can-covers	467,196	Jan. 19	1464	374	58	295
Phillips, Peter, assignor to S. Phillips, Toronto Junction, Canada. Mitering-machine	473,429	Apr. 19	2244	{ 564 565 }	59	453
Phillips, Solomon. (See Phillips, Peter, assignor.)						
Phillips, Thomas J., Ottumwa, Iowa. Car-dumping apparatus	481,968	Sept. 6	69	18, 19	60	1348
Phillips, William, Northville, Mich. Ironing-machine	468,527	Feb. 9	981	251	58	724
Phillips, William, Northville, Mich. Ironing-machine	480,277	Aug. 9	850	{ 216 217 }	60	757
Phillips, William A. (See Entz and Phillips.)						
Phillips, William A. (See Waddell, Entz, and Phillips.)						
Phillips, William A., U. S. Army. Electric odometer and speed-indicator	473,341	Apr. 19	2099	527	59	424
Phillips, William A., U. S. Army. Pencil-sharpener	479,658	July 26	2496	622	60	526
Phillips, William H. (See Marvel, Theodore L., assignor.)						
Phillips, William H., assignor to P. Thompson, Philadelphia, Pa. Tie-plate and brace	482,318	Sept. 6	664	158	60	1465
Phillips, O. L. (See Duer, Albert, assignor.)						
Philpott, James H. (See Waterhouse, Charles B., assignor.)						
Phinney, William F. (See Bond, Nathan O., assignor.)						
Phipps, Edward H., New Haven, assignor to Connecticut Pipe Manufacturing Company, West Haven, Conn. Bell-and-spigot joint for cement-lined pipes	474,779	May 10	1433	363	59	925
Phipps, Isaac N. (See Lame and Phipps.)						
Philegar, Jacob, De Witt, Mo. Wire-reel carrier	486,538	Nov. 22	2148	567	61	1055
Phenix Iron Company. (See Coffin, Amory, assignor.)						
Phonopore Syndicate. (See Langdon-Davies, Charles, assignor.)						
Photo Materials Company. (See Milburn, Gustave D., assignor.)						
Piat, Albert, Paris, France. Hydraulic riveting-machine	467,309	Jan. 19	1640	417	58	328
Piat, Albert, Paris, France. Smelting-furnace	467,310	Jan. 19	1642	{ 417 418 419 }	58	328
Piat, Albert, Paris, France. Electro-mechanical apparatus for starting or reversing ma- chinery	478,816	July 12	1165	{ 288 289 }	60	246
Piatt, William M., assignor of one-third to B. S. Leonard, West Liberty, Ohio. Corn-har- vester	474,761	May 10	1400	{ 354 355 }	59	919
Piccard, Paul, Geneva, Switzerland. Governor	474,064	May 3	289	70	59	693
Picher, Oliver H., Joplin, Mo. Smelting and saving fumes from complex ores	469,269	Feb. 23	2128	.....	58	967
Pichler, Francis S., assignor to Wittwe Andreas Saxlehner, Buda-Pesth, Austria-Hun- gary. Apparatus for capsuling bottles, &c.	468,389	Feb. 9	757	188	58	680
Pichno, Wasili, Kiev, Russia. Spade-plow	476,684	June 7	684	165	59	1573
Pickard, Edgar (See Thornton, John E., assignor.)						
Pickard, Edward L., Chelsea, assignor, by mesne assignments, to United States Postage } Stamp Delivery Company, Boston, Mass. Coin-controlled vending-machine	481,331	Aug. 23	2573	{ 632 633 634 }	60	1114
Pickens, Andrew D., New Orleans, La. Plant protecting and irrigating apparatus	468,536	Feb. 9	994	{ 254 255 }	53	727
Pickering, Barton, Dayton, Ohio. Detachable suspension-catch	475,516	May 24	2602	661	59	1183
Pickering, Barton, Dayton, Ohio. Postal-stamp holder	480,509	Aug. 9	1221	306	60	826
Pickering, Charles H., assignor of one-half to J. H. B. Honse, Houston, Tex. Poison-dis- tributer	471,892	Mar. 29	3461	884	58	1802
Pickernell, Frank A., Newark, N. J. Multiple-switchboard busy-test circuit and appa- ratus	466,702	Jan. 5	613	{ 159 160 }	58	119
Pickernell, Frank A., Newark, N. J., assignor to American Telephone and Telegraph Com- pany, of New York. Electric annunciator	481,120	Aug. 16	2192	542	60	1030
Pickett, Albert J. (See White, Frederick L., assignor.)						
Pickett, Squire A., Crowley, La. Rice-scorer	482,192	Sept. 6	445	107	60	1422
Pickett, William H. (See Homer and Pickett.)						
Pickett, William H., Warren, Pa. Extension-table	471,330	Mar. 22	2612	{ 662 663 664 }	58	1633
Pickett, William H., Warren, Pa. Water-cooling refrigerator	475,414	May 24	2435	{ 620 621 622 }	59	1150
Pickett, William H., and J. L. Neill, Warren, Pa. Baking-pan	472,811	Apr. 12	1222	314	59	244
Pickles, Charles K. (See O'Brien and Pickles.)						
Pickles, Charles K., assignor to American Roll Paper Company, St. Louis, Mo. Roll-pa- per holder and cutter	471,226	Mar. 22	2467	626	58	1605
Pickles, Charles K., assignor of one-half to J. O'Brien, St. Louis, Mo. Attachment for steam-boilers	477,151	June 14	1436	351	59	1737
Pickles, Charles K., and J. O'Brien, St. Louis, Mo. Steam-boiler attachment	477,152	June 14	1437	351	59	1737
Pickup, George A., and W. J. Towry, Shelbyville, Tenn. Rotary hand-stamp	481,969	Sept. 6	72	19	60	1349
Picot, Max, Paris, France. Elastic woven fabric	484,977	Oct. 25	2292	591	61	501

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Pidgin, Charles F., Cambridge, Mass. Tab for music-leaves.....	481,735	Aug. 30	3229	787	60	1257
Pielsticker, Carl M., London, England. Distillation of hydrocarbon or other oils.....	477,153	June 14	1438	352 353 468 469	59	1738
Pieper, Henri, Liege, Belgium. Gun-lock.....	488,366	Dec. 20	1872	469	61	1727
Piera y de Mata, Francisco, Havana, Cuba. Making portraits or other pictures.....	472,812	Apr. 12	1224	.....	59	244
Pierce, Arthur M., Brooklyn, assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-plate holder.....	484,569	Oct. 18	1605	408	61	349
Pierce, Butler & Pierce Manufacturing Company. (See Waggoner, Edward P., assignor.)						
Pierce, Charles S. (See Lockett, Joseph C., assignor.)						
Pierce, Charles W., Union City, Ind. Car-mover.....	482,878	Sept. 20	1566	391	60	1668
Pierce, Chester C., Clayton, assignor of one-half to G. E. Lewis, Carthage, N. Y. Axle-lubricator.....	484,234	Oct. 11	1077	273	61	233
Pierce, Erastus E., assignor to Standard Horse Nail Company, New Brighton, Pa. Machine for forging horseshoe-nails.....	486,195	Nov. 15	1617	429 430 630	61	936
Pierce, Jonathan A., Austin, Minn. Electric-arc lamp.....	479,659	July 26	2497	622	60	526
Pierce, Joseph H., Glenwood Springs, Colo. Water-wheel.....	474,098	May 3	341	82	59	703
Pierce, Morrill S., Westport, L. H. Desisle, Lamoine, and O. C. Oliver, Eden, assignors to Electric Heat Alarm Company, Bangor, Me. Automatic electric heat-alarm.....	466,865	Jan. 12	907	232	58	182
Pierce Steam Heating Company. (See Anderson, John, assignor.)						
Pierce, Ward E., Pulaski, N. Y. Window-screen.....	483,789	Oct. 4	404	100	61	85
Pierce, William M. (See Cogan, Pierce, and Jones.)						
Pierling, Franz S., Munich, Germany. Magic-lantern kiosk.....	486,236	Nov. 15	1686	446	61	949
Pierpoint, James, Pittsburg, Pa. Tubular boiler.....	472,660	Apr. 12	998	258	59	203
Pierpont, Frank H., Hartford, Conn. Steam-engine indicator.....	467,431	Jan. 19	1825	466	58	363
Pierre, Joseph M., Fort Wayne, Ind. Spool-holder.....	473,080	Apr. 19	1647	419	59	338
Piers, Benjamin, Xenia, Ohio. Lock.....	473,125	Apr. 19	1729	437 438	59	352
Piere, Benjamin, Xenia, Ohio. Latch.....	473,126	Apr. 19	1733	438	59	353
Pierson, Henry M., Brooklyn, N. Y. Manufacturing gas.....	478,459	July 5	608	148 149	60	120
Pierson, Silas S., et al. (See Soverhill, Charles W., assignor.)						
Pietschmann, Ferdinand, Berlin, Germany. Mechanical musical instrument.....	474,999	May 17	1792	454 455	59	1009
Pifer, Augustus P. (See Harris, William H., assignor.)						
Piffard, David H., Piffard, N. Y. Composition of matter for insulating purposes.....	467,520	Jan. 26	1982	.....	58	401
Piffard, David H., Piffard, N. Y. Incandescent electric lamp.....	467,982	Feb. 2	113	28	58	546
Piffard, David H., Piffard, N. Y. Incandescent-lamp socket.....	467,983	Feb. 2	115	28	58	546
Pigot, Martin, Brussels, Belgium. Protecting device for horses' feet.....	476,301	June 7	112	27	59	1460
Pigott, William. (See Henning and Pigott.)						
Pignet, William, Sentier, Switzerland. Stop-watch.....	479,900	Aug. 2	188	47	60	619
Pike, Joseph H., Jacksonville, Ill. Knit undergarment.....	482,097	Sept. 6	282	68	60	1391
Pike, William, and N. McDairmid, Sault de Ste. Marie, Mich. Foot for dredge-anchors.....	483,012	Sept. 20	1789	451	60	1712
Pike, William L., Groton, N. Y. Road-cart.....	469,096	Feb. 16	1857	475	58	907
Pike, William L., Groton, N. Y. Nut-lock for buggy-tops.....	470,630	Mar. 8	1546	403	58	1406
Pike, William L., Groton, N. Y. Vehicle-pole.....	480,510	Aug. 9	1222	306	60	827
Pike, William L., Groton, N. Y. Vehicle-pole.....	480,511	Aug. 9	1223	306	60	827
Pike, William L., Groton, N. Y. Clothes-pin.....	482,383	Sept. 13	787	189	60	1503
Pilet, Joseph, Liege, Belgium. Governor equilibrium-valve.....	476,550	June 7	487	116	59	1534
Pilkington, Herbert M., and R. S. White, Brooklyn, N. Y. Means for operating anemeters and other electrical apparatus.....	477,223	June 21	1576	387	59	1778
Pilkington, Herbert M., and R. S. White, Brooklyn, N. Y. Electric switch.....	477,869	June 22	2639	659	59	2000
Pilkington, Lawrence. (See Prentice, McLeod, Crane, and Pilkington.)						
Pillsbury, Daniel S., et al. (See Piper, William, assignor.)						
Pillsbury, Marcus M., et al. (See Piper, William, assignor.)						
Pinard, Adolphus. (See Pinard, Thelesphar and A.)						
Pinard, Thelesphar and A., Chehalis, Wash. Stump-extractor.....	466,833	Jan. 12	845	217	58	171
Pinch, Frank, Sidney, N. Y. Packing for piston or other rods.....	483,013	Sept. 20	1790	451	60	1712
Pine, Arthur F., assignor of one-half to H. Leiber, Antigo, Wis. Sleigh.....	479,154	July 19	1677	419	60	354
Pine, Wilber J., Waukau, Wis. Ice-cutting machine.....	485,114	Oct. 25	2495	641	61	543
Pinel, Charles, Rouen, France. Liquid-zago.....	483,485	Sept. 27	2512	632	60	1864
Ping, Robert G., and H. Mendenhall, Audubon, Iowa. Lock.....	467,235	Jan. 19	1525	389	58	307
Pinke, Alexander, St. Louis, Mo. Saw setting and filing machine.....	488,829	Dec. 27	2598	644 645	61	1858
Pinkerman, James, Columbus, Ohio. Toe-weight.....	488,450	Dec. 20	2005	501	61	1754
Pinkham, Charles A., Wollaston, Mass. Electric letter-box.....	469,181	Feb. 16	1977	506	58	931
Pinkham, George F. (See Pinkham, Horace A., assignor.)						
Pinkham, Horace A., assignor to G. F. Pinkham, Wollaston, Mass. Electric gas-lighting burner.....	470,256	Mar. 8	936	232	58	1289
Pinkston, James A., assignor of one-half to J. L. Hiers, Excelsior, Ga. Cotton-chopper.....	467,623	Jan. 26	2147	546	58	431
Pinney, Edwin S. (See Rendell and Pinney.)						
Pinto, João L. F., Rio de Janeiro, Brazil. Workman's time-indicator.....	477,448	June 21	1939	481	59	1847
Pioneer Manufacturing Company. (See Baker, William H., assignor.)						
Piper, Charles F., et al. (See Morrill, George W., assignor.)						
Piper, Edwin S., assignor of one-half to F. Clayton, Bristol, Conn. Bell.....	482,983	Sept. 20	1735	438	60	1701
Piper, Edwin S., assignor of one-half to F. Clayton, Bristol, Conn. Bell.....	482,984	Sept. 20	1736	439	60	1701
Piper, Gustav A., Pittsburg, Pa. Temporary binder.....	471,803	Mar. 29	3341	851	58	1777
Piper, James S., assignor of one-half to C. H. Jenkins, Louisville, Ky. Machine for cutting circular pieces from lumber or other materials.....	475,247	May 17	2172	533	59	1084
Piper, William, Mamaroneck, assignor to D. S. Pillsbury, New York, and M. M. Pillsbury, Napanoch, N. Y. Envelope-machine.....	469,391	Feb. 23	2316	596	58	1004
Pippenger, Chancey, Kingsbury, Ind. Feeding device for clover-hullers.....	482,135	Sept. 6	341	82	60	1402
Pirch, August, Los Angeles, Cal. Reversible plow.....	477,912	June 28	2702	677	59	2013
Pirung, Felix. (See Pirung, George and F.)						
Pirung, Frank E. and H. A., St. Paul, assignors of one-fourth to G. E. Torinus, White Bear, Minn. Feathering paddle-wheel.....	469,020	Feb. 16	1765	450	58	889
Pirung, George and F., Ravenswood, Ill. Bed-lounge.....	477,449	June 21	1942	481	59	1847
Pirung, Hubert A. (See Pirung, Frank E. and H. A.)						
Pistorius, Herman, Saginaw, Mich. Boot-blackening kit.....	487,963	Dec. 13	1186	296	61	1573
Pistorius, Herman, Saginaw, Mich. Cabinet-case.....	487,964	Dec. 13	1187	296	61	1573
Pitcher, Charles H., and G. A. Moody, Red Bank, N. J. Horse-blanket fastener.....	474,264	May 3	579	142	59	750
Pitcher, Frank C. (See Wellman, Willard F., assignor.)						
Pitcher, Lewis W. (See Gifford, Ezra N., assignor.)						
Pitchford, John B., San Francisco, Cal. Water-wheel bucket.....	485,477	Nov. 1	502	133	61	674

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Pitchford, John B., San Francisco, and A. S. Cooper, Santa Barbara, assignors to California Petroleum and Asphalt Company, San Francisco, Cal. Mixing-machine for asphalt.....	467,302	Jan. 19	1631	415	58	326
Pitkin, Clarence H., Berlin, Vt. Sawmill-dog.....	474,687	May 10	1294	331	59	897
Pitkin, Julian H., Chicago, Ill. Harvester-elevator.....	476,302	June 7	113	27	59	1460
Pitman, Benn. (See Frye and Pitman.)						
Pitman, Charles P., Freehold, N. J. Rubber dam.....	484,046	Oct. 11	789	198	61	176
Pitman, George W., Salem, Mass. Refrigerator-switch.....	476,962	June 14	1146	276	59	1678
Pitt, William, assignor to Sectional Standards, Limited, London, England. Telegraph or other pole.....	473,522	Apr. 26	2408	{ 610 611 }	59	505
Pitt, William A., Stamford, Conn. Steam-engine.....	471,804	Mar. 29	3342	851	58	1777
Pittigan, James, Goodland, Ind. Washboard.....	470,594	Mar. 8	1492	388	58	1395
Pittler, Wilhelm von, Leipsic, Germany. Lathe.....	485,773	Nov. 8	946	{ 253 254 }	61	783
Pittman, James P. (See Reynolds and Pittman.)						
Pittrich, Carl, Dresden, Germany. Apparatus for turning over the leaves of music.....	487,769	Dec. 13	872	221	61	1511
Pitts Agricultural Works. (See Bronson, Levi, assignor.)						
Pitts, William W., San Luis Potosi, Mexico, assignor of one-half to W. T. Pegues and C. E. Jenkins, Mansfield, La. Metal tie and automatic clamp for fastening same.....	488,904	Dec. 27	2730	673	61	1915
Pittsburgh Brass Company. (See Adams, Frederick, assignor.)						
Pittsburgh Brass Company. (See Hoeler, William M., assignor.)						
Pittsburgh Plate Glass Company. (See Danner, Friedrich, assignor.)						
Piver, John W., Ameriens, Ga. Lumber-drier.....	487,965	Dec. 13	1187	{ 296 297 }	61	1573
Pixley, Albert B., Vineland, N. J. Fork for hay-tedders.....	477,820	June 28	2551	638	59	1984
Pizzey, William J., Bristol, England. Spring-rim for velocipede-wheels.....	480,030	Aug. 2	439	111	60	665
Pizzuti, Joseph S. F., Columbus, Ohio. Musical instrument.....	467,521	Jan. 26	1983	503	58	401
Place, John H., Decatur, Ill. Circular-knitting machine.....	466,369	Jan. 5	95	26, 27	58	21
Place, John H., Decatur, Ill. Knitting narrowed tubular fabrics.....	466,370	Jan. 5	97	27	59	21
Place, John H., Decatur, Ill. Hem for stockings and making the same.....	466,371	Jan. 5	98	28	58	22
Place, John H., Decatur, Ill. Knitting reinforced stockings.....	466,372	Jan. 5	98	28	58	22
Plaisted, Harold M., Springfield, Ohio. Filing-cabinet.....	479,660	July 26	2498	622	60	526
Plano Manufacturing Company. (See Carver, George H., assignor.)						
Plant, Stephen J., Mommence, assignor of one-half to Tiffany Pressed Brick Company, Chicago, Ill. Brick-kiln.....	474,922	May 17	1660	424	59	984
Plass, Renben H., Brooklyn, N. Y. Governor.....	476,408	June 7	286	67	59	1494
Plass, Renben H., Brooklyn, N. Y. Lamp.....	477,698	June 28	2355	589	59	1948
Platt, Clark M., Waterbury, Conn. Button-attaching machine.....	481,587	Aug. 30	2984	732	60	1210
Platt, Clark M., Waterbury, Conn. Machine for attaching buttons.....	481,588	Aug. 30	2985	732	60	1210
Platt, Corwin H., Cleveland, Ohio. Drill-stock.....	475,949	May 31	3301	833	59	1331
Platt, F. G. (See Brown, Robert S., assignor.)						
Platt, Henry C., Nantucket, Mass. Camera-shutter.....	484,456	Oct. 18	1431	366	61	315
Platt, Irving G., Waterbury, Conn. Button-setting machine.....	480,031	Aug. 2	440	111	60	665
Platt, Irving G., Waterbury, Conn. Forming button-bars.....	480,032	Aug. 2	442	111	60	666
Platt, Joseph F., Waterbury, Conn. Bachelor-button.....	488,219	Dec. 20	1636	408	61	1681
Platt, Stephen L., Elgin, Ill. Trolley-carriage for conduits.....	481,817	Aug. 30	3369	{ 825 826 }	60	1283
Platto, William, Poughkeepsie, N. Y. Roller attachment for rocking or other chairs.....	466,573	Jan. 5	423	109	58	82
Platts, Henry C., London, England. Furnace.....	483,863	Oct. 4	509	{ 127 128 }	61	106
Player, John. (See Rogers and Player.)						
Player, John, Topeka, Kans. Dumping-car.....	483,790	Oct. 4	405	101	61	85
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Compound engine.....	481,056	Aug. 16	2078	{ 518 519 520 }	60	1010
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Valve for compound engines.....	481,057	Aug. 16	2084	520	60	1011
Player, John, assignor to Brooks Locomotive Works, Dunkirk, N. Y. Combined intercepting and reducing valve.....	481,148	Aug. 16	2250	555	60	1040
Pleadwell, William E., Bridgeport, Conn. Manufacture of plated articles.....	477,265	June 21	1652	404	59	1721
Plecker, William J., Galesburg, Ill. Corrugating-machine.....	473,019	Apr. 19	1552	395	59	322
Plecker, William J., Peoria, Ill. Corrugating pipes.....	473,020	Apr. 19	1554	396	59	322
Pletcher, Levi L., McConuelsville, Ohio. Head and shoulder rest.....	474,688	May 10	1295	331	59	898
Plescher, John, Baltimore, Md. Machine for cleaning and polishing knives.....	479,304	July 19	1903	476	60	398
Pleukharp, Ezra, assignor to J. E. and E. R. Lahman, Rockford, Ill. Slide for extension-tables.....	474,186	May 3	464	113	59	728
Pleukharp, James, Columbus, Ohio. Stave-jointing machine.....	477,450	June 21	1944	{ 481 482 }	59	1847
Plomberg, Sever H., Leland, Iowa. Hay-rack.....	481,420	Aug. 23	2713	668	60	1141
Plotner, Albert L., New Bedford, Mass. Hoisting device.....	485,774	Nov. 8	947	254	61	783
Plumb, Frank, Sunfield, Mich. Washing-machine.....	477,334	June 21	1759	431	59	1812
Plumb, George T., Danbury, Nebr. Carcass-spreader.....	473,127	Apr. 19	1735	438	59	353
Plumb, H. B. (See Roche, James, assignor.)						
Plumb, Joseph C. (See Haswell, Alanson M., assignor.)						
Plumbly, Frederic K., Buffalo, N. Y. Ballot-box.....	478,264	July 5	326	79	60	65
Plumbly, Frederic K., Buffalo, N. Y. Voting-booth.....	479,458	July 26	2188	{ 548 549 }	60	469
Plumbly, Frederic K., Buffalo, N. Y. Gate.....	483,387	Sept. 27	2392	601	60	1839
Plume & Atwood Manufacturing Company. (See Atwood, Lewis J., assignor.)						
Plume & Atwood Manufacturing Company. (See Atwood and Ashenden, assignors.)						
Plume & Atwood Manufacturing Company. (See Echols, Frank G., assignor.)						
Plume & Atwood Manufacturing Company. (See Hellstrom, Theodore H., assignor.)						
Plunly, Eugene K. (See Salisbury, George P., assignor.)						
Plummer, Ira H., Glendive, Mont. Car-axle box.....	471,893	Mar. 29	3462	884	58	1802
Plummer, John F., Paris, Me., and H. P. Chapman, Ivoryton, Conn. Self-locking nut.....	472,465	Apr. 5	713	182	59	135
Plummer, John W., Somerville, Mass. Tool-holder.....	474,302	May 3	646	163	59	762
Plumtree, Charles E., assignor of one-half to A. W. Crittenden, Spokane Falls, Wash. Side reflector.....	481,055	Aug. 16	2077	518	60	1010
Plunkett, J. C. (See Reynolds, Christopher C., assignor.)						
Plunkett, James C., Oakland, Cal. Sash-fastener.....	484,235	Oct. 11	1078	273	61	234
Plunkett, Michael H., assignor of fifty-one one-hundredths to W. Bowie and E. J. Bond, Baltimore, Md. Water-tube boiler.....	474,645	May 10	1222	{ 312 313 }	59	882
Plunkett, Michael H., assignor of fifty-one one-hundredths to W. Bowie and E. J. Bond, Baltimore, Md. Steam-boiler.....	482,384	Sept. 13	788	{ 189 190 }	60	1504

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Plymouth Foundry Company. (See Bowman and Shaw, assignors.)						
Pneumatic and Electric Tool Company. (See Drawbaugh, Daniel, assignor.)						
Pneumatic Gun Carriage and Power Company. (See Spiller, Harry A., assignor.)						
Pneumatic Press Company. (See Jordan, Edmund, assignor.)						
Pneumatic Tyre and Booth's Cycle Agency. (See Dunlop, John B., assignor.)						
Pneumatic Tyre and Booth's Cycle Agency. (See Sinclair, Finlay, assignor.)						
Poage, James F., Kirksville, Mo. Cuff button and fastener	484,669	Oct. 18	1777	432	61	384
Poalk, James L., Philadelphia, Pa. Bedstead	468,030	Feb. 2	198	46	58	561
Pocock, Francis A., Lynn, Mass., assignor to Thomson Van Depoelo Electric Mining Company, of Maine. Automatic governing device for electric pumps	485,221	Nov. 1	101	30	61	594
Poebl, Alexander, St. Petersburg, Russia. Artificial antiseptic sponge	471,343	Mar. 22	2630	668	58	1637
Poehner, Adolph A. (See Hey, Henry T., assignor.)						
Poetzol, Michael. (See Baemie, John, assignor.)						
Poh, Louis, Chicago, Ill. Liquid-measure	474,048	May 3	266	65	59	689
Pohl, Eduard, Louisville, Ky. Merry-go-round	476,551	June 7	488	116	59	1534
Pohle, Edwin C., Denver, Colo. Separating matte from slag	484,570	Oct. 18	1606	408	61	349
Pohle, Julius, Raguhn, Germany. Wire-gauze for dandy-rolls	469,716	Mar. 1	69	20	58	1112
Pohlé, Julius G., Jersey City, N. J. Elevating liquids	487,639	Dec. 6	649	167	61	1450
Pohligh, Julius. (See Otto, Theodor, assignor.)						
Pohlmann, William H., Dayton, Ohio. Candle-holder	468,363	Feb. 9	718	177	58	672
Pohrer, William J., St. Louis, Mo. Sectional vehicle-shaft	483,474	Sept. 27	2498	629	60	1862
Poindexter, Robert E., Indianapolis, Ind. Stay-rod clip for wire fences	469,408	Mar. 1	230	58	58	1146
Poindexter, William M., Washington, D. C. Book-support for chairs	467,311	Jan. 19	1643	418	58	329
Poland, Charles A., Ann Arbor, Mich. Combination step-ladder	480,342	Aug. 9	954	241	60	775
Poland, John C., Boston, Mass. Starching-machine	485,980	Nov. 8	1263	333 334	61	848
Poletti, Amedeo, <i>et al.</i> (See Dimpfi, Anton, assignor.)						
Polhemus, John A. (See Blauvelt and Polhemus.)						
Police Telephone and Signal Company. (See Firman, Leroy B., assignor.)						
Polk, John B. (See Harman and Polk.)						
Polka, Ferdinand A., Oakes, N. D. Draft-equalizer	477,064	June 14	1302	316	59	1711
Polkowski, John, New York, N. Y. Feathering paddle-wheel	486,502	Nov. 22	2100	555	61	1046
Pollak, Simon, Prague, Austria-Hungary, assignor to E. Friedheim, New York, N. Y. Anti-inductive device for telephones	477,870	June 28	2640	660	59	2001
Pollard, Charles E., Middletown, Conn., assignor to E. W. Bliss Company, Limited, Brooklyn, N. Y. Clutch mechanism for power-presses	477,604	June 21	2184	541 542	59	1896
Pollard, Edward, deceased, Cambridge, Mass.; M. W. Pollard, administratrix. Incandescent electric lamp	485,478	Nov. 1	504	133	61	674
Pollard, James B., assignor to International Cigarette Machine Company, Roanoke, Va. Cigarette-machine	475,341	May 24	2321	595 596	59	1130
Pollard, James M., assignor of one-half to G. S. Prindle and P. G. Russell, Washington, D. C. Cartridge	478,020	June 28	2867	717 718	59	2046
Pollard, Martha W., administratrix. (See Pollard, Edward.)						
Pollard, Paxton, Norfolk, Va. Bolt-releasing device	471,429	Mar. 22	2769	706	58	1663
Pollard, Robert. (See Taylor, Horace H., assignor.)						
Pollard, William, assignor of one-half to F. Farrell, Ansonia, Conn. Rolling-mill roll	476,552	June 7	489	116	59	1534
Polle, Friederich W., Washington, D. C. Vent for liquid-receptacles	484,816	Oct. 25	2023	519	61	448
Pollivick, Steve, <i>et al.</i> (See Cross, Thomas A., assignor.)						
Pollock, Charles V., Des Moines, Iowa. Nozzle	488,220	Dec. 20	1637	408	61	1681
Pollock, James, Wilkes-Barré, Pa. Steam-boiler	469,270	Feb. 23	2129	547	58	967
Pollock, James, Wilkes-Barré, Pa. Coal washing and separating machine	473,957	May 3	116	27	59	659
Pollock, James, Wilkes-Barré, Pa. Continuous-trough conveyer	483,475	Sept. 27	2499	629	60	1862
Pollock, James, assignor, by mesne assignments, to Wyoming Boiler Company, Limited, Wilkes-Barré, Pa. Steam-boiler	482,459	Sept. 13	904	219	60	1524
Pomeroy Duplicator Company. (See Fnerth, William G., assignor.)						
Pomeroy, George M. D., and G. H. Webber, Lebanon, Ind. Potato-digger	477,266	June 21	1653	404	59	1791
Pomeroy, Julius T., Edgerton, Wis. Fence-staple extractor	470,595	Mar. 8	1493	388	58	1395
Pomeroy, Noah G., New Haven, Conn. Oil-can	475,151	May 17	2023	511	59	1054
Pomeroy, Willis N., <i>et al.</i> (See Wead, Andrew M., assignor.)						
Pomper, Frank, Chicopee, Mass. Faucet or valve	482,409	Sept. 6	208	50	60	1376
Pomroy, John, Lake Linden, Mich. Stop-block for wagons	476,065	May 31	3475	876	59	1368
Ponton, Leon E., Corwin, Tex. Cultivator	472,813	Apr. 12	1226	314	59	245
Pool, John G., assignor of three-fourths to himself, J. E. and N. W. Hobinger, New Haven, Conn. Ring-armature	468,690	Feb. 9	1225	312	58	773
Pool, William H. (See Richardson and Pool.)						
Poole, Fredrick F., Newark, N. J. Trolley	479,608	July 26	2420	604	60	512
Poole, Fredrick F., Newark, N. J. Separable square	481,637	Aug. 30	3061	747	60	1224
Poole, George, assignor to G. B. Goodall and the Sanford Mills, Sanford, Me. Loom for weaving pile fabrics	467,726	Jan. 26	2317	588	58	463
Poole, Nathaniel D., North Attleborough, Mass. Level-hanger for shafting	487,427	Dec. 6	325	83	61	1366
Pooler, George B., Sheridan, Ill. Pastry-board	469,595	Feb. 23	2634	675	58	1065
Pooley Bros. (See Pooley, Edward F., assignor.)						
Pooley, Charles A., Buffalo, N. Y. Car-coupling	471,568	Mar. 29	2960	754	58	1708
Pooley, Edward F., Media, assignor to Pooley Bros., Philadelphia, Pa. Desk	483,864	Oct. 4	511	129	61	106
Poore, Charles. (See Williams and Poore.)						
Pope, Charles A., Cleveland, Ohio. Vapor-burner	472,394	Apr. 5	609	154 155	59	114
Pope, Edward J., Eau Claire, Wis. Apparatus for separating gluten from slaughter-house washings	467,312	Jan. 19	1645	418 419	58	329
Pope, Everett M. (See Bray and Pope.)						
Pope, Frederick B., Augusta, Ga. Spark-arrester	478,359	July 5	470	114	60	93
Pope, Frederick W., assignor to H. Robinson and K. P. Martin, Lynn, Mass. Heel-lift-skiving machine	466,743	Jan. 5	693	178	58	132
Pope, John L., Cleveland, Ohio. Adjustable walking-stilt	486,891	Nov. 29	2752	715	61	1191
Popo Manufacturing Company. (See Copeland, James S., assignor.)						
Pope Manufacturing Company. (See Rice, Charles D., assignor.)						
Pope, Thomas E., Oakland, Cal. Railway-car	485,562	Nov. 1	623	166	61	700
Pope, William R., New York, N. Y., assignor to Automatic Manufacturing Company, of New York. Coin-operated game apparatus	479,459	July 26	2190	549	60	469
Popoff, Matilda A., Brooklyn, N. Y. Blacking-receptacle for blacking-stands	476,066	May 31	3476	877	59	1368
Popp, Hermann. (See Hinshillwood, Thomas K., assignor.)						
Popp, Hermann S., Philadelphia, Pa. Type-casting machine	475,517	May 24	2603	661 662	59	1183
Poppowitsch, Edward, Brooklyn, N. Y. Preparing battery solutions	480,033	Aug. 2	443	60	666	

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Porrett, Christopher. (See Garner, Cockerill, and Porrett.)						
Porteous, William, Elmwood Place, Ohio. Chuck	487,292	Dec. 6	84	25	61	1338
Porter, Albert W., assignor to Porter Manufacturing Company, Farmer Village, N. Y. Rope-slide	468,537	Feb. 9	995	255	58	727
Porter, Daniel R., Chelsea, assignor to Columbian Manufacturing Company, Brockton, Mass. Pipe-wrench	482,527	Sept. 13	1025	247	60	1549
Porter, Edwin W., <i>et al.</i> (See Leber, Luther H., assignor.)						
Porter, Elbert B., Penn Yan, N. Y. Fishing-reel	478,713	July 12	978	243	60	210
Porter, Ephraim H., <i>et al.</i> (See Myers, Orlando R., assignor.)						
Porter, Ernest A., Florence, Mass. Staple-driving implement	481,970	Sept. 6	74	19	60	1349
Porter, Henry K., Boston, Mass. Bolt-clipper	484,670	Oct. 18	1778	452 453	61	384
Porter, James A. (See Clouser, William, assignor.)						
Porter, James A., Greenfield, Ohio. Poultry-brooder	477,309	June 21	1727	422 423	59	1806
Porter, John W., Williamstown, Victoria. Rifle-target	471,430	Mar. 22	2770	707	58	1663
Porter, John W., assignor of one-half to J. McNaughton, Waukesha, Wis. Automatic indicating-calipers	486,810	Nov. 22	2595	676	61	1144
Porter, Joseph E., Ottawa, Ill. Carrier-track	482,411	Sept. 13	825	198	60	1510
Porter, Joseph E., Ottawa, Ill. Hay-carrier and track	482,412	Sept. 13	826	198	60	1510
Porter, Joseph E., Ottawa, Ill. Track for hay carriers and elevators	487,966	Dec. 13	1189	297	61	1573
Porter, Lansing, Auburn, N. Y. Lock-hinge	475,415	May 24	2437	621	59	1151
Porter, Lemuel, Providence, R. I., assignor to Malden Machine Company, Boston, Mass. Water-motor	482,927	Sept. 20	1642	413	60	1682
Porter, Louis M., Montclair, N. J. Hook and eye	478,360	July 5	471	114	60	94
Porter Manufacturing Company. (See Porter, Albert W., assignor.)						
Porter, Robert H., <i>et al.</i> (See Stokesbury, John H., assignor.)						
Porter, Stephen, Boston, Mass. Suspension device for incandescent lamps	486,604	Nov. 22	2264	591	61	1076
Porter, Stephen, assignor to Rubber Tipped Arrow Company, Boston, Mass. Toy gun	482,411	Jan. 5	424	109	58	82
Porter, William D., Providence, R. I. Dental filling	488,634	Dec. 27	2303	570	61	1828
Porter, William S., Washington, Pa. Attachment for the brakes of bicycles	486,683	Nov. 22	2388	624	61	1102
Porter, Wilson E., assignor to New Haven Clock Company, New Haven, Conn. Clock-regulator	482,985	Sept. 20	1738	439	60	1701
Porter, Wilson E., assignor to New Haven Clock Company, New Haven, Conn. Alarm-clock	484,236	Oct. 11	1079	273	61	234
Porter's Sons, Robert. (See Cooper, George B., assignor.)						
Portland Iron Works. (See Clarke, Harry T., assignor.)						
Portsmouth Stove and Range Company. (See Knauss, Frank V., assignor.)						
Porttens, Anson, Marion, Ind. Milk-bucket	483,581	Oct. 4	101	25	61	22
Poschinger, Mathias, assignor to Sulzervogt Machine Company, Louisville, Ky. Liquid-regulator	485,563	Nov. 1	624	166	61	701
Posanner-Ehrnthall, Benno E. von, Vienna, Austria-Hungary. Seal	470,257	Mar. 8	938	233	58	1290
Post & Company. (See Briggs, Arthur E., assignor.)						
Post, Etta, Oakland, N. J. Carriage-step	469,031	Feb. 16	1779	451	58	892
Poston, Joseph W., Holly Springs, Miss. Car-coupling	485,333	Nov. 1	278	75, 76 549 550 551	61	629
Poteluno, Oscar, Limoges, France. Machine for treating skins, &c	479,460	July 26	2191	550 551	60	470
Poth, Henry, Crafton, Pa. Whiffletree	474,565	May 10	1102	281	59	860
Pott, Henry G. (See Myers, George P., assignor.)						
Potter & Atherton Machine Company. (See Potter, James C., assignor.)						
Potter, Burt I., Boston, Mass. Electrically-controlled car-switch	467,050	Jan. 12	1211	305 306	58	238
Potter, Francis A., assignor of one-half to G. Wihl and W. Dieffenbacher, San Francisco, Cal. Fruit-jar	470,386	Mar. 8	1155	295	58	1329
Potter, George L., Fort Wayne, Ind. Spring	470,949	Mar. 15	2036	520	58	1510
Potter, George L., Fort Wayne, Ind. Spring	481,971	Sept. 6	75	20	60	1349
Potter, Gideon, Osceola, Ill. Animal-trap	472,814	Apr. 12	1227	314 315	59	245
Potter, Gideon, and H. Dangerfield, Osceola, Ill. Tool-handle	483,865	Oct. 4	512	129	61	106
Potter, Henry W., assignor of one-half to J. E. Hayes, Wellington, New Zealand. Folding music-rack and telescopic stand therefor	478,460	July 5	612	149	60	121
Potter, Robert B., Hillburn, N. Y. Toilet-soap server	485,653	Nov. 8	757	200	61	744
Potter, Howard, New York, N. Y. Circular letter of credit	488,221	Dec. 20	1638	408	61	1622
Potter, James C., assignor to Potter & Atherton Machine Company, Pawtucket, R. I. Feeding mechanism for machinery for opening, cleaning, and preparing cotton	482,193	Sept. 6	446	108	60	1422
Potter, James C., assignor to Potter & Atherton Machine Company, Pawtucket, R. I. Feeding mechanism for machinery for opening and preparing cotton	482,194	Sept. 6	448	108	60	1423
Potter, James C., assignor to Potter & Atherton Machine Company, Pawtucket, R. I. Machine for opening and preparing cotton	482,273	Sept. 6	575	136 137	60	1447
Potter, John A. (See Grace, Robert W., assignor.)						
Potter, John A., Munhall, Pa. Rolling-mill	477,821	June 28	2552	639	59	1984
Potter, John A., Munhall, Pa. Mill appliance	477,822	June 28	2553	639 640	59	1985
Potter, John A., Munhall, assignor of one-half to R. W. Grace, Pittsburg, Pa. Art of and machine for cutting flanged beams	485,981	Nov. 8	1267	334	61	848
Potter, John A., and P. T. Berg, Homestead, Pa. Rolling-mill	485,982	Nov. 8	1268	334 335	61	849
Potter, John S., Newton, and D. J. Cartwright, Boston, Mass.; said Cartwright assignor to said Potter. Socket for incandescent electric lamps	485,587	Nov. 1	662	176	61	710
Potter, Joseph L., Fort Wayne, Ind. Pulley	476,303	June 7	114	27	59	1460
Potter, Morgan, Fishkill-on-the-Hudson, N. Y. Vehicle-brake	472,075	Apr. 5	96	26	59	20
Potter, Samuel A., assignor of one-half to D. G. Monfort, Cincinnati, Ohio. Adding-machine	478,361	July 5	472	114	60	94
Potter, Wilson E., Albany, N. Y. Voltaic body-battery	477,913	June 28	2706	677	59	2014
Potter, Wilson L., Hartford, Conn. Sanitary ventilator	479,224	July 19	1786	447	60	374
Pottle, George F., Boston, Mass. Valve	468,305	Feb. 2	622	155	58	644
Potts, Charles A., Trenton, N. J. Combined clothes-line prop and clothes-hanger	484,162	Oct. 11	959	246	61	210
Potts, Joseph D., trustee. (See McMannus, William S., assignor.)						
Potts, Joseph H. (See Potts, Mary F. and J. H.)						
Potts, Mary F. and J. H., Austin, Ill. Remedial or medical appliance	468,946	Feb. 16	1632	415 416	58	861
Poulson, Peter, Somers, Wis. Spade	479,601	July 26	2500	623	60	527
Poulson, Peter, Somers, Wis. Shovel	481,972	Sept. 6	76	20	60	1349
Poulter, John H., Arcola, Ill. Flood-fence	482,460	Sept. 13	905	220	60	1524

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Poulter, John H., assignor of one-half to J. H. Sullivan, Arcola, Ill. Shoe-fastening	480,133	Aug. 2	599	152	60	696
Pound, Harvey H., <i>et al.</i> (See Curtis, Andrew J., assignor.)						
Pound, William, <i>et al.</i> (See Curtis, Andrew J., assignor.)						
Pounds, Herbert G., New York, N. Y. Doubling attachment for quilting-machines	471,020	Mar. 15	2146	551	58	1531
Powell, Adolph, <i>et al.</i> (See Hunter, Joseph, assignor.)						
Powell, Charles E., Gloversville, N. Y. Paper-box machine	487,771	Dec. 13	876	222	61	1512
Powell, Clarence A. (See Courtright and Powell.)						
Powell, Elcanah, Kokomo, Ind. Clothes-drier	481,189	Aug. 23	2319	571	60	1068
Powell, George W., Pine Hill, Ala. Car-coupling	472,509	Apr. 5	789	202	59	150
Powell, Guy H. (See Chandler and Powell.)						
Powell, Guy H., and A. B. Chandler, assignors of one-third to C. T. Chandler, Jr., Chicago, Ill. Coin-controlled mechanism	477,871	June 28	2641	660	59	2001
Powell, Henry S., assignor of one-half to S. J. Minaker, Yates Centre, Kans. Horse hay-rake	475,342	May 24	2326	596	59	1131
Powell, James, Cincinnati, Ohio. Hardening seats and valves	481,332	Aug. 23	2577	633	60	1115
Powell, John B. and M. C., Parker, S. D. Combined chart and blackboard	484,338	Oct. 11	1246	{ 317 318 }	61	266
Powell, John S., Marshall, Tex. Harness-pad	470,917	Mar. 15	1986	508	58	1500
Powell, Joseph M., Springfield, Mo. Steam-engine	466,799	Jan. 12	795	205	58	161
Powell, Mary C. (See Powell, John B. and M. C.)						
Powell, Robert, Cleveland, Ohio. Construction and laying of subaqueous tunnels	485,983	Nov. 8	1270	{ 335 336 }	61	849
Powell, Samuel W., and J. W. Marshall, Richmond, Mo. Rubber shoe	477,958	June 28	2770	094	59	2028
Powell, Thomas, Fort Scott, Kans. Buttonhole attachment for sewing-machines	467,643	Jan. 26	2176	553	58	437
Powell, Thomas, Stockton, Cal. Wheel-pump	468,430	Feb. 9	815	205	58	692
Power, Augustus D., <i>et al.</i> (See Kline, David, assignor.)						
Power & Co., L. (See Pyott, Louis T., assignor.)						
Powers, Daniel. (See Dow and Powers.)						
Powers, Francis G., New Salem, Kans. Calf-weaner	467,830	Jan. 26	2472	628	58	494
Powers, George W. and J. M., Streator, Ill. Chimney-top	474,689	May 10	1296	332	59	898
Powers, James J., and R. Van Buren, Brooklyn, N. Y. Clay-conduit machine	478,462	July 5	616	150	60	122
Powers, James M. (See Powers, George W. and J. M.)						
Powers, Jay W., Chicago, Ill. Steam-engine	483,014	Sept. 20	1791	452	60	1712
Powers, John M. (See Schwalen and Powers.)						
Powers, Lyman A., Fennimore, Wis. Clothes-drier	485,222	Nov. 1	102	31	61	594
Powers, Timothy B., and T. W. Grevert, New York, N. Y. Attachment for steam or other engines	469,303	Feb. 23	2187	560	58	977
Pozdena, Gustave, Chicago, Ill. Respirator	476,486	June 7	402	93.94	59	1515
Pradex, William, Lawrence, Mass. Spirit-level	469,451	Feb. 23	2410	617	58	1021
Praetorius, Herman G., Dayton, Ohio. Guide for umbrella ribs and stretchers	481,283	Aug. 23	2494	614	60	1101
Prabha & Brother. (See Deck, Frederick R., assignor.)						
Prall, William E., Washington, D. C. Apparatus for condensing steam	475,795	May 31	3033	768	59	1279
Prange, Robert L. (See Colcl, Paul H., assignor.)						
Praray, Charles A., Providence, R. I. Composition for dressing hones	471,569	Mar. 29	2962	.....	58	1708
Prather, George E. (See Prather, Henry M., assignor.)						
Prather, Henry M., assignor of one-half to G. E. Prather, New Wilmington, Pa. Hay-rack	470,145	Mar. 1	745	185	58	1244
Pratt, Austin A., Independence, Oreg. Potato-digger	484,817	Oct. 25	2024	519	61	448
Pratt & Cady Company. (See Pratt, Rufus N., assignor.)						
Pratt, Charles F., East Buffalo, N. Y. Engraving-tool	476,817	June 14	908	222	59	1631
Pratt, Charles L., Minneapolis, Minn. Cigar-refrigerator	474,923	May 17	1662	425	59	985
Pratt, Charles M. (See Leland, Edwin A., assignor.)						
Pratt, Charles R., New York, N. Y. Electric elevator	472,909	Apr. 12	1358	{ 349 350 }	59	272
Pratt, Charles R., assignor to Sprague Electric Elevator Company, New York, N. Y. Ball-bearing nut	476,304	June 7	114	28	59	1461
Pratt, Charles T., assignor to Pratt Chuck Company, Clayville, N. Y. Sleeve for taper drills	473,639	Apr. 26	2609	657	59	544
Pratt, Charles W., Muskegon, Mich. Invalid-bedstead	474,690	May 10	1297	332	59	898
Pratt Chuck Company. (See Pratt, Charles T., assignor.)						
Pratt, Edward W. (See Mout and Pratt.)						
Pratt, Henry C., Canandaigua, N. Y. Wire-distributor for wire fences	479,571	July 26	2370	591	60	503
Pratt, I. F., <i>et al.</i> (See Mooney, Benjamin F., assignor.)						
Pratt, Irving W., Medford, Mass. Mouthpiece for reed-borns	468,156	Feb. 2	375	92	58	507
Pratt, James H., <i>et al.</i> (See Pearce, William, assignor.)						
Pratt, John, Centre, Ala., assignor to Hammond Type Writer Company, New York, N. Y. Type-writing machine	470,704	Mar. 15	1656	430	58	1436
Pratt, John, Gadsden, Ala., assignor to Hammond Type Writer Company, New York, N. Y. Type-writing machine	477,224	June 21	1578	{ 387 388 }	59	1778
Pratt, John W. (See Wiard, Frederick, assignor.)						
Pratt & Letchworth. (See Crosby, George S., assignor.)						
Pratt & Letchworth. (See Wiedeich, Charles L., assignor.)						
Pratt, Nat. W., Brooklyn, N. Y. Revolving stoker	485,223	Nov. 1	103	31.32	61	594
Pratt, Nat. W., Brooklyn, N. Y. Revolving stoker	485,224	Nov. 1	106	32.33	61	595
Pratt, Philip W., Boston, Mass. Spring toy gun	468,089	Feb. 2	269	65	58	576
Pratt, Rufus N., assignor to Pratt & Cady Company, Hartford, Conn. Valve	477,605	June 21	2187	542	59	1897
Pratt, Rufus N., assignor to Pratt & Cady Company, Hartford, Conn. Cock	477,606	June 21	2188	542	59	1897
Pratt, Rufus N., assignor to Pratt & Cady Company, Hartford, Conn. Cock	477,607	June 21	2189	542	59	1897
Pratt, Rufus N., assignor to Pratt & Cady Company, Hartford, Conn. Gate-valve	477,608	June 21	2190	543	59	1897
Pratt, Wilbur M., New York, N. Y. Tobacco-pipe	485,654	Nov. 8	759	200	61	744
Pratt, William, Montreal, Canada. Tin can	471,736	Mar. 29	3227	821	58	1755
Pratt, William, Montreal, Canada. Tin can or receptacle. (Reissue)	11,264	Aug. 16	2272	560	60	1044
Pratt, William H., Mount Vernon, Ohio. Telegraph-pole	488,830	Dec. 27	2600	645	61	1888
Pray, Edward E., New York, N. Y., assignor, by mesne assignments, to Crown Pharmaceutical Company, of New Jersey. Dress-shield	467,898	Jan. 26	2588	656	58	515
Pray, Hamilton, Clove, N. Y. Ice-plow	483,015	Sept. 20	1793	452	60	1713
Pray, Thomas, Jr., <i>et al.</i> (See Reagan, Harry C., Jr., assignor.)						
Preble, Amaziah M., <i>et al.</i> (See Reed, James H., assignor.)						
Preble, Josiah H., <i>et al.</i> (See Reed, James H., assignor.)						
Preis, Joseph, <i>et al.</i> (See Witte, Frank, assignor.)						
Preisler, Emil. (See Fischer and Preisler.)						
Preisler, Adolph J., <i>et al.</i> (See Berg, Peter V. P., assignor.)						
Preisler, Reinholdt J., <i>et al.</i> (See Berg, Peter V. P., assignor.)						
Prendergast, Will. P., St. Louis, Mo. Locomotive draw-bar coupling	470,897	Mar. 15	1955	{ 500 501 }	58	1495

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Prendiville, Harry. (See Fales and Prendiville.)						
Prentice, Leon H., Waukegan, P. R. McLeod, R. T. Crane, and L. Pilkington, assignors to Crane Company, Chicago, Ill. Valve mechanism for steam-radiators	470,512	Aug. 9	1224	306	60	827
Prentiss, Frederick H., New York, N. Y. Incandescent electric lamp	488,635	Dec. 27	2304	571	61	1828
Prentiss, Frederick H., New York, N. Y. Incandescent lamp	488,636	Dec. 27	2305	571	61	1828
Prentiss, Henry S., Elizabeth, N. J. Display device	477,382	June 21	1839	452	59	1827
Prentiss, Henry S., Elizabeth, N. J. Automatic keyboard-operator	487,936	Dec. 13	1149	287 288	61	1565
Prenzlau, Hermann, Hamburg, assignor of one-half to C. Beuster, Berlin, Germany. Vehicle-shafts	487,037	Nov. 29	3001	772	61	1239
Prescott, Charles M., Boonville, N. Y. Attachment for type-writing machines	470,385	Mar. 8	1186	303	58	1334
Prescott, De Witt C., Marinette, Wis. Band-saw mill	472,586	Apr. 12	895	229 230	59	184
Prescott, De Witt C., Marinette, Wis. Band-saw mill	478,817	July 12	1166	289 290	60	217
Prescott, Edwin, Arlington, Mass. Dough-kneader	485,822	Nov. 8	1006	269	61	795
Prescott, George A., assignor of three-fourths to W. M. Ahernathy and W. Wadsworth, Topeka, Kans. Car-heating apparatus	474,404	May 10	835	219	59	810
Prescott, Sidney I., Brooklyn, N. Y. Device for distributing oil upon water	481,818	Aug. 30	3370	826	60	1284
Pressnell, Thomas H. (See Brenizer, Orson W., assignor.)						
Prest, John E., Whitinsville, Mass. Beam-doffer for warpers	485,225	Nov. 1	109	33	61	595
Preston, Almon E., Battle Creek, Mich. Apparatus for and method of gaining wood for seats and backs	476,305	June 7	116	28	59	1461
Preston, Elijah J. (See Lipp and Preston.)						
Preston, H. C., et al. (See Preston, Othniel, assignor.)						
Preston, Leonard Z., and O. H. Wirsig, Champion, Nebr. Car-coupling	474,691	May 10	1300	332	59	898
Preston, Leonidas M., Bonham, Tex. Stocking	472,815	Apr. 12	1228	315	59	245
Preston, O., Jr., et al. (See Preston, Othniel, assignor.)						
Preston, Othniel, Hornellsville, N. Y. Machine for making hollow wire cable	475,889	May 31	3211	813	59	1314
Preston, Othniel, assignor of two-thirds to H. C. and O. Preston, Jr., Hornellsville, N. Y. Machine to plait wire	482,589	Sept. 13	1117	269 270	60	1567
Preston, Robert, et al. (See Trump, John G., assignor.)						
Pretzel & Co., Franz. (See Borchardt, Oswald, assignor.)						
Prewitt, William Q., Lexington, Ky. Wire-support for electric railways	466,800	Jan. 12	797	206	58	161
Prewitt, William Q., Lexington, Ky. Trolley-track hanger for electric railways	483,388	Sept. 27	2392	601	60	1840
Prewitt, William Q., Lexington, Ky. Portable mirror	484,818	Oct. 25	2026	519	61	449
Prewitt, William Q., Lexington, Ky., assignor of one-half to L. H. Owen, Oak Park, Ill. Combination-crayon	471,191	Mar. 22	2410	613	58	1594
Price, Benjamin F., Bloomington, Ill. Drive-gate	473,958	May 3	118	27	59	660
Price, Charles S. (See Fronheiser and Price.)						
Price, Courtleon R., Prescott, Wis. Cuspidor	486,892	Nov. 29	2753	715	61	1191
Price, Edwin H., Lansdale, assignor of one-half to J. B. Alderfer, Souderton, Pa. Shutter-worker	479,155	July 19	1677	419	60	354
Price, George W., Baltimore, Md. Electric-circuit closer	470,596	Mar. 8	1493	388	58	1296
Price, George W., assignor of one-half to W. Albert, Baltimore, Md. Fountain attachment for pens	475,285	May 17	2229	571	59	1097
Price, Harry W. (See Vernon, George O., assignor.)						
Price, Henry W., et al. (See Winlund, Nicholas J., assignor.)						
Price, Jacob, San Leandro, Cal. Cotton-press	474,482	May 10	963	248 249	59	833
Price, James M., Philadelphia, Pa. Mechanical movement	466,923	Jan. 12	1006	257	58	201
Price, James M., Philadelphia, Pa. Metallic railway-support	467,432	Jan. 19	1827	466 467	58	363
Price, James M., Philadelphia, Pa. Street railway or tramway	469,392	Feb. 23	2317	596	58	1004
Price, James M., Philadelphia, Pa. Support for street railways or tramways	478,362	July 5	473	115	60	94
Price, Jesse M. (See Maxim and Price.)						
Price, John A., Scranton, Pa. Gate	476,963	May 14	1148	277	59	1679
Price, John B., Wollaston, Mass. Bobbin-winder	474,187	May 3	466	113	59	728
Price, John B., Wollaston, Mass. Combined paper-weight, letter-scale, and calendar	476,067	May 31	3417	877	59	1369
Price, John B., Wollaston, Mass. Cylinder-lock	477,021	Jan. 10	1229	298	59	1696
Price, John B., Wollaston, Mass. Lamp-extinguisher	477,267	June 21	1654	404	59	1792
Price, John B., Wollaston, Mass. Center and key-seating square	477,959	June 28	2771	694	59	2028
Price, John B., Wollaston, Mass. Surface-gage	477,960	June 28	2772	694	59	2028
Price, John B., Wollaston, Mass. Lamp-extinguisher	481,268	Aug. 23	2462	607	60	1096
Price, John B., Wollaston, Mass. Cylinder-lock	481,421	Aug. 23	2714	668	60	1141
Price, John B., Wollaston, Mass. Lock	481,422	Aug. 23	2718	668	60	1142
Price, John B., Wollaston, Mass. Padlock	483,866	Oct. 4	513	129	61	107
Price, John B., Wollaston, Mass. Seal-lock	483,867	Oct. 4	515	129	61	107
Price, John B., Wollaston, Mass. Mechanical movement	484,645	Oct. 18	1735	440 441	61	374
Price, Jonathan D., Chicago, Ill. Chart	480,413	Aug. 9	1071	268	60	796
Price, Joseph F., Exeter, Nebr. Wire stretcher and splicer	484,881	Oct. 25	2127	546	61	468
Price, Russell D., Parkside, Pa. Railway-tie and track-fastening	487,351	Dec. 6	185	51	61	1357
Price, Samuel B., Jr., C. E. Martin, and B. Furser, Brookwood, Ala. Ore and coal crusher and separator	479,018	July 19	1466	365	60	315
Price, Sio T., et al. (See Wise, Benjamin F., assignor.)						
Price, William, Mendota, Ill. Attachment for stoves	480,828	Aug. 16	1727	431	60	941
Price, William C., et al. (See Monday, Robert, assignor.)						
Price, William G., New Orleans, La. Pencil-sharpener	479,303	July 19	1901	476	60	398
Price, William H., Jr., assignor to Chandler & Price, Cleveland, Ohio. Platen printing-press	469,215	Feb. 16	2048	524	58	943
Prickett, Frank C., assignor of one-half to F. W. Bruchmann, Kansas City, Kans. Trolley-wire support	472,953	Apr. 12	1435	366	59	287
Prickett, George W., Waverly, Ill. Vehicle-wheel	475,152	May 17	2024	511	59	1054
Prickett, John B., Forest Grove, Oreg. Boot-cleaner	468,364	Feb. 9	718	178	58	672
Pride, James, London, England. Fire-escape	482,274	Sept. 6	577	137 138	60	1447
Prideaux, William D., Wellington, England. Box-fastener	467,357	Jan. 19	1714	438	58	342
Pridmore, John L., Linn, Indian Ter. Cotton-press	478,070	June 28	2946	735 736 709	59	2060
Pridmore, Henry E., Chicago, Ill. Grain-binder	481,530	Aug. 23	2890	710 711	60	1176

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Pridmore, Henry E., Chicago, Ill., assignor to McCormick Harvesting Machine Company. } Grain-binder	467,197	Jan. 19	1466	{ 374 375 376	58	295
Pridmore, Henry E., Chicago, Ill., assignor to McCormick Harvesting Machine Company. } Grain-binder	491,244	Aug. 23	2416	{ 596 597	60	1087
Pridmore, Henry E., Chicago, Ill., assignor to McCormick Harvesting Machine Company. } Mowing-machine	488,905	Dec. 27	2731	674	61	1915
Priesshoff, Theodore, St. Louis, Mo. Hand planter or dibbler	467,433	Jan. 19	1829	467	58	364
Priest, Augustus F., West Superior, Wis. Flanger	467,349	Jan. 19	1704	436	58	340
Priest, Joseph K., Nashua, N. H. Hair-clipper	470,597	Mar. 8	1494	389	58	1396
Priest, Joseph K., Nashua, N. H. Hair clipper and shears	478,461	July 5	614	149	60	121
Priestley, Forrest M., Denver, Colo. Roller-blotter ruler	472,510	Apr. 5	790	202	59	150
Priestley, George F., Halifax, England. Machine for dressing silk, &c	468,507	Feb. 9	941	240	58	716
Priestley, John H., Meriden, Iowa. Automatic brake	481,190	Aug. 23	2320	571	60	1068
Primrose, Isaac P., <i>et al.</i> (See Armstrong, James P., assignor.)						
Prince, Louis, Washington, D. C. Stone-cutting machine	469,091	Feb. 16	1858	475	58	907
Prince, Samuel F., Jr., Reading, Pa. Compound engine	480,781	Aug. 16	1652	413	60	926
Prince, Samuel F., Jr., Reading, Pa. Check-valve	483,635	Oct. 4	175	44	61	36
Prindle, Frederick J. (See Prindle, William E. and F. J.)						
Prindle, George S., <i>et al.</i> (See Pollard, James M., assignor.)						
Prindle, William E. and F. J., Aurora, Ill. Lawn-mower	482,752	Sept. 20	1374	{ 340 341	60	1629
Pringle, Eugene, Gloversville, N. Y. Device for supporting and holding cartridges in fire-arms	484,457	Oct. 18	1433	366	61	315
Pringle, Robert C., Marine City, Mich. Draft-indicator for vessels	467,996	Feb. 2	137	33	58	550
Prinz, Faustin, Milwaukee, Wis. Lubricator	468,262	Feb. 2	547	134	58	630
Prinzlan, Wilhelm, Hamburg, Germany. Car starter and brake	485,353	Nov. 1	317	84	61	636
Prior, Matthew, Watertown, assignor to F. W. Munroe, Salem, Mass. Coin-operated playing-card case	468,827	Feb. 16	1435	365	58	825
Priser, Orion T., Brookville, Ohio. Support for stew-pans or like utensils in a domestic boiler	488,831	Dec. 27	2602	646	61	1888
Prochaska, George B., New Orleans, La. Spark-arrester	469,271	Feb. 23	2130	547	58	967
Prochaska, George B., New Orleans, La. Polishing rice or other grains	483,868	Oct. 4	518	130	61	107
Proctor, Abner C., Washington, D. C. Puzzle	481,589	Aug. 30	2987	733	60	1210
Proctor, Charles M. (See Raymond, Nelson H., assignor.)						
Proctor, Charles W., Lake Forest, Ill. Oil-can and lamp-filler	468,691	Feb. 9	1228	312	58	774
Proctor, George E., Washington, D. C. Air cooling and purifying apparatus	488,798	Dec. 27	2556	{ 634 635	61	1879
Proctor, Josiah K., Philadelphia, Pa., assignor to Philadelphia Textile Machinery Company, of Pennsylvania. Drying-machine	473,263	Apr. 19	1968	494	59	399
Proctor, William R., Redding, Iowa. Lifting-jack	487,770	Dec. 13	874	222	61	1512
Prohaska, Anton, Hoboken, N. J. Shears	468,207	Feb. 2	452	112	58	613
Prokhoroff, Nicolaus, assignor of one-half to N. Fahlberg, Kiev, Russia. Electric central clock	481,916	Aug. 30	3531	{ 864 865	60	1315
Propfe, Heinrich, Mannheim, Germany. Distilling apparatus	478,265	July 5	327	79	60	66
Propst, J. M., <i>et al.</i> (See Foster, Benjamin F., assignor.)						
Prospective Mining and Machinery Company. (See Tremain and Johnson, assignors.)						
Pross, John A. (See Lipe and Pross.)						
Pross, John A. (See Montague and Pross.)						
Prouty, Enoch, Chicago, Ill. Steam-condensing apparatus	467,236	Jan. 19	1527	{ 389 390	58	307
Prouty, Enoch, assignor to himself and E. J. Noble, Chicago, Ill. Power-transmitting mechanism for cars	469,717	Mar. 1	70	21	58	1112
Prouty, Enoch, assignor to himself, R. Tarrant, and O. S. Prouty, Chicago, Ill. Printing-press	478,760	July 12	1061	{ 262 263 264	60	226
Prouty, George W., Boston, Mass. Ink-eraser	469,304	Feb. 23	2189	561	58	978
Prouty, Nelson H., Charlton, Mass. Handle	488,679	Dec. 27	2380	589	61	1843
Prouty, Olive S., <i>et al.</i> (See Prouty, Enoch, assignor.)						
Prouty, Theodore C., and C. W. Turner, Evanston, Ill. Door-hanger	476,068	May 11	3479	877	59	1369
Provident Gas Process Company. (See Waite, George R., assignor.)						
Pruden, Clarence D., St. Paul, Minn. Sheet-metal building-front	483,163	Sept. 27	2021	{ 511 512	60	1771
Pruden, Daniel R., Chelsea, Mass. Eyeglass or spectacle case	467,707	Jan. 26	2283	579	58	457
Prud'homme, Hector, Marinette, Wis. Scrubbing-machine	478,636	July 12	874	{ 215 216	60	189
Prud'homme, Joseph P. (See Des Rivières and Prud'homme.)						
Pruitt, John H., Markton, Ala. Burglar-alarm	486,893	Nov. 29	2754	715	61	1191
Pruner, Thomas H., assignor of one-half to M. Grigsby and F. Forde, Sioux Falls, S. D. Thill-coupling	486,410	Nov. 15	1964	521	61	1006
Prunetti, Emelio, and G. Avignone, Sierra City, Cal. Aerial tramway	468,208	Feb. 2	453	112	58	613
Pruser, John N., Union Hill, N. J. Burial-casket	481,370	Aug. 23	2624	645	60	1124
Pruzman, John H., Plankinton, S. D. Trousers-shield	483,164	Sept. 27	2023	512	60	1771
Psaroudaki, Spiridon, Paris, France. Steam-engine valve	470,443	Mar. 8	1280	328	58	1352
Psilander, Charles A. (See Angerer and Psilander.)						
Psilander, Charles A. (See Samuel, Angerer, and Psilander.)						
Ptomey, William J., McCracken, Kans. Blacksmith's forge	477,699	June 28	2356	589	59	1948
Puccini, Regolo, Chicago, Ill. Stopper-extractor	480,414	Aug. 9	1072	268	60	787
Pückler, Heinrich v., Oberweisitz, Germany. Insect-trap	473,778	Apr. 26	2816	708	59	584
Pudan, Herbert W., Sacramento, Cal. Machine for cutting screw-threads on bolts	473,640	Apr. 26	2610	{ 657 658	59	544
Puddifoot, Charles, Morrison, Ill. Display-rack	473,709	Apr. 26	2715	683	59	564
Pugh, John W., assignor of one-third to T. J. Haynes, Grand Rapids, Mich. Nut-lock	484,745	Oct. 18	1893	482	61	409
Pugh, William H., Minneapolis, Minn. Axle-lubricator	488,402	Dec. 20	1925	463	61	1737
Pugsley, John G., South Norwalk, Conn. Ankle-supporter	487,492	Dec. 6	429	110	61	1406
Pugsley, William E., assignor to Lincoln Road Grader Manufacturing Company, Lincoln, Nebr. Extensible axle	475,248	May 17	2173	553	59	1084
Pullar, William, Ithaca, N. Y. Sod-trimming machine	487,058	Nov. 29	3032	778	61	1246
Pullman, Albert B., assignor to A. B. Pullman Company, Chicago, Ill. Sliding-door lock	483,326	Sept. 27	2301	579	60	1823
Pullman, Albert B., assignor to A. B. Pullman Company, Chicago, Ill. Car-door	485,588	Nov. 1	664	{ 176 177 178	61	710
Pullman, Charles L., Chicago, Ill. Passenger-car	471,761	Mar. 29	3259	{ 830 831 832	58	1762

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Pullman, Herbert S., Meriden, Conn. Shoe-fastening.....	481,638	Aug. 30	3062	748	60	1224
Pullman, Herbert S., Meriden, Conn., assignor of one-half to H. L. Allen. Necktie-fastener.....	486,956	Nov. 29	2879	744	61	1217
Pullman, James M., <i>et al.</i> (See Knowles, Louis T., assignor.)						
Pullman Sash Balance Company. (See Rose, Byron H., assignor.)						
Pullman's Palace Car Company. (See Sessions, Henry H., assignor.)						
Pulsion Telephone Company. (See Eastman, William H., assignor.)						
Pummeier, A. G. (See Berkefeld, Hermann, assignor.)						
Pungs, William A., Detroit, Mich. Metallic brake-beam.....	466,834	Jan. 12	846	217	58	171
Puntney, Archibald, and E. C. Sooy, Kansas City, Mo. Combined hay rake and loader.....	487,640	Dec. 6	651	167 168	61	1450
Purcell, Frank A., and J. Morgan, Vincennes, Ind. Chalk-sharpener.....	477,310	June 21	1729	423	59	1806
Purcell, John J., assignor of one-half to W. H. Allen, Washington, D. C. Coupling for underground wires.....	483,327	Sept. 27	2303	579	60	1823
Purcell, John J., assignor of one-half to W. H. Allen, Washington, D. C. Electric coupling.....	488,027	Dec. 13	1303	324	61	1598
Purcell, Marmaduke F. (See Tichborne, Darley, Purcell, and Geoghegan.)						
Purcell, Thomas W., and J. B. Craig, St. Louis, Mo. Wardrobe, chiffonier, &c.....	479,078	July 19	1555	388 389	60	331
Purdon, William, Hull, England. Sash-holder.....	487,155	Nov. 29	3190	817	61	1278
Purdy, Fred, Englewood, assignor to American Spring Company, Chicago, Ill. Method of and apparatus for tempering wire.....	482,879	Sept. 20	1567	391	60	1668
Purdy, George H., assignor of one-half to E. Harris, Parkersburg, W. Va. Pressure-regulator.....	469,505	Feb. 23	2498	640	58	1037
Purdy, George H., assignor of one-half to E. Harris, Parkersburg, W. Va. Machine for indenting and crushing meats or like substances.....	470,258	Mar. 8	939	233	58	1990
Purdy, Sarah J., administratrix. (See Purdy, Stillman H.)						
Purdy, Stillman H., deceased, Minneapolis, Minn.; S. J. Purdy, administratrix. Grain-seeder.....	471,192	Mar. 22	2411	613	58	1594
Purdy, William J. (See Taylor and Purdy.)						
Purefoy, Addison F., Wake Forest, N. C. Spring bed-bottom.....	486,183	Nov. 15	1603	426	61	932
Purefoy, Addison F., Wake Forest, N. C. Spring bed-bottom.....	486,184	Nov. 15	1605	426	61	933
Purfoy, William S., Furman, Ala. Automatic fire-extinguisher.....	488,232	Dec. 27	2603	646	61	1888
Purple, Charles W. (See Purple, George E. and C. W.)						
Purple, Charles W., Minneapolis, Minn. Separable water back or heater for stoves.....	474,459	May 10	934	240	59	827
Purple, George E. and C. W., Minneapolis, Minn.; said George E. Purple assignor to said C. W. Purple. Trolley for electric cars.....	480,240	Aug. 2	781	197 198	60	729
Pursell, David E., Mauch Chunk, Pa. Time-recording mechanism.....	483,767	Oct. 4	365	91	61	77
Purser, Benjamin P. (See Price, Martin, and Purser.)						
Purley, James F., South Pittsburg, Tenn. Car-coupling.....	482,809	Sept. 20	1454	361	60	1645
Purves, George. (See Johnston, John H., assignor.)						
Purves, James. (See Cornelius, William A., assignor.)						
Purves, James L. (See Sawyer and Purves.)						
Purvis, Charles A., Purvis, Mo. Hay-stacker.....	478,021	June 28	2872	718	59	2046
Pusey, Joshua, Lima, Pa. Friction-match card.....	483,165	Sept. 27	2024	512	60	1771
Pusey, Joshua, Lima, Pa. Flexible match.....	483,166	Sept. 27	2026	512	60	1771
Pusey, Joshua, Philadelphia, Pa., assignor to Eagle Pencil Company, New York, N. Y. Pencil.....	471,431	Mar. 22	2772	708	58	1663
Putman-Cramer, Anthon W., Brooklyn, N. Y. Producing gas.....	470,007	Mar. 1	545	135	58	1204
Putman, Gideon V., Gloversville, N. Y. Cut-off valve.....	477,022	June 14	1233	293	59	1697
Putman, John, Cerro Gordo, Ill. Nut-lock.....	478,637	July 12	877	216	60	190
Putnam, Ann M., <i>et al.</i> (See Moore, Charles E., assignor.)						
Putnam, Joseph W., New Orleans, La. Steam-boiler.....	487,641	Dec. 6	652	168	61	1451
Putnam, Oliver K., Worcester, Mass. Sash-fastener.....	474,405	May 10	840	220	59	810
Putnam, Ralph C., Philadelphia, Pa., assignor to J. E. Caldwell & Company. Electric-light attachment for lamps.....	470,008	Mar. 1	547	136	58	1204
Putnam, Theodore A. B., assignor to E. S. Webster, New York, N. Y. Electric railway-signal.....	479,333	July 19	1940	485	60	406
Putney, Edwin B., Lyons, N. Y. Bill-file.....	476,487	June 9	403	94	59	1515
Pye, James F., Baldwinville, assignor of one-half to J. A. Spain, Talbotton, Ga. Lapping.....	487,156	Nov. 29	3191	817	61	1278
Pye, James F., Baldwinville, assignor of one-half to J. A. Spain, Talbotton, Ga. Hame.....	487,157	Nov. 29	3192	817	61	1278
Pyke, Lazarus S. M., and E. S. Harris, London, England. Magnetic inductor for dynamo-electric machines.....	476,818	June 14	908	222	59	1631
Pyke, Lazarus S. M., and E. S. Harris, London, England. Field-magnet for dynamo-electric machines.....	476,819	June 14	909	222	59	1631
Pyke, Lazarus S. M., and E. S. Harris, London, England. Electrical inductorium.....	481,544	Oct. 18	1574	400	61	343
Pyke, Lazarus S. M., and H. T. Barnett, assignors to said Pyke and E. S. Harris, London, England. Dynamo-electric machine.....	472,628	Apr. 12	961	249	59	196
Pyke, Lazarus S. M., and H. T. Barnett, assignors to said Pyke and E. S. Harris, London, England. Electrical inductorium.....	484,543	Oct. 18	1573	399	61	342
Pyle, Alice A., Richmond, Va. Carpet-cleaning apparatus.....	488,323	Dec. 20	1798	451	61	1712
Pyle, Edwin I., Bridgeport, Conn. Mechanical toy.....	476,895	June 14	1030	250	59	1655
Pyncheon, Edwin, Chicago, Ill., assignor to A. Hoeffler, J. C. Skelton, and A. P. Gould, Canton, Ohio. Adjustable chair.....	484,571	Oct. 18	1607	408	61	349
Pyott, Louis T., assignor to L. Power & Co., Philadelphia, Pa. Planing-machine.....	481,371	Aug. 23	2625	646	60	1124
Pyper, Mitchel, New York, N. Y. Saw-handle attachment.....	486,736	Nov. 22	2471	645	61	1119
Pyrolith Company. (See Keseling and Fuchs, assignors.)						
Q. & C. Company. (See Churchward, James, assignor.)						
Q. & C. Company. (See Reece, Benjamin, assignor.)						
Quackenbush, Philip P., New York, N. Y. Elevator.....	467,135	Jan. 12	1370	350	58	269
Quackenbush, Edward F. (See Nilson, Nils, assignor.)						
Quarnström, Charles E., assignor of one-half to N. P. Hedin, Chicago, Ill. Ironing-machine.....	472,954	Apr. 12	1437	366	59	287
Quatermass, Reuben, Moline, Kans. Car-coupling.....	478,463	July 5	617	150	60	122
Quatermass, Reuben, Moline, Kans. Building.....	488,451	Dec. 20	2907	501	61	1755
Quealy, John T., South Coventry, Conn. Monocycle.....	473,959	May 3	119	28	59	660
Quein, Hannah F., Odell, Nebr. Clasp.....	477,154	June 14	1441	353	59	1738
Quentell, William P., Kansas City, Mo. Can-soldering machine.....	471,360	Mar. 22	2665	676 677	58	1643
Quentell, William P., Kansas City, Mo. Can-soldering machine.....	479,174	July 19	1710	428 429	60	360
Quentell, William P., Kansas City, Mo. Apparatus for forming and soldering sheet-metal cans.....	480,034	Aug. 2	443	112 113	60	666

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Quick, William H. (See Hanna, Manuel J., assignor.)						
Quickel, Edwin G., York, Pa. Whiffletree-hook	484,746	Oct. 18	1894	482	61	409
Quinby, Thomas B. (See Duncan and Quinby.)						
Quinby, Thomas B., <i>et al.</i> (See Barrett, George L., assignor.)						
Quincy Gas Economizer Company. (See Cabell, Samuel G., assignor.)						
Quinlan, John E., Boston, Mass. Banjo	477,451	June 21	1945	482	59	1848
Quinn, David J., Brookline, and P. W. Hoffmann, Boston, Mass., assignors to Iona Manufacturing Company, of Maine. Gas-lighting device	478,522	July 5	708	171	60	140
Quinn, George W., Bloomington, Ill. Corn-harvester	471,139	Mar. 22	2327	598 599	58	1579
Quinn, James W., assignor of one-half to C. D. Vawter, North Madison, Ind. Flower-stand	469,216	Feb. 16	2049	524	58	943
Quinn, John J., assignor of one-half to T. Mulcahy, Rochester, N. Y. Shaper and cutter head	485,427	Nov. 1	428	114	61	660
Quinn, Michael, assignor of one-half to R. S. Coltman, Westborough, Mass. Machine for blocking and pressing hats	473,641	Apr. 26	2613	658	59	545
Quinn, William J., assignor to Henry McShane Manufacturing Company, Baltimore, Md. Globe-valve	485,055	Oct. 25	2413	621	61	525
Quinton, John H., Portland, Oreg. Horse-hitching device	483,514	Sept. 27	2567	643	60	1875
Quirk, Michael J., and C. Bach, Jr., Milwaukee, Wis. Electric-lighting system	480,782	Aug. 16	1653	413	60	926
Quittner, Josef and L., Vienna, Austria-Hungary. Automatic coin-freed seat	473,264	Apr. 19	1970	494	59	399
Quittner, Leopold. (See Quittner, Josef and L.)						
R. E. Dietz Company, <i>et al.</i> (See Gall, John S., assignor.)						
R. E. Dietz Company, <i>et al.</i> (See McArthur, Warren, assignor.)						
R. E. Dietz Company, <i>et al.</i> (See Wright, Frederick K., assignor.)						
R. S. True Company. (See True, Richard S., assignor.) (Reissue.)						
Raab, George, Cleveland, Ohio. Coin-controlled music-box	473,342	Apr. 19	2102	528	59	425
Raab, William, assignor of one-half to D. Wild, Cedar Falls, Iowa. Railway-switch	477,609	June 21	2190	543 544 545	59	1897
Raatz, Julius, Manistee, Mich. Straw-cutter	482,413	Sept. 13	828	198 199	60	1511
Rabb, Philipp J., Frankfort Station, Ill. Draft-equalizer	471,396	Mar. 22	2718	693	58	1654
Rabb, Philipp J., Frankfort, Ill. Draft-equalizer	486,265	Nov. 15	1741	459	61	961
Rabbeth, Francis J., Boston, Mass. Sash-fastener	467,934	Feb. 2	71	17	58	539
Rabbeth, Francis J., Boston, Mass. Sash-fastener	480,343	Aug. 9	956	242	60	776
Rabbligo, Parnell, Sydney, New South Wales. Telephone	488,367	Dec. 20	1876	469 470	61	1728
Rabiger, Emil. (See Rabiger, Robert and E.)						
Rabiger, Robert and E., Philadelphia, Pa. Game apparatus	474,188	May 3	469	113	59	728
Rabitte, John M., Boston, Mass., assignor to Ball and Socket Fastener Company, of New Hampshire. Catch for garment-supporters	484,849	Oct. 25	2026	519	61	449
Rach, Carl, Chicago, Ill. Apparatus for the preparation of wort	469,718	Mar. 1	72	21	58	1112
Rachelman, Max. (See Rachelman, Samuel and M.)						
Rachelman, Max and S., St. Paul, Minn. Trousers	475,416	May 24	2438	621	59	1151
Rachelman, Samuel. (See Rachelman, Max and S.)						
Rachelman, Samuel and M., St. Paul, Minn. Trousers	486,894	Nov. 29	2757	716	61	1191
Racine, Ulvsses. (See Levez, Louis A., assignor.)						
Rackliff, Thomas S. (See Forster and Rackliff.)						
Radeliffe, Charles, Newark, N. J. Button	474,969	May 17	1744	442	59	1000
Radeliffe, Charles, Newark, N. J. Button-attaching machine	486,895	Nov. 29	2759	716 717 718 719 719	61	1192
Radeliffe, Charles, Newark, N. J. Button-attaching machine	486,896	Nov. 29	2770	720 721 722	61	1195
Ræder, Alexius, Christiania, Norway. Soldering metal for aluminium	476,896	June 14	1031		59	1656
Rader, Clarence, Shawnee, Ohio. Pick-handle	466,703	Jan.	617	160	58	119
Radermacher, John, Kaukauna, Wis. Potato-harvester	488,948	Dec. 27	2795	689 690	61	1928
Radford, Benjamin F., Hyde Park, Mass. Belt-shifter	483,920	Oct. 4	156	38	61	33
Radford, Benjamin F., Hyde Park, Mass. Friction-clutch	483,941	Oct. 4	621	157	61	128
Radford, Benjamin F., Hyde Park, Mass. Digester	483,942	Oct. 4	622	157	61	128
Radford, William, San Francisco, Cal. Brick-kiln	480,134	Aug. 2	600	152 153	60	697
Radford, William, San José, Cal. Continuous kiln	484,237	Oct. 11	1081	274	61	234
Radley, Richard, Buffalo, N. Y. Valve-gear for steam-engines	483,328	Sept. 27	2304	579 580	60	1823
Radley, William, and T. W. Beal, assignors to Sandwich Enterprise Company, Sandwich, Ill. Hand-cart	480,670	Aug. 9	1480	368	60	877
Rae, Frank B., assignor to Detroit Electrical Works, Detroit, Mich. Regulation of electric circuits	467,773	Jan. 26	2384	606	58	476
Raechele, William, Boston, Mass. Overcam	480,783	Aug. 16	1655	414	60	927
Raff, Edward S., Canton, Ohio. Inkstand. (Reissue.)	11,233	Apr. 26	3012	759	59	622
Raff, Edward S., Canton, Ohio. Inkstand. (Reissue.)	11,234	Apr. 26	3013	759	59	622
Ragains, James G. (See Cowan and Ragains.)						
Rager, Adolphus S., Frederick, Md. Combined pipe-holder and pipe-vise	486,124	Nov. 15	1522	402	61	916
Ragsdale, Charles, Purdy, Mo. Scaffold-bracket	479,662	July 26	2501	623	60	527
Rahn, Charles A., Cleveland, Ohio. Horse-boot	484,820	Oct. 25	2028	580	61	440
Rahn, Charles A., Cleveland, Ohio. Stallion-shield	487,293	Dec. 6	85	25, 26	61	1338
Rahn, Frederick. (See Knecher, Charles F., assignor.)						
Rahn, Rudolph, assignor of one-fourth to E. Gisi, St. Louis, Mo. Funnel	473,081	Apr. 19	1643	419	59	338
Raidline, Elvin, Bethlehem, Pa. Bottle-washing machine	480,135	Aug. 2	603	153	60	697
Railsback, Jacob T., Kansas City, Kans. Car-coupling	475,796	May 31	3035	769	59	1279
Railway Improvement Company. (See Hartford, Arthur J., assignor.)						
Ralph, Martin, Queens, N. Y. Combination-ticket	487,540	Dec. 6	502	131	61	1420
Ralston, J. Huss. (See Holmes and Ralston.)						
Ralston, James B. (See Kirkpatrick and Ralston.)						
Ramapo Iron Works. (See Wright, Abram W., assignor.)						
Rampe, John W. (See Cushing and Rampe.)						
Ramsay, Henry A., Baltimore, Md. Apparatus for generating heat	474,344	May 3	739	193	59	779

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Diag.	Vol.	Page.
Ramsden, John W., and H. S. Ellis, Leeds, England. Sewing-machine	467,136	Jan. 12	1371	{ 350 351 352 524 525 526 527	{ 58	269
Ramsden, John W., and H. S. Ellis, Leeds, England, assignors, by mesne assignments, to G. McKay, Newport, R. I., J. W. Brooks and A. Van Wagenen, Boston, Mass. Sewing-machine	469,217	Feb. 16	2050	{ 525 526 527	{ 58	943
Ramsden, William, Buxton, N. D. Means for exploding torpedoes	470,705	Mar. 15	1663	430	58	1438
Ramsey, Archie H., Rutland, Fla. Crate	486,297	Nov. 15	1786	469	61	970
Ramsey, James W., Paragould, Ark. Spark-arrester	467,051	Jan. 12	1213	306	58	238
Ramsey, James W., Paragould, Ark. Saw-gumner	468,031	Feb. 2	189	46	58	561
Ramsey, John J., <i>et al.</i> (See Patton, Charles W., assignor.)						
Ramsey, Jonathan, assignor of one-third to H. D. Gove, Boston, Mass. Soda-fountain	475,890	May 31	3212	813	59	1314
Ramsey, Jonathan, and R. Carleton, Boston, Mass. Soda-water apparatus	486,548	Nov. 22	2161	571	61	1058
Ramsey, Marcellus, Miles Grove, Pa. Scaffold-bracket	474,406	May 10	841	220	59	810
Ramsey, Thomas J., <i>et al.</i> (See Patton, Charles W., assignor.)						
Rand, Addison C., New York, N. Y. Explosive compound	478,819	July 12	1171		60	247
Rand, Charles A. A., assignor to William Deering & Company, Chicago, Ill. Grain-binder	471,826	Mar. 29	3371	{ 858 859	{ 58	1784
Rand, Charles A. A., assignor to William Deering & Company, Chicago, Ill. Harvester-reel support	481,191	Aug. 23	2321	{ 571 572	{ 60	1068
Rand, McNally & Company. (See Reid, John, assignor.)						
Rand, William W., Minneapolis, Minn. Toy marble-shooter	472,608	Apr. 12	931	240	59	191
Randall, Amelia A. (See Randall, Silas G., assignor.)						
Randall, Benjamin F., Fall River, Mass. Wire-fence post	467,434	Jan. 19	1830	467	58	364
Randall, Benjamin F., Fall River, Mass. Metallic fencing	469,596	Feb. 23	2635	675	58	1065
Randall, Benjamin F., Fall River, Mass. Metallic fence-post	476,069	May 31	3481	877	59	1369
Randall, Don W., Wapakoneta, Ohio. Game-board	472,846	Apr. 12	1230	315	59	245
Randall, Edison E., West Winsted, Conn. Knitting-machine	480,938	Aug. 16	1886	471	60	973
Randall, Frederick W. (See Avery, Thomas E., assignor.)						
Randall, George W. and G. H., Plympton, Mass. Bobbin-winder	474,924	May 17	1664	425	59	985
Randall, Gilbert H. (See Randall, George W. and G. H.)						
Randall, John W., New York, N. Y. Disk-holder for valves	485,984	Nov. 8	1272	337	61	850
Randall, Robert F., assignor to himself, J. P. Ballou, and E. Van Peirson, Newark, N. J. Coffee-pot	481,769	Aug. 30	3292	801	60	1270
Randall, Robert O., Joplin, Mo. Horse-collar pad	483,016	Sept. 20	1795	452	60	1713
Randall, Silas G., assignor to A. A. Randall, Greene, N. Y. Seed-planter	495,226	Nov. 1	110	33, 34	61	596
Randall, Silas H., Wyoming, Ohio. Leather-splitting machine	479,461	July 26	2194	551	60	470
Randall, Timothy P., assignor of one-half to G. Kastler, Adrian, Mich. Wagon-brake	476,553	June 7	490	117	59	1534
Randall, Victor E., Burlington, Mich. Culinary and heating oil-stove	581,511	Aug. 23	2854	701	60	1169
Randall, Victor E., Marshall, Mich. Harrow	484,047	Oct. 11	789	199	61	176
Randle, Alexander E., Grayville, Ill. Mortising device	483,869	Oct. 4	519	130	61	107
Randolph & Clowes. (See Cotter, Charles A., assignor.)						
Randolph, Frederick W., Raynor, Va. Lubricating-hub	482,195	Sept. 6	450	109	60	1423
Randolph, George F., Little Genesee, N. Y. Apparatus for converting petroleum, &c., into gas and burning the same	476,554	June 7	491	117	59	1535
Randolph, George W. F., Salem, W. Va. Heel	473,590	Apr. 26	2536	640	59	531
Randolph, John L., assignor of one-half to G. L. Cruiser, Norfolk, Va. Car-coupling	469,197	Feb. 16	2006	511	58	936
Randolph, Theodore F., Cincinnati, Ohio. Transit	470,076	Mar. 1	648	160	58	1224
Randolph, William J., Millersville, La. Grain-harvesting machine	488,833	Dec. 27	2604	{ 646 647	{ 61	1889
Rands, George L., London, England. Stand for poison-bottles	478,818	July 12	1170	290	60	247
Range, John J. (See Foote and Range.)						
Range, John J. (See Saunders, Range, and Foote.)						
Range, John J., assignor to Boston Cash Register Company, Northampton, Mass. Cash-register	479,334	July 19	1946	486	60	407
Range, John J., assignor to Boston Cash Register Company, Northampton, Mass. Cash-register	479,335	July 7	1947	486	60	407
Range, John J., assignor to Boston Cash Register Company, Northampton, Mass. Cash-register	479,336	July 19	1949	{ 486 487	{ 60	407
Ranger, Casper, Holyoke, Mass. Planing and sawing machine	470,444	Mar. 8	1285	328	58	1353
Rank, Erdmann, St. Paul, Minn. Fire-escape	485,656	Nov. 8	774	205	61	746
Ranker, Frank X., Pittsburg, Pa. Hinge	480,238	Aug. 2	773	195	60	729
Rankin, Alexander C., Glenfield, Pa. Meat-chopper	473,779	Apr. 26	2817	708	59	584
Rankin, Edmund, Jr., Lincoln, Ill. Portable roof	473,128	Apr. 19	1736	438	59	354
Rankin, Edmund, Jr., Lincoln, Ill. Rein-holder	479,096	July 19	1586	397	60	337
Rankin, Francis M. (See Murphy and Rankin.)						
Rankin, Robert P. (See Campbell and Rankin.)						
Rankin, Thomas V., Cincinnati, Ohio. Sawing-machine	474,189	May 3	470	114	59	729
Rankin, Washington M., Little Rock, Ark. Axle	472,587	Apr. 12	893	230	59	185
Rankin, William P., Rochester, Mich. Bulletin-board	468,550	Feb. 9	1012	259	58	731
Ranney, David F., <i>et al.</i> (See Keith, Jeremiah, assignor.)						
Ranney, Fred. E., Belding, Mich., assignor to Belding Manufacturing Company, Chicago, Ill. Lock-strike	475,000	May 17	1797	456	59	1009
Ranney, Maurice M., Comstock, Mich. Machine for digging celery	481,819	Aug. 30	3372	826	60	1284
Ranney, William H., Detroit, Mich. Card shuffling and dealing mechanism	473,364	Sept. 27	2349	590	60	1832
Rano, Charles O. (See Dean, Cyrus S., assignor.)						
Ransom, Albert F. (See Kent, George R., assignor.)						
Ransom, Louis, and A. W. Maynes, assignors to C. W. Seiberling, trustee, Akron, Ohio. Type-line-forming machine	485,655	Nov. 8	760	{ 200 201 202 203 204 205	{ 61	744
Ransom, Moses Y., Cleveland, Ohio. Toilet-stand	470,337	Mar. 8	1103	281	58	1319
Ransom & Randolph. (See Hullhorst, William G., assignor.)						
Ransom, William H., Kirksville, Mo. Bolt-cutter	480,858	Aug. 16	1767	443	60	949
Ransome, Ernest L., Oakland, Cal. Concrete-mixing machine	485,428	Nov. 1	430	115	61	660
Ranton, William J., Syracuse, N. Y. Steam-generator	484,339	Oct. 11	1247	318	61	266
Raper, Charles E., Big Rapids, Mich. Nut-warmer	471,021	Mar. 15	2147	552	58	1531
Rapid Transit Cable Company. (See Bryson, Pendleton, and Benn, assignors.)						
Rapid Transit Cable Company. (See Pendleton, John H., assignor.)						
Rapid Transit Cable Company. (See Pendleton and Bryson, assignors.)						
Rapkin, Alfred T., and F. Cossor, London, England; said Cossor assignor to said Rapkin. Indicating-thermometer	483,365	Sept. 27	2350	591	60	1832

[Alphabetical list of patentees—Continued.]

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
Rapp, Joseph, New Philadelphia, Ohio. Building-brick.....	468,990	Feb. 16	1715	436	58	879
Rapp, Joseph, New Philadelphia, Ohio. Roofing-tile.....	478,171	July 5	160	41	60	34
Rapp, William, Terre Haute, Ohio. Clod-crusher.....	472,770	Apr. 12	1166	299	59	233
Rapplee, Frank A., Farmer Village, N. Y. Fruit-basket handle and cover-fastener.....	474,925	May 17	1666	425	59	985
Rapplee, Hannibal W., Philadelphia, Pa. Drying apparatus.....	484,821	Oct. 25	2028	520	61	449
Rapraeger, Robert H., Lakota, N. D. Pump.....	478,464	July 5	619	150	60	122
Rapson, Philip T., Bad Axe, Mich. Gate-latch.....	487,077	Nov. 29	3061	786	61	1252
Rarig, Weldon C. (See Clennam, Milton A., assignor.)						
Rasey, John D., assignor of one-half to F. M. Hasbrouck, Oshkosh, Wis. Auxiliary base for stoves.....	480,212	Aug. 2	734	185	60	721
Rasmussen, Alfred W. (See Thuge, Johan A., assignor.)						
Rasmussen, Knud, Denver, Colo. Cable-railway switch.....	470,306	Mar. 8	1048	265	58	1310
Rasmussen, Louie C., San Francisco, Cal. Thill-coupling.....	466,716	Jan. 5	654	168	58	124
Rasmussen, Rasmus, Tacoma, Wash. Saw set and clamp.....	474,460	May 10	935	240	59	827
Rasner, Franklin, et al. (See Snyder, Oswill P., assignor.)						
Rasner, Henry C., San Francisco, Cal. Vise.....	473,343	Apr. 19	2105	528	59	426
Rassweiler, John K., Wheaton, Ill. Tellurian.....	477,846	June 28	2599	651	59	1993
Ratchford, Nicholas, Plain City, assignor of one-half to L. D. Evans, Columbus, and C. N. Ford, Plain City, Ohio. Railway-frog.....	470,009	Mar. 1	547	136	58	1205
Ratchiff, Benjamin, and S. T. Lawrence, Coushatta, La. Shovel-plow.....	472,817	Apr. 12	1231	316	59	246
Ratcliff, William H., assignor to T. H. Wilcox, Bloomfield, N. J. Paper-fastener.....	467,471	Jan. 19	1858	481	58	376
Ratcliffe, John, J., Hilton, and E. Mellor, New Bedford, Mass. Spinning-mule.....	476,308	June 7	120	29	59	1402
Rath, Adolphus I., Hyde, England. Manufacture of india-rubber.....	468,627	Feb. 9	1136		58	753
Rath, Charles, Moheette, Tex. Wheeled scraper.....	482,414	Sept. 13	829	199	60	1511
Rath, Charles, Chicago, Ill. Automatic cut-off for gas-burners.....	488,949	Dec. 27	2797	690	61	1929
Rath, Jack, Jackson, Mich. Harp.....	485,354	Nov. 1	317	85	61	637
Rathbun, Elihu, Cable, Ill. Chimney or flue lining.....	485,479	Nov. 1	505	133	61	675
Rathburn, Sereno H., Stanberry, Mo. Street-sweeping machine.....	482,196	Sept. 6	451	109	60	1423
Rathgeb, Emil, New York, N. Y. Mechanical fly-trap.....	481,820	Aug. 30	3375	827	60	1284
Rathmann, Johann H. E., Buffalo, N. Y. Apparatus for drying and germinating malt.....	485,355	Nov. 1	319	85, 86	61	637
Ratliff, Charles L., Marion, Ind. Index.....	470,504	Mar. 8	1370	357	58	1369
Rau, Charles. (See Reisky, Emil, assignor.)						
Raudenbush, Harry R., Vicksburg, Pa. Spring for vehicles.....	482,385	Sept. 13	789	190	60	1504
Raub, Andrew, Bridgeport, Conn. Device for adjusting brakes.....	478,638	July 12	878	216	60	190
Rauhe, Carl, Dusseldorf, Germany. Dental drill.....	477,225	June 21	1585	388	59	1779
Rausch, Rudolf, Vienna, Austria-Hungary. Producing inlaid work on stones.....	486,590	Nov. 22	2237		61	1072
Rausser, Heinrich, C. Wieber, and A. Sokoloff, Moscow, Russia. Boiler-feeder.....	468,269	Feb. 2	454	113	58	614
Rave, Henry. (See Kraft, John U., assignor.)						
Ravencroft, Evan B., assignor of one-half to T. H. Carter, North Baltimore, Ohio. Cistern-cleaner.....	481,423	Aug. 23	2720	669	60	1142
Ravenel, Daniel, Jr., and R. P. Miles, Charleston, S. C. Adjustable bracket.....	485,589	Nov. 1	666	177	61	710
Ravenshaw, Henry W. (See Atkinson, Ravenshaw, and Mori.)						
Rawle, John, Chicago, Ill. Stone cutting and dressing machine.....	482,098	Sept. 6	274	69	60	1332
Rawle, John, Chicago, Ill. Stone cutting and dressing machine.....	482,099	Sept. 6	288	69	60	1392
Rawle, John, Chicago, Ill. Unicycle.....	482,100	Sept. 6	291	70	60	1393
Rawlings, Samuel T., Frome, England. Fire-escape.....	476,409	June 7	287	68	59	1494
Rawnsley, Festus. (See Terry and Rawnsley.)						
Rawson, Abel M., San Francisco, Cal. Hydraulic-mining engineering method and apparatus.....	486,897	Nov. 29	2783	722	61	1198
Rawson, John. (See Teel, John, assignor.)						
Rawson, Manly S., Jamaica, assignor of one-half to H. J. Stewart, Londonderry, Vt. Planing-machine.....	477,610	June 21	2198	545	59	1899
Ray, Alexander, assignor of one-half to E. S. Lowry, Philadelphia, Pa. Dumping-cart.....	469,870	Mar. 1	329	84	58	1165
Ray, Chauncey T., Rockford, Ill. Starching-machine.....	480,344	Aug. 9	958	242	60	776
Ray, Edgar. (See Tweedie, Michael, assignor.)						
Ray, Edwin R. (See Alderson and Allen, assignors.)						
Ray, Ethel A., Florence, S. C. Crane for suspending mail-bags.....	481,673	Aug. 30	3116	761	60	1234
Ray, Frederick A., Chicago, Ill., assignor to Heaton Peninsular Button Fastener Company, Providence, R. I. Button-setting machine.....	483,694	Oct. 4	257	63, 64	61	54
Ray, Frederick A., Chicago, Ill., assignor to Heaton Peninsular Button Fastener Company, Providence, R. I. Button-setting tool.....	483,695	Oct. 4	260	64	61	54
Ray, Jessie L., administratrix. (See Ray, Simeon.)						
Ray, Miles E., assignor of one-half to E. L. Ford, Toledo, Ohio. Hydrocarbon-burner.....	472,226	Apr. 5	344	89	59	65
Ray, Olaf E., et al. administrators. (See Devold and Mourath.)						
Ray, Simeon, deceased, St. Louis, Mo.; J. L. Ray, administratrix. Newspaper-file.....	473,476	Apr. 26	2332	590	59	492
Raybuck, Balthaser S., Freed, W. Va. Nut-lock.....	467,324	Jan. 19	1660	424	58	332
Rayl, James S., Green Camp, Ohio. Harrow.....	474,692	May 10	1301	333	59	899
Raymo, Louis H., and W. L. Woods, Baltimore, Md. Salesman's sample-trunk.....	487,493	Dec. 6	430	111	61	1406
Raymond, Albert, assignor of two-thirds to G. Raymond and O. Kutsche, Chicago, Ill. Purifying smoke.....	467,264	Jan. 19	1574	{ 400 401 262 263 }	{ 58 59 }	316
Raymond, Charles W., Dayton, Ohio. Brick-pressing machine.....	476,928	June 14	1087		59	1667
Raymond, Franklin L. (See Lane, John H., assignor.)						
Raymond, Freeborn F., 2d. (See Small, Chester C., assignor.)						
Raymond, Freeborn F., 2d, Newton, Mass. Comb nail-strip.....	467,237	Jan. 19	1529	390	58	307
Raymond, Freeborn F., 2d, Newton, Mass. Making shoe-slugs.....	467,522	Jan. 26	1984	503	58	401
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine.....	468,957	Feb. 16	1617	{ 419 420 }	{ 58 }	865
Raymond, Freeborn F., 2d, Newton, Mass. Attachment of heels to the soles of boots or shoes.....	474,146	May 3	402	97	59	716
Raymond, Freeborn F., 2d, Newton, Mass. Heeling-machine.....	474,407	May 10	844	{ 220 221 221 222 }	{ 59 }	811
Raymond, Freeborn F., 2d, Newton, Mass. Heel-randing machine.....	474,408	May 10	846	{ 221 222 }	{ 59 }	812
Raymond, Freeborn F., 2d, Newton, Mass. Attaching heels.....	475,001	May 17	1798	456	59	1009
Raymond, Freeborn F., 2d, Newton, Mass. Comb-strip of heel-nails.....	474,858	May 17	1570	400	59	965
Raymond, Freeborn F., 2d, Newton, Mass. Nailing-machine.....	475,417	May 24	2439	632	59	1152
Raymond, Freeborn F., 2d, Newton, Mass. Gluing attachment for heel-nailing machines.....	476,306	June 7	119	29	59	1461
Raymond, Freeborn F., 2d, Newton, Mass. Shoe-nail.....	476,307	June 7	120	29	59	1462
Raymond, Freeborn F., 2d, Newton, Mass. Heel-nailing machine.....	479,142	July 19	1661	415	60	351
Raymond, Freeborn F., 2d, Newton, Mass. Heel-loading machine.....	480,415	Aug. 9	1073	{ 268 269 270 }	{ 60 }	797
Raymond, Freeborn F., 2d, Newton, Mass. Jack for heel-nailing machines.....	480,741	Aug. 16	1592	399	60	914

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Raymond, George, <i>et al.</i> (See Raymond, Albert, assignor.)						
Raymond, George E. and George E., Jr., Chicago, Ill. Barrel-cover	485,227	Nov. 1	113	35	61	596
Raymond, John C., New Brunswick, N. J. Joint-mold	471,894	Mar. 29	3463	884	58	1802
Raymond, John W., San Francisco, Cal. Gas-engine	488,483	Dec. 20	2059	512	61	1765
Raymond Manufacturing Company. (See Raymond, Murray M., assignor.)						
Raymond, Murray M., assignor to Raymond Manufacturing Company, Corry, Pa. Chimney-top	473,853	Apr. 26	2936	739	59	607
Raymond, Nelson H., assignor of one-half to C. M. Proctor, Buffalo, N. Y. Watchman's electric time-recorder	483,308	Sept. 27	2273	572	60	1818
Raymond, Nelson H., assignor to C. M. Proctor, Buffalo, N. Y. Electric bell	483,309	Sept. 27	2276	572	60	1818
Raymond, Nelson H., assignor to C. M. Proctor, Buffalo, N. Y. Electrical annunciator	483,310	Sept. 27	2278	572	60	1818
Raymond, Pierre A., Grenoble, France. Glove-fastening	472,272	Apr. 5	415	106	59	78
Raymond, Robert W. (See Doubler, John W. H., assignor.)						
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,209	May 31	3731	942	59	1416
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,210	May 31	3732	942	59	1416
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,211	May 31	3733	943	59	1416
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,212	May 31	3734	943	59	1417
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,213	May 31	3735	943	59	1417
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	476,214	May 31	3736	943 944	59	1417
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Box-lid support	486,503	Nov. 22	2102	556	61	1047
Raymond, Silas H., assignor to T. S. White and T. Friant, Grand Rapids, Mich. Carpet-sweeper	488,950	Dec. 27	2798	690	61	1929
Raymond, Silas H., assignor to W. B. Remington, E. J. Horton, F. E. Remington, T. S. White, and T. Friant, Grand Rapids, Mich. Carpet-sweeper	471,086	Mar. 15	2241	575	58	1551
Raymond, Silas H., assignor to W. B. Remington, E. J. Horton, F. C. Remington, S. S. White, and T. Triant, Grand Rapids, Mich. Carpet-sweeper	473,438	Apr. 19	2254	568	59	455
Raymond, Stiles, Minneapolis, Minn. Folding bed-bottom	470,706	Mar. 15	1664	431	58	1438
Raynal, Albert, New York, N. Y. Safety attachment for cable or electric cars	471,750	Mar. 29	3246	827	58	1759
Rayner, Thomas J., London, England. Surface-condenser	468,048	Feb. 2	214	52	58	566
Raynor, Irwin H., assignor of one-half to C. O. Furgason, Cleburne, Tex. Feed apparatus for locomotives	485,056	Oct. 25	2414	621	61	525
Reach, Robert, Philadelphia, Pa. Joint-wiper. (Reissue.)	11,229	Mar. 8	1574	409	58	1412
Read, Charles C., Mandarin, Fla. Berry-picker	485,057	Oct. 25	2416	621	61	525
Read, Charles H. (See Stupakoff, Simon H., assignor.)						
Read, Glasgow A., <i>et al.</i> (See Bailey, Archibald, assignor.)						
Read, Harry F., assignor of one-half to L. A. Dodd, Baltimore, Md. Registering and measuring faucet	479,721	July 26	2622	650 651	60	549
Read, James A., Norfolk, Nehr. Coin-tray	485,228	Nov. 1	114	35	61	597
Reade, Charles A., Chicago, Ill. Vehicle	475,891	May 31	3214	813	59	1314
Reade, Charles A., Chicago, Ill. Horseshoe	482,650	Sept. 13	1200	292	60	1583
Reading, Dallas H., <i>et al.</i> (See Reading, John, assignor.)						
Reading, Herbert, <i>et al.</i> (See Reading, John, assignor.)						
Reading Iron Company. (See Wolfe, Edward M., assignor.)						
Reading, John, assignor to D. H. and H. Reading, Akron, Ohio. Wall-paper exhibitor	466,727	Jan. 5	671	172	58	127
Reagan, Harry C., Jr., Philadelphia, Pa. Injector	480,784	Aug. 16	1656	414	60	927
Reagan, Harry C., Jr., Philadelphia, Pa. Compound engine	488,250	Dec. 20	1681	420	61	1690
Reagan, Harry C., Jr., assignor of two-thirds to E. F. Peacock, Philadelphia, Pa., and T. Pray, Jr., New York, N. Y. Compound locomotive	473,437	Apr. 19	2251	567 568	59	454
Reagan, Harry C., Jr., assignor of two-thirds to E. F. Peacock, Philadelphia, Pa., and T. Pray, Jr., New York, N. Y. Compound locomotive	481,149	Aug. 16	2253	556	60	1041
Reagan, Paul M., Chicago, Ill. Car-coupling	467,282	Jan. 19	1602	409	58	321
Reagan, Paul M., Chicago, Ill. Car-coupling	485,356	Nov. 1	322	86	61	638
Reagan, Paul M., Chicago, Ill., assignor to Hinson Car Coupler Company, Des Moines, Iowa. Car-coupling	469,409	Feb. 23	2348	603	58	1010
Reagan, William S., Myra, Kans. Automatic cut-off for water-troughs	477,226	June 21	1585	388	59	1779
Reager, Frank S., Germantown, Cal. Reel-support	483,389	Sept. 27	2294	601	60	1840
Reaman, Abram G., Ringwood, assignor to Mercer Bros. & Co., Alliston, Canada. Har-vest-binder	473,780	Apr. 26	2820	708 709	59	585
Reamer, George W., Forest Hill, Cal. Preparing figs	474,099	May 3	343		59	703
Reams, Levi B., Cassopolis, Mich. Wagon-jack	475,021	May 17	1827	463	59	1016
Reamy, Thomas J., Auburn, Ind. Intermittent grip device for machinery	485,058	Oct. 25	2417	621 622	61	525
Reaney, Charles H., Washington, D. C. Paint	474,693	May 10	1303		59	899
Reaney, David L., Bradford, England. Brake for bicycles	483,621	Oct. 4	158	39	61	33
Reaper, John H. (See O'Neill, James M., assignor.)						
Reardin, J. G. (See Andrews, Willard J., assignor.)						
Reardon, Robert, Savannah, Ga. Car-coupling	475,153	May 17	2025	511	59	1154
Reason, Albert, Pinckney, Mich. Thrashing-machine attachment	479,156	July 19	1679	420	60	354
Reasoner, Andrew, <i>et al.</i> (See Morrell, Robert, assignor.)						
Reasons, Robert W., and M. M. Ozbirn, Campbell, Mo. Gate	488,834	Dec. 27	2608	647	61	1829
Reaume, Albert D. (See Delaney and Reaume.)						
Reavis, Samuel M., Frankfort, Ind. Tellurian	469,719	Mar. 1	74	21, 22	58	1115
Rebmann, William, Chicago, Ill. Melting-furnace	488,661	Dec. 27	2346	581	61	1837
Recht, Frederick, Brooklyn, N. Y. Metal bracket and its manufacture	483,741	Dec. 27	2468	613	61	1861
Reck, Adam, assignor of one-half to G. F. Hall, Hartford, Wis. Saw-set	468,577	Feb. 9	1056	268	58	739
Reckenzaun, Anthony, Stockwell, England, assignor of one-half to J. A. Pentz, Philadelphia, Pa. Electric-clock motor	473,960	May 3	122	28	59	661
Reckenzaun, Anthony, London, England. Secondary-battery electrode and making the same	475,797	May 31	3038	769	59	1280
Record, George J., Conneaut, Ohio. Fastening for the caps of cans, &c.	476,309	June 7	121	29	59	1462
Rector, Edward, Cincinnati, assignor to National Cash Register Company, Dayton, Ohio. Cash register and indicator	468,967	Feb. 16	1666	425	58	869
Rector, Enoch J., <i>et al.</i> (See Lang and Roper, assignors.)						
Redding Electric Company. (See Redding, Harvey, assignor.)						
Redding, Harvey, Everett, assignor to Redding Electric Company, Boston, Mass. Fire-alarm system	469,376	Feb. 23	2296	591	58	1000
Redel, Charles R., Rochester, Minn. Grain separator and cleaner	467,198	Jan. 19	1471	376	58	296

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Matrix-making machine	468,973	Feb. 16	1677	428 429	58	871
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Matrix-making machine	468,974	Feb. 16	1682	429 430	58	872
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Matrix-making machine	468,975	Feb. 16	1686	430 431	58	872
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-die	468,976	Feb. 16	1694	432	58	874
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Forming matrices	481,308	Aug. 23	2539	624	60	1107
Redfield, Casper L., Chicago, Ill., assignor to Chicago Matrix Machine Company. Type-writing machine	481,309	Aug. 23	2540	624	60	1108
Redfield, Lewis H., assignor of one-half to J. R. Clancy, Syracuse, N. Y. Hose-clamp	477,227	June 21	1586	389	59	1779
Redfield, Lewis H., assignor of one-half to J. R. Clancy, Syracuse, N. Y. Hose-clamp	480,513	Aug. 9	1225	307	60	827
Redfield, Lewis H., assignor of one-half to J. R. Clancy, Syracuse, N. Y. Hose-clamp	480,514	Aug. 9	1226	307	60	827
Redfield, Lewis H., assignor of one-half to J. R. Clancy, Syracuse, N. Y. Hose-clamp	480,515	Aug. 9	1227	307	60	828
Redican, Joseph, assignor of one-half to J. Chamberlain, Toronto, Canada. Hydrant	470,842	Mar. 15	1883	482	58	1489
Redlinger, Michael, Freeport, Ill. Spring-hinge	467,472	Jan. 19	1888	481	58	376
Redman, James W. (See Okey, Joseph B., assignor.)						
Redman, John W., et al. (See Kline, John E., assignor.)						
Redman, William F., et al. (See Kline, John E., assignor.)						
Redmayne, Robert N., Newcastle-on-Tyne, England. Apparatus for the manufacture of paper-pulp	463,870	Oct. 4	520	130	61	108
Redmond, James G. (See Bailey, James B., assignor.)						
Redmond, John, Seattle, Wash. Electric-car brake	470,505	Mar. 8	1370	358	58	1370
Redpath, Charles, Pembina, N. D. Ventilator	485,059	Oct. 25	2419	622	61	526
Reece, Benjamin, assignor to Q. & C. Company, Chicago, Ill. Wear-plate for railway-ties	488,662	Dec. 27	2348	581	61	1837
Reece, John, Boston, Mass. Sewing-machine for finishing buttonhole-pieces	479,572	July 26	2371	591	60	503
Reece, John, Boston, Mass. Sewing-machine	484,671	Oct. 18	1779	453 454	61	384
Reece, John, Boston, Mass. Buttonhole sewing-machine	488,028	Dec. 13	1304	324 325 326	61	1598
Reed, Alanson H., and D. Donovan, Chicago, Ill.; said Donovan assignor to said Reed. Piano-pin block	473,523	Apr. 26	2409	611	59	506
Reed & Barton Corporation. (See Jackson, Austin F., assignor.)						
Reed, Calvin M., Hoppenville, Pa. Railway-tie and rail-fastener	487,642	Dec. 6	654	169	61	1451
Reed & Carnrick. (See Carnrick, George W., assignor.)						
Reed, Charles H., Boston, Mass. Glove-fastener	474,409	May 10	851	222	59	813
Reed, Charles J., Orange, N. J. Ore-separator	466,513	Jan. 5	331	83	58	64
Reed, Charles J., Orange, N. J. Ore-separating machinery	466,514	Jan. 5	332	83	58	64
Reed, Charles J., Orange, N. J. Ore-separator	466,515	Jan. 5	333	83	58	64
Reed, Charles J., Orange, N. J. Attachment for type-writing machines	473,236	Apr. 19	1926	485	59	390
Reed, Charles J., Orange, N. J. Attachment for type-writing machines	473,237	Apr. 19	1929	485	59	391
Reed, Charles J., Orange, N. J. Printing-telegraph	477,383	June 21	1840	453	59	1827
Reed, Charles J., Orange, N. J. Printing-telegraph	477,384	June 21	1843	453	59	1828
Reed, Charles S., Boston, Mass. Sign for cars	482,928	Sept. 20	1643	414	60	1682
Reed, Daniel, Ansonia, Conn. Cutlery-grinder	480,035	Aug. 2	445	113	60	666
Reed, David E., and O. Gurnee, New Hudson, Mich. Axle-cutter	477,268	June 21	1656	405	59	1792
Reed, Eli S., Chattanooga, Tenn. Motor for machines	484,238	Oct. 11	1083	274	61	234
Reed, George M., Waltham, assignor to D. H. Bishop, Boston, Mass. Placer-machine	488,452	Dec. 20	2008	502	61	1755
Reed, George T., assignor of one-half to H. A. Cheatham, Baltimore, Md. Cushioned tire	476,215	May 31	3737	944	59	1417
Reed, George T., assignor of one-half to H. A. Cheatham, Baltimore, Md. Bicycle-wheel	476,216	May 31	3739	944	59	1417
Reed, Heber C., and A. Clark, assignors to D. C. & H. C. Reed & Company, Kalamazoo, Mich. Trussed axle for vehicles	470,259	Mar. 8	940	233	58	1290
Reed, J. Van D. (See Stowe, Benjamin L., assignor.)						
Reed, James, Cambridge, Mass. Landing-net frame	479,157	July 19	1682	420 421	60	355
Reed, James D., Eagle, Mich. Washing-machine	472,227	Apr. 5	346	89	59	65
Reed, James H., Lynn, Mass. Woodworking-machine	467,629	Jan. 26	2153	547 548	58	433
Reed, James H., assignor of one-half to J. McLay, Lynn, Mass. Woodworking-machine	467,899	Jan. 26	2590	656	58	515
Reed, James H., assignor to A. M. and J. H. Preble, Lynn, Mass. Sole-trimming machine	469,720	Mar. 1	79	22	58	1114
Reed, James H., assignor to A. M. and J. H. Preble, Lynn, Mass. Sole-trimming machine	475,608	May 24	2743	635	59	1211
Reed, Jerome B., Sunbury, Pa. Pocket-register	478,363	July 5	474	115	60	94
Reed, John R., Westfield, Mass. Rocking grate for furnaces	469,978	Mar. 1	511	127	58	1198
Reed, John W., Chicago, Ill. Piano-back	473,082	Apr. 19	1649	419	59	339
Reed, John W., Chicago, Ill. Piano-action rail	480,829	Aug. 16	1728	432	60	941
Reed, Joseph V., Jeffersonville, Ind. Combined sign and price-current	485,229	Nov. 1	115	35	61	597
Reed, Laura B., et al. (See Hall, James G., assignor.)						
Reed, Lewis M., assignor of one-half to J. W. Hickman, Patterson, Kans. Feeding device for animals	476,310	June 7	122	30	59	1462
Reed, Nathan F., assignor of one-half to C. E. Whitcomb, Hyde Park, Vt. Whiffletree-hook	468,019	Feb. 2	170	42	58	557
Reed, Nicholas S. (See Maine, David F., assignor.)						
Reed, Robert N., Covington, Ky., and F. Buob; said Buob assignor to E. P. Christian, Cincinnati, Ohio. Clothes-drier	473,781	Apr. 26	2822	709	59	585
Reed, Theodore J., assignor to L. Scheer, Leavenworth, Kans. Machine for cleaning corn-chaff or cellulose	472,548	Apr. 12	845	216	59	174
Reed, Thomas L., Providence, R. I. Insulated electric wire	482,753	Sept. 20	1377	341	60	1629
Reed, Wesley G., et al. (See Clow, William, assignor.)						
Reed, William S., assignor to W. S. Reed Toy Company, Leominster, Mass. Game-board	469,948	Mar. 1	456	114	58	1187
Reedy, Henry J., Cincinnati, Ohio. Automatic stop-valve for elevators	480,278	Aug. 9	851	217	60	757
Reefy, Solomon L., Edinburg, Ill. Bracket-lamp for vehicles	475,798	May 31	3040	769	59	1280
Rees, David, Pittsburg, assignor of one-half to P. Burron, Allegheny county, Pa. Baby-carriage	472,714	Apr. 12	1089	279	59	218
Rees, Frank, South Orange, N. J. Repeating firearm	473,179	Apr. 19	1829	461 462	59	371
Rees, Jonathan, Phoenixville, Pa. Wheel	481,821	Aug. 30	3376	827	60	1285
Rees, Thomas W., Philadelphia, Pa., assignor to Universal Water Heater Company, Camden, N. J. Supplementary heater for range-boilers	471,827	Mar. 29	3373	859	58	1784
Reese, Abram, Pittsburg, Pa. Universal rolling-mill	481,058	Aug. 16	2086	520 521	60	1011
Reese, Abram L. (See Reese, Mary I. and A. L.)						
Reese, Edwin M., Santa Paula, Cal. Wooden vessel	486,737	Nov. 22	2472	645	61	1120

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Reese, Frederick W., Paris, Ill. Broom-corn cleaner.....	488,251	Dec. 20	1683	{ 420 421	61	1690
Reese, Jacob, Pittsburg, assignor to Bessemer Steel Company, Limited, Philadelphia, Pa. Basic lining.....	481,869	Aug. 30	3449	-----	60	1300
Reese, Mary I. and A. L. Chase, Kans. Stove-kettle cover.....	486,539	Nov. 22	2149	567	61	1055
Reese, Reese T., and D. Williams, Scranton, Pa. Commode.....	484,672	Oct. 18	1782	454	61	385
Reeve, Addison A. (See Merrill, Rufus S., assignor.)						
Reeve, Herman D. (See Alderman, Olinthus G., assignor.)						
Reeves, Abbott M., Decatur, Ill. Wheel.....	468,397	Feb. 9	773	192	58	683
Reeves, Abbott M., Decatur, Ill. Baby-carriage.....	478,172	July 5	160	41	60	34
Reeves, Carrie V., Baltimore, Md. Head-rest for beds.....	471,895	Mar. 29	3464	884	58	1802
Reeves & Co. (See Kailor, John N., assignor.)						
Reeves & Co. (See Kailor and Williams, assignors.)						
Reeves, Fred. W. (See Roat, George M., assignor.)						
Reeves, Millard M., Carrollton, Mo. Corn and cane harvester.....	466,835	Jan. 12	847	{ 217 218	58	171
Reeves, Milton O., assignor to Reeves Pulley Company, Columbus, Ind. Securing pulleys to shafts.....	473,524	Apr. 26	2410	611	59	506
Reeves, Orwell C., assignor to National Cash Register Company, Dayton, Ohio. Stop-clock for cash-registers.....	468,483	Feb. 9	906	230	58	709
Reeves Pulley Company. (See Reeves, Milton O., assignor.)						
Reeves, Thomas H., Minneapolis, Minn., assignor of one-fourth to I. F. Bissell, Trenton, N. J. Ice-plow.....	473,782	Apr. 26	2822	709	59	585
Reeves, Vincent. (See Keller, Theodore, assignor.)						
Reford, John H., Philadelphia, Pa. Vending apparatus.....	478,714	July 12	981	244	60	211
Regan, Daniel S., assignor to Regan Vapor Engine Company, San Francisco, Cal. Transmitting power to propellers.....	474,926	May 17	1667	426	59	986
Regan Vapor Engine Company. (See Regan, Daniel S., assignor.)						
Regester, Thomas L., Tekamah, Nebr. Windmill-governor.....	472,549	Apr. 12	847	217	59	175
Rego, Frank I., Allston, Mass. Car-brake.....	485,135	Oct. 25	2529	650	61	549
Rehfuß, George, J. G., and M. O., Philadelphia, Pa. Machine for forming tassel-bunches.....	467,435	Jan. 19	1832	468	58	364
Rehfuß, George, J. G., and M. O., Philadelphia, Pa. Machine for forming skeins or hanks.....	468,628	Feb. 9	1127	287	58	753
Rehfuß, George, J. G., and M. O., Philadelphia, Pa. Sewing-machine for forming fringe upon fabrics.....	469,452	Feb. 23	2411	{ 617 618	58	1022
Rehfuß, George, M. O., and J. G., assignors to H. D. Justi, Philadelphia, Pa. Tool-holder.....	478,943	July 12	1337	332	60	280
Rehfuß, John G. (See Rehfuß, George, J. G., and M. O.)						
Rehfuß, John G. (See Rehfuß, George, M. O., and J. G.)						
Rehfuß, Martin O. (See Rehfuß, George, J. G., and M. O.)						
Rehfuß, Martin O. (See Rehfuß, George, M. O., and J. G.)						
Rehnström, Albert W., Mälhammar, Sweden. Manufacture of soap.....	476,556	June 7	493	-----	59	1535
Rehnström, Albert W., Mälhammar, Sweden. Soap.....	476,557	June 7	494	-----	59	1535
Rehnström, Albert W., Mälhammar, assignor to Lactoserine Company, Limited, Stockholm, Sweden. Manufacture of soap with whey.....	476,555	June 7	492	-----	59	1535
Reichel, Walter. (See Philipsborn and Reichel.)						
Reichelt, Bruno, South Bend, Ind. Motor for sewing-machines.....	472,818	Apr. 12	1232	316	59	246
Reichenbach, Henry M., assignor, by mesne assignments, to Eastman Kodak Company, Rochester, N. Y. Manufacture of photographic films.....	479,305	July 19	1904	-----	60	398
Reichert, Charles F. (See Kussmaul and Reichert.)						
Reichert, Louis, Scranton, Pa. Toy for emitting sound.....	476,024	May 31	3409	860	59	1354
Reichhelm & Co., E. P. (See Leibman, Frank, assignor.)						
Reichle, Martin, et al. (See Trump, John G., assignor.)						
Reichling, Oscar E. H. N., Marion, Ind. Wrench.....	485,657	Nov. 8	776	206	61	747
Reichman, Moses. (See Silverberg, Reichman, and Troxler.)						
Reichwein, Herman, Spring Lake, N. J. Lawn-tennis-court marker.....	475,154	May 17	2027	511	59	1055
Reichwein, Herman, Spring Lake, N. J. Shutter-bowser.....	460,136	Aug. 2	604	153	60	697
Reid, Andrew, assignor of one-half to C. Dwyer, Amsterdam, N. Y. Dyeing apparatus.....	475,065	May 17	1892	480	59	1028
Reid, Charles E., Kansas City, Mo. Elevator.....	486,704	Nov. 22	2569	670	61	1139
Reid, Charles H., Danbury, Conn. Hat-rounding machine.....	471,751	Mar. 29	3247	827	58	1759
Reid, Charles H., Danbury, Conn. Hat-rounding machine.....	473,238	Apr. 19	1931	{ 485 486	59	391
Roid, David, Melbourne, Victoria. Device for mounting and locking interchangeable stereotype and electrotpe plates to their bases.....	471,432	Mar. 22	2775	708	58	1664
Reid, Edwin B., Barrie, Canada. Car-coupling.....	487,772	Dec. 13	878	223	61	1513
Reid, George, et al. (See Trump, John G., assignor.)						
Reid, James, Jr., West Troy, assignor to Hagen & Reid, Troy, N. Y. Nail-drawing implement.....	474,859	May 17	1570	401	59	965
Reid, James W., Grand Rapids, Mich. Heat-distributor.....	469,587	Feb. 23	2636	676	58	1065
Reid, John, assignor to Rand, McNally & Company, Chicago, Ill. Railway-ticket.....	467,294	Dec. 6	86	26	61	1339
Reid, John S., Muncie, Ind. Radial-center sawing-machine.....	476,820	June 14	910	223	59	1632
Reiff, William H., assignor to F. Haggerty, Philadelphia, Pa. Game apparatus.....	477,452	June 21	1946	482	59	1848
Reiff, William, Indianapolis, Ind. Paper-jogger.....	470,898	Mar. 15	1956	501	58	1495
Reiffner, Ulrich, and J. F. Stauffer, Chicago, Ill. Oil-can.....	480,742	Aug. 16	1593	399	60	914
Reifsnider, Calvin K. (See Reifsnider, William D., assignor.)						
Reifsnider, William D., Lake, Ohio, assignor of one-half to C. K. Reifsnider, St. Louis, Mo. Trace-protector.....	468,692	Feb. 9	1220	313	58	774
Reiger, John F. (See Jackson and Reiger.)						
Reigh, Mark B., Boston, Mass., assignor to Willimantic Linen Company, Hartford, Conn. Thread-unwinding device for sewing-machines.....	477,611	June 21	2200	546	59	1899
Reigh, Mark B., Boston, Mass., assignor to Willimantic Linen Company, Hartford, Conn. Thread-unwinding device for sewing-machines.....	485,136	Oct. 25	2531	650	61	549
Reiley, James M., et al. (See Reiley, Matthew S., assignor.)						
Reiley, Matthew S., assignor to M. D. Peck and J. M. Reiley, Washington, D. C. Railway-train telegraph.....	484,375	Oct. 11	1297	332	61	276
Reilly, James, Brooklyn, N. Y. Device for separating oil from feed-water.....	473,591	Apr. 26	2537	640	59	531
Reilly, John, assignor of one-half to T. A. Symington, Baltimore, Md. Controller for elevators.....	483,943	Oct. 4	623	157	61	128
Reilly, John P., St. Louis, Mo. Combined calendar-holder and pencil-sharpener.....	466,704	Jan. 5	617	160	58	119
Reimann, Georg, Berlin, Germany. Bunsen burner.....	478,364	July 5	475	115	60	94
Reimer, Carl, Halle, Germany. Hardening objects made of crude gypsum.....	479,019	July 19	1467	60	61	315
Reimers, Jeronimus, Toronto, Canada. Piano-case.....	483,811	Oct. 4	433	107	61	90
Reimers, John N., and W. M. Schneekloth, Calumet, Iowa. Corn-harvester.....	470,598	Mar. 8	1496	{ 389 390	58	1396
Reinbold, Benjamin F., Lickdale, Pa. Bolting-reel.....	480,345	Aug. 9	960	{ 242 243	60	776

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. et	Vol.	Page.
Reinemann, Adolph, New York, N. Y. Fire-extinguisher	466,801	Jan. 12	798	206	58	162
Reinfeld, Mayer, St. Louis, Mo. Frame for pictures and similar purposes	481,333	Aug. 23	2578	633	60	1115
Reinhardt, James H., Newark, N. J., assignor to J. Wetter, Memphis, Tenn. Consecutive-numbering machine	469,198	Feb. 16	2006	512	58	937
Reinhardt, James H., Newark, N. J., assignor of two-thirds to P. Van Alstyne and C. E. Hill, New York, N. Y. Tramway-switch	488,132	Dec. 13	1478	372	61	1634
Reinhold, Hermann, Berlin, Germany. Bed-bottom	471,622	Mar. 29	3040	774	58	1722
Reinmann, Albert L. (See Berenberg, William, assignor.)						
Reinohl, David C. (See Johnston, James J., assignor.)						
Reisert, Michael E., Hennef-on-the-Sieg, Germany. Automatic liquid-meter	469,793	Mar. 1	203	53	58	1140
Reisert, Michael E., Hennef-on-the-Sieg, Germany. Automatic weighing apparatus	483,636	Oct. 4	176	44	61	37
Reisinger, Frank W. (See Lawrence and Reisinger.)						
Reisky, Emil, assignor to C. Rau, Rochester, N. Y. Game apparatus	473,265	Apr. 19	1972	494	59	399
Reiss, George, assignor of one-half to A. J. Gleissner, Brooklyn, N. Y. Timepiece-dial	483,696	Oct. 4	261	64	61	55
Reissig, Wilhelm, Munich, Germany. Manufacture of artificial stone	477,847	June 28	2600		59	1994
Reiter, Johannes, assignor to C. Heucken, Aix-la-Chapelle, Germany. Coke-oven	470,506	Mar. 8	1371	{ 358 359 }	58	1370
Reitmayer, John V. (See White and Reitmayer.)						
Reitz, Daniel G., assignor to Eureka Wood Pulley Company, Berlin, Pa. Split pulley	481,871	Aug. 30	3451	{ 846 847 }	60	1300
Reitzenstein, Hugo A. (See White and Reitmayer, assignors.)						
Reinly, Sylvester, Johnstown, Nebr. Plow	483,311	Sept. 27	2279	573	60	1818
Reimbert Roller Compress Company. (See Goldthwaite, Joseph G., assignor.)						
Reminder Lock Company. (See Stiner, Clarence M., assignor.)						
Remington Arms Company. (See Fay, Rimmon C., assignor.)						
Remington, Fred E., et al. (See Raymond, Silas H., assignor.)						
Remington Standard Type Writer Manufacturing Company. (See Diss, Louis P., assignor.)						
Remington Standard Type Writer Manufacturing Company. (See Shepard, Charles H., assignor.)						
Remington Standard Type Writer Manufacturing Company. (See Webb, George B., assignor.)						
Remington Standard Type Writer Manufacturing Company. (See Webb and Chapin, assignors.)						
Remington, William B., et al. (See Raymond, Silas H., assignor.)						
Rempen, Carl A., and E. Andre, assignors to F. Heuser & Co., Hanover, Germany. Pressure-regulating valve	479,462	July 26	2196	551	60	470
Remson, Isaac S., assignor to I. S. Remson Manufacturing Company, Brooklyn, N. Y. Harness-saddle	469,979	Mar. 1	512	127	58	1198
Renard, Victorien L. M., Paris, France, assignor to C. F. Veit, London, England. Stand for exhibiting pictures, &c.	478,887	July 12	1256	311	60	264
Rendell, Charles H., and E. S. Pinney, Tulare City, Cal. Calendar	482,929	Sept. 20	1644	414	60	1682
Rendle, Arthur E., Philadelphia, Pa. Glazed structure	488,663	Dec. 27	2350	581	61	1838
Rendon, Mannel E. (See Lanaux and Rendon.)						
Renehan, James J., New Britain, Conn. Suspending device for electric lamps	469,048	Feb. 16	1800	460	58	896
Renfro, George, Wagoner, Indian Ter. Bedstead	470,445	Mar. 8	1286	329	58	1353
Renner, Edmund, and J. Hofbauer, Philadelphia, Pa. Steam-trap	471,397	Mar. 22	2719	693	58	1654
Rennie, John, Dayton, Ohio. Toy gun	467,238	Jan. 19	1530	390	58	308
Reno, Griffin, New York, N. Y. Truss	477,335	June 21	1760	431	59	1813
Reno, Jesse W., New York, N. Y. Railway-tunnel construction	469,453	Feb. 23	2413	618	58	1022
Reno, Jesse W., New York, N. Y. Endless conveyor or elevator	470,918	Mar. 15	1987	508	58	1500
Renold, Hans, Manchester, W. T. Goolden, L. B. Atkinson, and S. C. G. Gold, London, England. Cutter or drill applicable to coal, &c.	481,656	Aug. 30	3092	754	60	1230
Rensen, John H., Philadelphia, Pa. Tailor's measuring apparatus	480,036	Aug. 2	446	113	60	667
Renton, George W., Brooklyn, assignor to F. N. Du Bois, New York, N. Y. Faucet	476,170	May 31	3649	923	59	1402
Replogle, John E., Cleveland, Ohio. Safety-pocket for garments	469,721	Mar. 1	81	23	58	1114
Replogle, Mark A., Mattawana, Pa. Electrical governor	476,311	June 7	123	30	59	1462
Repp, Ephraim B., Washington, D. C. Metallic roofing-tile	482,025	Sept. 6	171	41	60	1368
Reppell, Louis H., Kansas City, Mo. Brick-kiln	479,239	Nov. 29	3193	818	61	1279
Requa, Elias B., Jersey City, N. J. Lamp-burner	488,972	Dec. 27	2832	699	61	1938
Requa, Elias B., Jersey City, N. J. Lamp-burner	488,973	Dec. 27	2834	699	61	1938
Rerich, Franz, Buda-Pesth, Austria-Hungary. Filter-can	478,365	July 5	476	115	60	95
Resche, Friedrich E., Duluth, Minn. Plug-cutting tool	476,312	June 7	126	30	59	1462
Resley, Horace, Cumberland, Md. Means for radiating car-trucks	480,830	Aug. 16	1728	432	60	941
Resor & Co., William. (See Elliott, James W., assignor.)						
Ressler, Annie M. (See Ressler, Thaddeus H. and A. M.)						
Ressler, Thaddeus H. and A. M., Ronks, Pa. Cake-dish	470,827	Mar. 15	1861	477	58	1476
Restein, Julius, Philadelphia, Pa. Washing-machine	466,575	Jan. 5	426	{ 109 110 }	58	82
Rettenmeyer, Bernhard, Stuttgart, Germany. Apparatus for cooling fluids	468,919	Feb. 16	1580	401	58	853
Rettich, Frank D., Cincinnati, Ohio, assignor to Mather Manufacturing Company, Philadelphia, Pa. Addressing-machine	481,639	Aug. 30	3063	748	60	1225
Rettig, Adolf, Saarbrücken, Germany. Telephone	481,294	Aug. 23	2495	614	60	1101
Rettig, Charles, Philadelphia, Pa. Barrel-stand	481,640	Aug. 30	3065	748	60	1225
Reuber, Mathias J., E. G. Stone, Pittsburg, and P. Fuchs, Lower St. Clair, Pa. Condensing apparatus	488,664	Dec. 27	2351	582	61	1838
Rensch, Christian. (See Wagner, Oscar, assignor.)						
Reuter, Charles, and G. Bollmann, Brooklyn, N. Y. Electric tell-tale for tanks	467,774	Jan. 26	2387	606	58	477
Reuter, John C. (See Elsing, Sigmund, assignor.)						
Reuter, John C., assignor of one-eighth to M. S. Byck, Savannah, Ga. Motor	475,799	May 31	3042	{ 770 771 }	59	1280
Reuther, Carl, Hennef-on-the-Sieg, Germany. Grain-weighing apparatus	478,465	July 5	621	151	60	123
Reuther, John. (See Reuther, William and J.)						
Reuther, William and J., Elma, N. Y. Potato-digger	473,083	Apr. 19	1650	420	59	339
Reuther, William and J., Elma, N. Y. Potato-digger	473,084	Apr. 19	1652	420	59	339
Reuther, Franz, assignor of one-half to A. Miloche, New York, N. Y. Vaginal syringe	471,514	Mar. 22	2886	734	58	1686
Reutter, Samuel E., Titusville, Pa. Folding base for stands	480,346	Aug. 9	962	243	60	777
Rever, Robert P., Newark, N. J. Means for transferring railway-cars to and from floating vessels, &c.	466,516	Jan. 5	335	84	58	65
Revere Rubber Company. (See Elliott, Charles B., assignor.)						
Revere Rubber Company. (See Hardy, Walter B., assignor.)						
Rew, Henry C., Chicago, Ill. Regenerative metallurgical furnace	472,076	Apr. 5	98	26	59	20
Rew, Henry C., Chicago, Ill. Apparatus for the manufacture of gas	472,077	Apr. 5	100	27, 28	59	21
Rex, David J., Pittsburg, Pa. Crate	483,871	Oct. 4	521	131	61	108

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Reymann, A., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Reymond, Adrien, New York, N. Y. Stop-watch	474,100	May 3	344	82	59	703
Reynolds, Abram D. (See Fields, Charles C., assignor.)						
Reynolds, Abram D., <i>et al.</i> (See Fields and Duvall, assignors.)						
Reynolds, Arthur J., assignor to Stanley Works, New Britain, Conn. Drive-chain link	475,705	May 24	2887	730	59	1238
Reynolds, Charles J., assignor of one-half to W. A. Macdonald, Boston, Mass. Faucet	467,560	Jan. 26	2063	521	58	416
Reynolds, Christopher C., Kelseyville, assignor of one-half to J. C. Plunkett, Oakland, Cal. Cultivator and pulverizer	484,239	Oct. 11	1084	275	61	235
Reynolds, David R., Philadelphia, Pa. Automatic toy savings-bank	487,773	Dec. 13	879	223	61	1513
Reynolds, Edwin, Milwaukee, Wis. Boiler-furnace	484,507	Oct. 18	1517	385	61	331
Reynolds, Edwin, Milwaukee, Wis. Steam-boiler	485,299	Nov. 1	216	61	61	616
Reynolds, Frank, assignor of one-half to A. B. Hunt, Omaha, Nebr. Smoke-consuming steam-boiler furnace	486,167	Nov. 15	1584	419	61	929
Reynolds, George A. (See Clarke, Charles E., assignor.)						
Reynolds, George F. (See Thomas and Reynolds.)						
Reynolds, George H., New York, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Mechanical movement	479,526	July 26	2304	576	60	490
Reynolds, George L., Auburn, N. Y. Game apparatus	475,469	May 24	2525	643	59	1168
Reynolds, Hanford, Gifford, Ill. Shovel	487,831	Jan. 26	2474	628	58	494
Reynolds, Harry W., Long Branch, N. J. Burglar-alarm	487,128	Nov. 29	3146	806	61	1269
Reynolds, James, Fairfield, assignor to R. M. Fairfield, Holyoke, Mass. Suction mechanism for paper-machines	483,329	Sept. 27	2306	580	60	1824
Reynolds, John H. (See Gerdorn, Gregory, assignor.)						
Reynolds, John H., <i>et al.</i> (See Gibbons, John, assignor.)						
Reynolds, Lewis G., Dayton, Ohio. Copying-pad and binder	467,018	Jan. 12	1152	292	58	227
Reynolds, Lewis G., Dayton, Ohio. Manifold-copying device	467,019	Jan. 12	1153	293	58	227
Reynolds, Lewis G., assignor to Dayton Printing and Manufacturing Company, Dayton, Ohio. Manifold-copying device	475,155	May 17	2028	512	59	1055
Reynolds, Mary B., Tacoma, Wash. Strainer	484,459	Oct. 18	1437	367	61	316
Reynolds, Milton B., Jerico, Mo. Sash-fastener	470,791	Mar. 15	1788	460	58	1462
Reynolds, Richard J., assignor of one-half to G. M. Jones, Springville, Ala. Car-coupling	479,989	Aug. 2	358	88	60	649
Reynolds, Richard J., and J. P. Pittman, Springville, Ala. Car-coupling	468,823	Feb. 16	1437	365	58	825
Reynolds, Samuel F., Auburn, N. Y. Hose-reel	483,390	Sept. 27	2395	602	60	1840
Reynolds, Stephen H. (See Hood and Reynolds.)						
Reynolds, Thomas, <i>et al.</i> (See Neer, Harry M., assignor.)						
Reynolds, William D. (See Watrous, Thomas A., assignor.)						
Rheobottom, Frank C., Union City, Mich. Grave-vault	476,171	May 31	3651	923	59	1402
Rhett, Charles H., Baltimore, Md. Air-valve for traps and waste-pipes	473,961	May 3	124	29	59	661
Rheobottom, Homer E. (See Chaffee, Louis S., assignor.)						
Rheutan, Abram A., assignor to W. H. Hill, Worcester, Mass. Envelope-machine	466,924	Jan. 12	1007	258	58	201
Rhind, Frank, Meriden, Conn. Argand lamp	480,373	Aug. 9	1005	253	60	785
Rhind, Frank, assignor of one-half to Edward Miller & Company, Meriden, Conn. Gas-burner	475,800	May 31	3046	771	59	1281
Rhind, Frank, assignor of one-half to Edward Miller & Company, Meriden, Conn. Wick-adjusting device	478,288	July 5	360	87	60	72
Rhind, Frank, assignor of one-half to Edward Miller & Company, Meriden, Conn. Argand lamp	478,639	July 12	879	216	60	190
Rhind, Frank, assignor of one-half to Edward Miller & Company, Meriden, Conn. Argand lamp	481,674	Aug. 30	3118	761	60	1235
Rhind, Frank, assignor of one-half to Edward Miller & Company, Meriden, Conn. Argand lamp	483,167	Sept. 27	2028	513	60	1772
Rhind, Frank, assignor to Edward Miller & Company, Meriden, Conn. Wick-lifting device	485,429	Nov. 1	431	115	61	660
Rhoades, Alonzo E. (See Bancroft and Rhoades.)						
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Mechanical movement	470,599	Mar. 8	1499	390	58	1397
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Warping-machine	478,523	July 5	709	172	60	141
Rhoades, Alonzo E., assignor to Hopedale Machine Company, Hopedale, Mass. Warping-machine	487,682	Dec. 6	722	184	61	1463
Rhoades, Roland E., Pittsfield, Me. Loom	467,644	Jan. 26	2180	554	58	437
Rhoads, John P., Clifton, W. Va. Harrow attachment for plows	467,020	Jan. 12	1154	293	58	227
Rhoads, Solomon J., Metropolis, Ill. Invalid-supporter	483,657	Oct. 4	206	51	61	42
Rhoads, William M. (See Sears, Willard T., assignor.)						
Rhode Island Perkins Horse Shoe Company. (See Perkins, Charles H., assignor.)						
Rhodes, Harry A., Denver, Colo. Thermal circuit-changer and protective appliance for operating swinging gates	484,822	Oct. 25	2030	521	61	450
Rhodes, James W., Cameron, assignor of one-half to H. R. Belsber, Lexington, Tex. Means for operating swinging gates	471,193	Mar. 22	2414	614	58	1594
Rhodes, John, Birmingham, England. Top for stands and brackets for holding or displaying hats, bonnets, &c	467,313	Jan. 19	1647	419	58	329
Rhodes, John W., Havana, Ill. Bridge-gate	477,700	June 28	2358	590	59	1949
Rhodes, John W., Havana, Ill. Wheel	481,822	Aug. 30	3377	827	60	1285
Rhodes, Joseph T., Shell, Ala. Rotary cutter-head	480,137	Aug. 2	605	153	60	698
Rhodes, Leverett E., Hartford, Conn. Adjustable tool-rest	470,010	Mar. 1	549	136	58	1205
Rhodes, Marcus J., Dayton, N. Y. Float-valve for evaporating-pans	484,560	Oct. 18	1595	405	61	347
Rhodes, Thomas H. (See Kato and Rhodes.)						
Riatti, Vincenzo, Milan, Italy, assignor to J. Goldsmid, London, England. Electric battery	470,260	Mar. 8	941	233	58	1290
Rice, Charles D., Hartford, Conn., assignor to Pope Manufacturing Company, Portland, Me. Wheel for velocipedes	473,408	Apr. 19	2216	556	59	447
Rice, Charles D., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Repairing pneumatic tires	475,343	May 24	2327	597	59	1132
Rice, Charles D., Hartford, Conn., assignor to Pope Manufacturing Company, Boston, Mass. Device for repairing tires	475,344	May 24	2328	597	59	1132
Rice, Charles E., and L. B. McDonald, Little Rock, Ark. Fire-escape	479,527	July 26	2306	576	60	491
Rice, Daniel, and J. S. Kirk, Canton, Ohio. Nut-lock	468,578	Feb. 9	1057	269	58	739
Rice, Edward T. (See Kingley, Elissa L., assignor.)						
Rice, Edwin W., Jr. (See Thomson and Rice.)						
Rice, Edwin W., Jr., <i>et al.</i> (See Wakefield, William O., assignor.)						
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch	466,802	Jan. 12	799	206	58	162

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulator for electric generators	467,358	Jan. 19	1715	{ 438 439 }	58	342
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric transmission of power	485,658	Nov. 8	777	206	61	747
Rice, Edwin W., Jr., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric transmission of power	485,659	Nov. 8	779	207	61	747
Rice, George W., Des Moines, Iowa. Anvil attachment	476,504	Nov. 22	2103	556	61	1047
Rice, Harvey D., Brooklyn, assignor to Abendroth & Root Manufacturing Company, New York, N. Y. Machine for making sheet-metal pipes	484,112	Oct. 11	873	222	61	193
Rice, Henry C., Farmington, Conn. Lawn-trimmer	470,950	Mar. 15	2036	521	58	1510
Rice, Joel T., assignor of one-half to C. Cutter and J. J. Sumpter, Hot Springs, Ark. Saw-mill-set works	485,564	Nov. 1	625	167	61	701
Rice, John H., Henderson county, Ill. Portable roof	477,701	June 28	2361	590	59	1949
Rice, John H., Henderson county, Ill. Portable roof	480,859	Aug. 16	1768	443	60	949
Rice, Oscar R., Milwaukee, Wis. Moistening attachment for cigar-cases	467,708	Jan. 26	2285	580	58	457
Rice, Richard H., Providence, R. I. Cut-off-valve gear	473,085	Apr. 19	1655	421	59	340
Rice, Robert C., New Castle, Pa. Bag-fastener	471,433	Mar. 22	2776	708	58	1664
Rice, Robert H., <i>et al.</i> (See Christy, Russ J., assignor.)						
Rice, S. P., <i>et al.</i> (See Tanner, David W., assignor.)						
Rice, Vietts L., New York, N. Y. Pulverizing-mill	469,334	Feb. 23	2230	572	58	986
Rice, William. (See Bowen, Calvin C., assignor.)						
Rich, Charles W., Summertown, assignor of one-half to L. L. Frierson, Mount Pleasant, Tenn. Stave trimming or jointing machine	484,460	Oct. 18	1438	367	61	316
Rich, Charles W., Summertown, assignor to himself, and L. L. Frierson, Mount Pleasant, Tenn. Machine for cutting barrel-staves	485,565	Nov. 1	627	{ 167 168 }	61	702
Rich, Charles W., Summertown, assignor to himself, and L. L. Frierson, Mount Pleasant, Tenn. Machine for cutting barrel-staves	485,566	Nov. 1	630	{ 168 169 }	61	702
Rich, Edwin D. (See Miller and Farrow, assignors.)						
Rich, Fred S., Sycamore, Ill. Corn and cob crusher and grinder	471,828	Mar. 29	3374	{ 859 860 }	58	1784
Rich, Frederick, and N. Sondag, St. Louis, Mo. Woodworking-machine	468,897	Feb. 16	1539	392	58	844
Rich, George. (See Brown, Walton, and Rich.)						
Rich, Henry M. (See Taft, Edward L., assignor.)						
Rich, Jerome, Jackson, Mich. Window-screen	484,978	Oct. 25	2293	592	61	501
Rich, Peter S., Sparta, Wis. Machine for preparing green corn for domestic use	474,762	May 10	1402	355	59	919
Rich & Sager. (See Sager, James H., assignor.)						
Rich, Watson W., Minneapolis, Minn. Dry-dock	483,697	Oct. 4	263	64, 65	61	55
Richard, Jean E., New York, N. Y., assignor to J. Scott. Machine for cracking ice	475,518	May 24	2606	663	59	1183
Richard, Theogene E., Lake Charles, La. Portable evaporating apparatus	481,675	Aug. 30	3119	{ 761 762 }	60	1235
Richard, William, H. G. Ogden, and E. E. Heath, Bloomville, Ohio. Washer for vehicle-axles	477,065	June 14	1303	317	59	1711
Richards, Arthur M., Bloomington, and J. A. Giese, Chicago, Ill.; said Giese assignor to said Richards. Chair	478,130	July 5	74	20	60	17
Richards, Arthur M., Bloomington, and I. Veeder, Chicago, Ill.; said Veeder assignor to said Richards. Chair	478,131	July 5	75	20	60	17
Richards Balanced Engine Company of Maine. (See Richards, Jackson, assignor.)						
Richards, Charles. (See Baackes and Richards.)						
Richards, Charles R. (See Hobbs and Richards.)						
Richards, Charles R., assignor to Union Metallic Cartridge Company, Bridgeport, Conn. Tool for trimming heads of cartridge-shells	479,125	July 19	1634	409	60	345
Richards, Charles T. (See Brunkhorst, Wieden, and Richards.)						
Richards, Charles T., St. Louis, Mo. Illuminating-tile	467,832	Jan. 26	2474	628	58	494
Richards, Charles T., assignor to Mesker & Bro., St. Louis, Mo. Building-front	480,909	Aug. 16	1846	{ 459 460 }	60	965
Richards, David L., St. John, Canada. Car-coupling	483,945	Oct. 4	625	158	61	129
Richards, Ephraim S., assignor of one-half to F. S. Keehn, Milford, Ind. Carriage-curtain fastener	468,080	Feb. 2	258	63	58	574
Richards, Francis H., Hartford, Conn. Drawing-rolls for spinning-machines	474,030	May 3	230	55	59	682
Richards, Francis H., Hartford, Conn. Clock-lathe	484,673	Oct. 18	1783	454	61	385
Richards, Francis H., Hartford, Conn. Knob attachment	485,137	Oct. 25	2532	650	61	550
Richards, Francis H., Hartford, Conn. Feed mechanism	487,428	Dec. 6	326	83, 84	61	1386
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Valve-gate	467,955	Feb. 2	73	17	58	539
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Valve-gate	476,313	June 7	128	31	59	1463
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Slide feed mechanism	480,347	Aug. 9	963	243	60	777
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Gearing	480,671	Aug. 9	1481	{ 368 369 }	60	877
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Turret-clamping device	480,962	Aug. 16	1931	483	60	981
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Turret-mechanism for lathes	480,963	Aug. 16	1933	484	60	981
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Turret-mechanism	480,964	Aug. 16	1935	{ 484 485 }	60	982
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Stop-mechanism for turret-lathes	481,192	Aug. 23	2323	{ 572 573 }	60	1069
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Tool-holding device	481,193	Aug. 23	2325	573	60	1069
Richards, Francis H., Hartford, Conn., assignor to W. Wood, Philadelphia, Pa. Friction-clutch	481,194	Aug. 23	2326	573	60	1070
Richards, Francis H., assignor to W. Wood, Hartford, Conn. Duplex feed mechanism	487,775	Dec. 13	884	224	61	1514
Richards, Francis H., Hartford, Conn., assignor of two-thirds to R. M. Fairfield, Holyoke, and O. S. Greenleaf, Springfield, Mass. Magnetic separator	467,833	Jan. 26	2475	629	58	494
Richards, Francis H., Hartford, Conn., assignor of two-thirds to O. S. Greenleaf, Springfield, and R. M. Fairfield, Holyoke, Mass. Magnetic separator	467,645	Jan. 26	2180	554	58	437
Richards, Frank P., Edinburg, Ill. Center movement for check-rows	466,908	Jan. 12	982	{ 251 252 }	58	196
Richards, Henry J., Wilkes-Barré, Pa. Miner's safety-lamp	476,488	June 7	404	94	59	1516
Richards, Hubert P., assignor to Trant & Hine Manufacturing Company, New Britain, Conn. Suspender-buckle	476,172	May 31	3652	924	59	1403
Richards, Isaac P., Providence, R. I. Rotary tool-holder for lathes	469,377	Feb. 23	2298	591	58	1000
Richards, Jackson, Philadelphia, Pa. Boring-machine	470,879	Mar. 15	1934	494	58	1490

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g	Vol.	Page.
Richards, Jackson, assignor to Richards Piston Packing Company, Limited, Philadelphia, Pa. Piston-packing.....	487,494	Dec. 6	431	111	61	1406
Richards, Jackson, Philadelphia, Pa., assignor to Richards Balanced Engine Company of Maine. Locomotive-engine.....	488,774	Dec. 27	2514	625	61	1870
Richards, John T., Gardiner, Me. Dust-guard for hubs.....	478,466	July 5	622	151	60	123
Richards, Joseph W., Philadelphia, Pa. Solder for aluminium.....	478,238	July 5	283		60	57
Richards, Josias H., and A. W. Burr, Philadelphia, Pa. Loose-pulley oiler.....	476,173	May 31	3653	924	59	1403
Richards Piston Packing Company. (See Richards, Jackson, assignor.)						
Richards & Rutihauser. (See Downey, Silas C., assignor.)						
Richards, Walter F. (See Cranston, Otto G., assignor.)						
Richards, Walter S., Natick, assignor of one-half to G. B. James, Boston, Mass. Automatic battery cut-off.....	482,136	Sept. 6	342	82	60	1402
Richards, Walter S., Natick, assignor of one-half to G. B. James, Boston, Mass. Electrically-adjusting relay.....	482,137	Sept. 6	344	82	60	1403
Richards, William, Mayburg, Pa. Tool for raising casing tubes or rods.....	471,896	Mar. 29	3466	885	58	1803
Richards, William, Rochester, N. Y. Adjustable chair.....	480,743	Aug. 16	1594	400	60	915
Richards, William, W. Garwood, and H. N. Rosebrook, Big Springs, Ohio; said Richards assignor to said Garwood and Rosebrook. Harrow.....	483,501	Sept. 27	2540	638	60	1870
Richards, Wilton L. (See Hayes and Richards.)						
Richardson, Aaron, Uniontown, and F. E. Richardson, Manchester, Iowa; said Aaron Richardson assignor to said F. E. Richardson. Latch.....	476,070	May 31	3483	878	59	1369
Richardson & Boynton Company. (See Mackay, William M., assignor.)						
Richardson, Charles B., Springfield, Mass. Trousers-stretcher.....	469,272	Feb. 23	2131	548	58	967
Richardson, Charles B., and W. H. Pool, Springfield, Mass. Dandy-roll.....	473,180	Apr. 19	1836	462	59	372
Richardson, Charles G., Boston, Mass. Lathe.....	481,717	Aug. 30	3190	779	60	1249
Richardson, Charles H., Gloucester, Mass. Steering apparatus.....	471,570	Mar. 29	2963	755	58	1708
Richardson, David J. (See Leber, Luther H., assignor.)						
Richardson, Dwight S., Brooklyn, N. Y. Hot-air furnace.....	470,446	Mar. 8	1287	329	58	1353
Richardson, Dwight S., Brooklyn, N. Y. Sectional steam-boiler.....	487,774	Dec. 13	880	223	61	1513
Richardson, Fred L., Milford, Mass. Sole-staining machine.....	483,944	Oct. 4	624	158	61	129
Richardson, Frederick A., London, England. Glove-fastening.....	476,410	June 7	289	68	59	1494
Richardson, Frederick E. (See Richardson, Aaron and F. E.)						
Richardson, George R., Latrobe, Cal. Bevel-square.....	471,897	Mar. 29	3467	885	58	1803
Richardson, Henry, Lichfield, England. Automatic weighing-machine.....	467,021	Jan. 12	1155	293	58	228
Richardson, Jeremiah J., Brooklyn, N. Y. Fireplace-heater.....	477,155	June 14	1441	353	59	1738
Richardson, Jerome S., Woodbury, Tex. Wire-stretcher.....	468,991	Feb. 16	1716	436	58	879
Richardson, John, Clinton, Iowa. Soap-holder.....	467,436	Jan. 19	1834	468	58	365
Richardson, John, San Francisco, Cal. Saw filing and setting machine.....	481,823	Aug. 30	3378	827	60	1285
Richardson, John P., and G. F. Dyer, Cambridge, assignors to Mason & Hamlin Organ and Piano Company, Boston, Mass. Damper-action for pianofortes.....	481,121	Aug. 16	2194	543	60	1030
Richardson, Newton C., et al. (See Tarris, Andrew, assignor.)						
Richardson, Oscar N., High Point, N. C. Combined tongs, shovel, and kindling-splitter.....	467,782	Jan. 26	2397	609	58	479
Richardson, Robert E. (See Jones, Isaac B., assignor.)						
Richardson, Theodore M., Stockton Springs, assignor to L. Clay and F. G. White, Belfast, Me. Thill-coupling.....	467,052	Jan. 12	1214	307	58	239
Richardson, Wilbur E., Milwaukee, Wis. Traction-engine.....	480,626	Aug. 9	1408	350	60	863
Richardson, William H. (See Fries, Richardson and Hackett.)						
Richardson, Willis S., Newark, N. J. Watchcase-pendant.....	466,965	Jan. 12	1068	271	58	211
Richardson, Willis S., assignor to Newark Watch Case Material Company, Newark, N. J. Watchcase-spring.....	466,964	Jan. 12	1066	270	58	211
Richens, James. (See Miller, Charles, assignor.)						
Richey, James N., Carmichael's, S. N. Hench, and W. A. Dromgold, York, Pa.; said Richey assignor to said Hench and Dromgold. Sawmill-dog.....	488,906	Dec. 27	2733	674	61	1915
Richmond, James H., Ardeola, Mo. Harrow.....	470,401	Mar. 8	1211	310	58	1339
Richmond, John O., Hart, Mich. Hoisting-crane.....	471,898	Mar. 29	3468	885	58	1803
Richmond, Joseph T., Caldwell, Kans. Portable shed.....	467,314	Jan. 19	1647	419	58	329
Richmond, Stirling P., Weatherford, Tex. Plow.....	487,643	Dec. 6	655	169	61	1451
Richmond, Walter. (See Bronsdon, Milton H., assignor.)						
Richords, Benjamin, Middle Bank, Swansea, England. Copper-smelting furnace.....	475,609	May 24	2744	696	59	1211
Richson, Carl E., Boston, Mass. Indicating and adding apparatus.....	466,836	Jan. 12	855	218	58	173
Richter, Adolf. (See Seidel, Victor, assignor.)						
Richter, Alexander, Hollyrood, Kans. Churn.....	487,870	Dec. 13	1044	261	61	1545
Richter, Emil. (See Hanke and Richter.)						
Richter, Ernst, assignor of two-thirds to A. Schaefer and K. F. Jenne, New York, N. Y. Machine for cleaning malt.....	488,403	Dec. 20	1927	483	61	1738
Richter, Ernst, and A. Schaefer, New York, N. Y. Preparing malt for brewing.....	477,823	June 28	2555		59	1985
Richter, Franz L., Schuilenburg, Tex. Poison-distributor.....	472,819	Apr. 12	1233	316	59	246
Richter, Maurice, Williamstown, W. Va. Balanced stage.....	478,467	July 5	623	151	60	123
Richter, Max A., and J. G. Nolen, assignors to Illinois Electric Lamp Company, Chicago, Ill. Incandescent electric lamp.....	479,020	July 19	1468	365	60	315
Richtmann, Charles, Newark, N. J. Twine-holder.....	466,426	Jan. 5	186	48	58	36
Richtmann, Charles, Newark, N. J. Lock.....	478,239	July 5	284	70	60	58
Rickabach, William H., assignor of one-half to W. A. Fore, Mishawaka, Ind. Hoisting-machine.....	483,391	Sept. 27	2396	602	60	1840
Rickard, Charles S., Grand Rapids, Mich. Folding crib.....	477,311	June 21	1730	423	59	1806
Richards, Ross. (See Lamborn and Richards.)						
Ricker, James H., St. Louis, Mo., assignor to Rockingham Machine Company, of New Hampshire. Welt-trimming machine.....	471,079	Mar. 15	2233	573	58	1548
Ricker & Montgomery. (See Ricker, Wentworth G., assignor.)						
Ricker, Wentworth G., assignor to Ricker & Montgomery, Rochester, N. Y. Hay-carrier.....	487,856	Dec. 13	1023	256	61	1541
Ricker, William H., Cambridge, Mass. Valved cap or stopper for bottles.....	486,298	Nov. 15	1787	470	61	970
Rickert, Charles H., Reading, Pa. Puzzle.....	484,882	Oct. 25	2128	547	61	468
Ricketson, James C., Milwaukee, Wis. Electric signal for engines.....	475,066	May 17	1894	480	59	1028
Rickman, William T., Fern Bank, Ala. Automatic car-brake.....	471,022	Mar. 15	2148	552	58	1531
Riddell, De Witt C. (See Staunford, Frank C., assignor.)						
Riddell, James, et al. (See Abrahams, John W., assignor.)						
Riddell, John, Lynn, assignor of one-half to G. F. Greenwood, Boston, Mass. Valve-gear.....	478,022	June 28	2873	718	59	2047

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Riddelle, Philip S., <i>et al.</i> (See Rinker, Robert S., assignor.)						
Riddick, James E. R. Wakefield, Va. Combination-lock	476,821	June 14	912	223	59	1632
Riddle, Frank C., St. Louis, Mo. Coffin-fastener	476,815	June 7	130	31	59	1463
Riddle, William N., Crowley, Tex. Aerial ship	473,344	Apr. 19	2106	529	59	426
Rider, Ebenezer W., Racine, Wis. Water-cooler for use in refrigerators	476,314	June 7	129	31	59	1463
Rider, Ebenezer W., Racine, Wis. Wrench	477,228	June 21	1587	389	59	1779
Rider, Ebenezer W., Racine, Wis. Carriage-pole tip	488,133	Dec. 13	1479	363	61	1634
Rider, Frederick W., <i>et al.</i> (See Moore, George R., assignor.)						
Rider, John T., assignor of one-fourth to H. Fritz, South Oil City, Pa. Plumb-level	482,026	Sept. 6	173	41	60	1368
Rider, Walter. (See Bucher, Clyde W., assignor.)						
Ridge, Joseph, Chicago, Ill. Vehicle-wheel	473,525	Apr. 26	2411	611	59	506
Ridgely, Charles T., and M. A. Smith, Springfield, Ohio. Straight-edge	480,516	Aug. 9	1228	307	60	828
Ridsdale, Charles H., Guisborough, and A. Jones, Middlesbrough, England. Lubricant	486,196	Nov. 15	1620		61	936
Ridsdale, Thomas W. (See Fomander, Alfred, assignor.)						
Riebeling, Hugo R. (See Windfelder, George F., assignor.)						
Rieckert, Herman A. J., New York, N. Y. Knockdown exhibition-stand	473,783	Apr. 26	2823	709	59	585
Rieckert, Herman A. J., New York, N. Y. Folding chair	484,240	Oct. 11	1086	275	61	235
Riedel, Herman, <i>et al.</i> (See Meyer, Henry, assignor.)						
Riedel, J. D. (See Schoivien, Ludwig, assignor.)						
Riedel, Josef, New York, N. Y. Electric-arc lamp	467,199	Jan. 19	1472	377	58	297
Rieger, Louis, Chicago, Ill. Nut-lock	468,420	Feb. 9	803	200	58	690
Riegert, Frederick, St. Joseph, Mo. Treating leather	467,200	Jan. 19	1474		58	297
Riepe, Fritz H., Jr., and C. E. Hilgeman, Metropolis City, Ill. Heating-stove and draft-regulator therefor	481,870	Aug. 30	3150	846	60	1300
Ries Electric Specialty Company. (See Ries, Elias E., assignor.)						
Ries Electric Specialty Company. (See Ries and Horry, assignors.)						
Ries, Elias E., assignor to Ries & Henderson, Baltimore, Md. Electric soldering	485,017	Oct. 25	2361	{ 607 608 }	61	514
Ries, Elias E., assignor to Ries Electric Specialty Company, Baltimore, Md. Regulating-socket for incandescent electric lamps	488,835	Dec. 27	2609	647	61	1890
Ries, Elias E., assignor to Ries Electric Specialty Company, Baltimore, Md. Regulating-socket for incandescent electric lamps	488,951	Dec. 27	2799	690	61	1929
Ries, Elias E., and W. S. Horry, assignors to Ries Electric Specialty Company, Baltimore, Md. Regulating socket or holder for incandescent electric lamps	470,402	Mar. 8	1212	310	58	1339
Ries & Henderson. (See Ries, Elias E., assignor.)						
Riess, Rudolph W., Philadelphia, Pa. Attachment for bicycles	469,722	Mar. 1	82	23	58	1115
Riessner, Paul. (See Brachhausen and Riessner.)						
Riester, George P., Salem, Ind. Wagon-brake lever	485,060	Oct. 25	2420	622	61	526
Rigby, Harry. (See Westwood and Rigby.)						
Rigby, Holden. (See Allcroft, Herbert, assignor.)						
Rigby, James, Detroit, Mich. Locking device for railway-rails	469,921	Mar. 1	406	102	58	1179
Rigby, Nicholas L., Los Angeles Cal. Lawn-sprinkler	483,017	Sept. 20	1796	453	60	1713
Rigby, Richard, Fall River, assignor of one-half to G. Draper & Sons, Hopedale, Mass. Weft fork or feeler	474,780	May 10	1434	364	59	926
Riggins, Paden B., Sheffield, Iowa. Pump	473,345	Apr. 19	2108	520	59	426
Riggs, Horace A., Plymouth, Ohio. Brick-cutting machine	479,663	July 26	2502	{ 623 624 625 }	60	527
Riggs, Lewis S., assignor of two-thirds to A. P. Howison and J. G. Murray, Selma, Ala. Car-coupling	471,023	Mar. 15	2149	552	58	1532
Riggs, Lewis S., assignor of two-thirds to A. P. Howison and J. G. Murray, Selma, Ala. Filling syringes	477,961	June 28	2774	695	59	2028
Riggs, Pierce, Crowley, Oreg. Hop-press	470,600	Mar. 8	1499	{ 390 391 }	58	1397
Righter, James B., Reedsburg, Wis. Spoke-socket	471,024	Mar. 15	2150	552	58	1532
Righter, James B., Reedsburg, Wis. Button	482,651	Sept. 13	1201	292	60	1583
Riguel, George T., Plainfield, N. J. Feathering paddle-wheel	479,928	July 26	2307	{ 576 577 }	60	491
Riker, Andrew L., New York, N. Y. Electric-railway system	483,366	Sept. 27	2352	591	60	1833
Riker, Andrew L., New York, N. Y. Motor-mounting for electrically-driven fans	483,582	Oct. 4	102	25	61	22
Riley, George S., Rochester, N. Y. Smoke-consuming furnace	477,780	June 28	2433	621	59	1972
Riley, Michael, London, Ohio. Guard for railway tracks and switches	484,461	Oct. 18	1442	368	61	317
Riley, Michael, London, Ohio. Foot-guard for railway-tracks	4-5,480	Nov. 1	506	133	61	675
Rimmel, August, St. Louis, Mo. Shears	473,710	Apr. 26	2716	683	59	564
Rimmer, Joseph, Malden, Mass. Sofa-bed	474,970	May 17	1746	{ 442 443 }	59	1000
Rinderknecht, Charles J. (See Lipman and Rinderknecht.)						
Rinderknecht, Charles J., Indianapolis, Ind., assignor to A. Kopp, L. Jaeger, J. Schuler, and J. B. Curtis. Fluid-pressure regulator	484,458	Oct. 18	1435	366	61	315
Rinehart, Adam F., near Unionopolis, Ohio. Cultivator	467,382	Jan. 19	1749	{ 446 447 }	58	348
Rinehart, Beecher H., Alliance, Ohio. Ditching-plow	483,476	Sept. 27	2501	630	60	1862
Riner, William W., Los Angeles, Cal. Faucet	485,430	Nov. 1	432	115	61	661
Ringen, John, St. Louis, Mo. Coin-controlled stereoscope	485,567	Nov. 1	635	169	61	703
Rinker, Robert S., Rinkerton, Va., assignor of two-thirds to P. S. Riddelle, Washington, D. C., and M. Funkhouser, Rinkerton, Va. Corn-harvester	481,059	Aug. 16	2090	{ 521 522 }	60	1012
Ripley, Daniel C., Pittsburg, Pa. Manufacture of glassware	477,336	June 21	1762	431	59	1813
Ripley, David A. (See Davis and Ripley.)						
Ripley, Edwin L. (See Robertson and Genin, assignors.)						
Ripley, Herman, <i>et al.</i> (See Barber, Edwin J., assignor.)						
Ripley, James G., Boston, Mass. Hoof-expander	475,801	May 31	3047	771	59	1282
Ripley, Robert A., Stamford, Conn. Camera	487,159	Nov. 29	3195	818	61	1279
Ripley, Charles, <i>et al.</i> (See Dearborn, Wyman, assignor.)						
Ripp, Ernst L., Schönau, near Chemnitz, Germany. Ladder	472,141	Apr. 5	204	55	59	38
Ripp, Ernst L., Schönau, near Chemnitz, Germany. Ladder	476,897	June 14	1032	250	59	1656
Ripple, Ezra H. (See Long, Eugene F., assignor.)						
Ripson, John D., assignor of one-half to J. J. Franklin and J. Battle, Thorold, Canada. Casket-handle	481,531	Aug. 23	2897	711	60	1178
Risdon, Hugh C., assignor to J. H. Risdon, Philadelphia, Pa. Game apparatus	475,067	May 17	1895	481	59	1029
Risdon Iron and Locomotive Works. (See Booth, Edgar H., assignor.)						
Risdon Iron and Locomotive Works. (See Dorward, David, assignor.)						
Risdon, John H. (See Risdon, Hugh C., assignor.)						
Rishel, John K., Hughesville, Pa. Carving-machine	481,372	Aug. 23	2626	646	60	1124
Risk, Robert J., assignor to B. Eastwood, Paterson, N. J. Harness-leveling device for looms	488,286	Dec. 20	1740	438	61	1701

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Risser, Morris H., Ashland, Ohio. Thill-coupling bolt	470,507	Mar. 8	1373	359	58	1370
Ristedt, Albert H., Cleveland, Ohio. Clothes-drainer	484,340	Oct. 11	1249	318	61	267
Ritchie, Annie. (See Grant, Duncan E., assignor.)						
Ritchie, David A., Cambridge, Mass. Machine for cutting sheet metal	467,646	Jan. 26	2182	{ 554 555 743 744	{ 58 60 59	{ 438 1221 1516
Ritchie, Edward S., Newton, Mass. Azimuth-circle	481,625	Aug. 30	3046	95	59	1221
Ritchie, John, Beamsville, Canada. Manufacture of pulley-wheels	476,489	June 7	406			1516
Ritchie, Walter S. (See Van Voorhis, William H., assignor.)						
Ritter & Conley. (See Kennedy, Hugh, assignor.)						
Riter, John L. (See Fender and Riter.)						
Riter, John L., Brownsville, Ind., and J. M. Alford, College Corner, Ohio; said Riter assignor to said Alford. Tellurian	471,524	Mar. 22	2897	737	58	1688
Rittenhouse, Silas B., Liberty Mills, Ind. Wrench	474,566	May 10	1103	282	59	861
Ritter, Anton, Milwaukee, Wis. Horse-collar fastener	474,147	May 3	402	98	59	716
Ritter, Frederic W., Jr. (See McGilvray, Bernard, assignor.)						
Ritter, Frederic W., Jr. (See Snively, Samuel H., assignor.)						
Ritter, Johann J., Basle, Switzerland. Electric soldering-tool	469,949	Mar. 1	457	114	58	1188
Ritterbeck, Jacob, Newark, N. J. Door-jamb setter	481,245	Aug. 23	2421	{ 597 568	{ 60	{ 1087
Ritzell, A. P., et al. (See Thrush, John W., assignor.)						
Rivers, Joseph. (See Gray and Rivers.)						
Rivers, Thomas L., assignor of one-third to J. Thielemann, Newark, N. J. Car-coupling	472,395	Apr. 5	611	155	59	114
Rivers, Thomas L., assignor of one-third to J. Thielemann, Newark, N. J. Car-coupling	482,833	Sept. 20	1490	{ 370 371	{ 60	{ 1653
Riverside Iron Works. (See Maddock, William H., assignor.)						
Rivett, Edward, Boston, Mass. Milling-machine	487,160	Nov. 29	3196	{ 818 819	{ 61	{ 1279
Rivnác & Co., K. (See Rivnác and Vojáček, assignors.)						
Rivnác, Karel, and L. Vojáček, assignors to K. Rivnác & Co., Prague, Austria-Hungary. Apparatus for heating, &c.	474,694	May 10	1303	333	59	899
Rix, Benjamin F., Kalamazoo, Mich. Fertilizer-distributor	488,680	Dec. 27	2381	590	61	1843
Roach, Bertha B., Upper Alton, Ill. Swinging bed for infants	482,275	Sept. 6	579	138	60	1448
Roach, Dennis. (See Helbing, Theodore O., assignor.)						
Roach, Richard G., Lebanon, Tex. Plow	488,287	Dec. 20	1741	439	61	1702
Roach, William H., High Point, N. C. Rocking attachment for chairs	471,080	Mar. 15	2234	574	58	1549
Roadifer, Erastus, Carpenter, Ind. Draft-equalizer	480,517	Aug. 9	1929	308	60	828
Roanoke Wood Novelty Company. (See Nicholson, Jacob H., assignor.)						
Roat, George M., assignor of one-half to F. W. Reeves, Pillar Point, N. Y. Hame-fastener	485,751	Nov. 8	918	246	61	778
Robare, Louis F., Au Sable Forks, assignor to himself, and R. J. Clark, Champlain, N. Y. Scale attachment	482,138	Sept. 6	345	83	60	1403
Robb, James T., Mount Vernon, assignor to Bergmann & Company, New York, N. Y. Device for supporting fixtures	480,744	Aug. 16	1595	400	60	915
Robb, James T., Mount Vernon, assignor to Edison General Electric Company, New York, N. Y. Electric-light fixture	480,745	Aug.	1596	400	60	915
Robberson, Alexander J., assignor of one-half to J. W. Hostetler, Napa, Cal. Pillow-sham holder	481,424	Aug. 23	2721	669	60	1142
Robberson, John W., Belcherville, Tex. Musical notation	482,442	Sept. 13	880	{ 211 212	{ 60	{ 1519
Robbins, Andrew B. (See Duke and Loose, assignors.)						
Robbins, Andrew B., assignor of one-half to E. W. Loose, Minneapolis, Minn. Horse-power lawn-mower	480,831	Aug. 16	1730	432	60	942
Robbins, Charles P., Calais, Me. Globe-guard for electric lights	466,576	Jan. 5	422	110	58	82
Robbins, Edward P., Cincinnati, Ohio. Underground electric circuit	469,723	Mar. 1	83	23	58	1115
Robbins, Frank C., Niles, Ohio. Metallic roofing	471,338	Mar. 22	2623	666	58	1636
Robbins, John W., Boston, Mass. Producing metallic relief-plates for pictorially burning or searing wood	475,047	May 17	1864	473	59	1023
Robbins, Josiah S., Allentown, N. J. Potato-planter and fertilizer-distributor	475,519	May 24	2608	663	59	1184
Robbins, Lorenzo M., Elizabeth, N. J. Vehicle pole or shaft	477,269	June 21	1657	405	59	1792
Robbins, Richard B., Adrian, Mich. Corn or cane harvester	475,418	May 24	2441	{ 622 623	{ 59	{ 1152
Robbins, Samuel F., Langhorne, Pa. Basket handle or carrier	479,329	July 26	2309	577	60	491
Robbins, William O., New York, N. Y. Apparatus for treating petroleum-wells	468,365	Feb. 9	719	178	58	673
Roberge, David, Sr., and David, Jr., New York, N. Y. Car-axle	486,898	Nov. 29	2785	723	61	1198
Robert, Fleury, St. Paul, Island of Réunion, Indian Ocean. Aerial tramway	466,909	Jan. 12	985	252	58	197
Robert, Paul. (See Claudin and Robert.)						
Roberts-Brevoort Electric Company. (See Roberts, Isaiah L., assignor.) (Reissue.)						
Roberts, Charles W., Lawrence, Kans. Box-machine	487,967	Dec. 13	1190	297	61	1573
Roberts, Cyrus, Three Rivers, Mich. Rail-joint	472,228	Apr. 5	346	90	59	65
Roberts, Cyrus, Three Rivers, Mich. Track gage and level	472,229	Apr. 5	348	90	59	65
Roberts, Cyrus, Three Rivers, Mich. Track gage and level	474,646	May 10	1224	313	59	883
Roberts, Cyrus, Three Rivers, Mich. Track gage and level	487,375	Dec. 6	232	61	61	1364
Roberts, Cyrus, Three Rivers, Mich. Hand-car	487,376	Dec. 6	223	61	61	1365
Roberts, Cyrus, Three Rivers, Mich. Hand-car	487,377	Dec. 6	225	61, 62	61	1365
Roberts, Cyrus, Three Rivers, Mich. Hand-car	487,378	Dec. 6	227	62	61	1366
Roberts, Edward F., Columbus, Ohio. Electric valve-controller	482,139	Sept. 6	346	83	60	1403
Roberts, Edward F., Rochester, N. Y., assignor to Roberts Manufacturing Company, of Ohio. Cash register and indicator	481,824	Aug. 30	3382	{ 828 829 830	{ 60	{ 1286
Roberts, Edward F., assignor to Roberts Manufacturing Company, Columbus, Ohio. Car-heating apparatus	483,693	Oct. 4	265	66	61	56
Roberts, Edward F., assignor to Roberts Manufacturing Company, Columbus, Ohio. Cash-register	483,946	Oct. 4	627	{ 158 159	{ 61	{ 129
Roberts, Edward F., assignor to Roberts Manufacturing Company, Columbus, Ohio. Cash-register	484,376	Oct. 11	1301	{ 332 333	{ 61	{ 277
Roberts, Edward F., assignor to Roberts Manufacturing Company, Columbus, Ohio. Cash-register	487,683	Dec. 6	724	185	61	1463
Roberts, Edward M., Charleston, S. C. Air-brake base-support	468,613	Feb. 9	1329	313	58	774
Roberts, Edward P., Cleveland, Ohio. Floating figure	479,530	July 26	2310	577	60	492
Roberts, Edward P., assignor to Swan Lamp Manufacturing Company, Cleveland, Ohio. Incandescent electric lamp	467,523	Jan. 26	1984	504	58	401
Roberts, Edwin B., Emporia, Kans. Core-saw	467,383	Jan. 19	1751	447	58	349
Roberts, Edwin H., New York, N. Y. Sidewalk-hole guard	472,661	Apr. 12	999	259	59	203
Roberts, Elmer H., Meriden, Conn. Shoe-lace fastener	472,078	Apr. 5	104	28	59	21

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr't	Vol.	Page.
Roberts y Fernandez, Hugo, Havana, Cuba. Envelope	484,674	Oct. 18	1787	455	61	386
Roberts, George J., Dayton, Ohio. Steam-pump	484,241	Oct. 11	1087	276	61	235
Roberts, George L., Grand Rapids, Mich. Fire-escape for buildings	480,518	Aug. 9	1230	308	60	828
Roberts, George W., Chisholm's Island, S. C. Phosphate-washing machine	472,820	Apr. 12	1235	317	59	246
Roberts, Henry P., Jamestown, N. Y. Inhaler	470,011	Mar. 1	550	136	58	1205
Roberts, Henry P., Jamestown, N. Y. Hydrocarbon-oil vaporizer and burner	477,872	June 28	2644	660 661	59	2001
Roberts, Henry P., Jamestown, N. Y. Boot or shoe creaser	482,529	Sept. 13	1023	249	60	1550
Roberts, Henry P., Jamestown, N. Y., assignor to F. M. Ferrin, Boston, Mass. Vaporizer	488,530	Dec. 20	2140	530	61	1780
Roberts, Isaac N., Norristown, Pa. Lamp-top holder	466,543	Jan. 5	372	93	58	72
Roberts, Isaiah L., assignor to Roberts-Brevort Electric Company, Limited, New York. N. Y. Secondary battery. (Reissue.)	11,238	Apr. 26	3020	761	59	623
Roberts, Jay H. (See Dodds, James H., assignor.)						
Roberts, John W., assignor of one-half to Sherwin-Williams Company, Cleveland, Ohio. Can-crimping machine	476,558	June 7	495	117 118	59	1535
Roberts, Joseph W., Bassettville, Kans. Hame-tug	469,425	Feb. 23	2373	609	58	1014
Roberts, Lorin. (See Fulghum, Elisha J., assignor.)						
Roberts, Lorin. (See Fulghum and Roberts.)						
Roberts Manufacturing Company. (See Roberts, Edward F., assignor.)						
Roberts, Nate H., Indianapolis, Ind. Saw-sage	469,410	Feb. 23	2349	603	58	1010
Roberts, Nate H., Indianapolis, Ind. Saw-sage	469,411	Feb. 23	2352	604	58	1010
Roberts, Richard B. (See Leonard, Roberts, and Allison.)						
Roberts, Robert, Brooklyn, N. Y. Wood-cutting tool	479,306	July 19	1906	476	60	398
Roberts, William D. (See Freeman, Thomas R., assignor.)						
Roberts, William L., San Francisco, Cal. Banjo attachment	486,053	Nov. 8	1381	367	61	871
Roberts, William M., Joliet, Ill. Self-closing gas-burner	474,695	May 10	1304	333	59	899
Robertson, Emma L. T., Port Hope, Canada. Frying-pan	471,227	Mar. 22	2468	627	58	1605
Robertson, George. (See Jewell, William M., assignor.)						
Robertson, Jackson. (See Robertson, William J. and J.)						
Robertson, James, Birmingham, England. Shaping metal tubes	481,060	Aug. 16	2096	522 523	60	1013
Robertson, James C., Glen Campbell, Pa. Mining-machine	471,434	Mar. 22	2777	709	58	1664
Robertson, James L., New York, N. Y. Exhaust-head	481,373	Aug. 23	2629	647	60	1124
Robertson, John H., New York, N. Y. Grip mechanism for cable railways	484,920	Oct. 25	2206	568	61	484
Robertson, Joseph B., Belfast, Ireland. Wheel for velocipedes	477,962	June 28	2774	695	59	2028
Robertson, Oliver H., Forestville, Conn. Nut-cracker	484,049	Oct. 11	793	200	61	177
Robertson, Peter C., Phillipsburg, Mont. Guide-holder for stamp-mills	488,453	Dec. 20	2010	502	61	1755
Robertson, Richard A., Jr., Providence, R. I. Apparatus for casting cannon	474,860	May 17	1572	401	59	965
Robertson, Richard S., Castle Gate, Utah Terr. Car-coupling	479,079	July 19	1556	389	60	331
Robertson, Rinaldo S., Artondale, Wash. Adding-machine	479,531	July 26	2311	578	60	492
Robertson, Robert A. (See Yeakley, Melvin A., assignor.)						
Robertson, Soren, Cleveland, Ohio. Car-axle box	487,231	Nov. 29	3336	849	61	1303
Robertson, Soren, assignor to Fulton Foundry Co., Cleveland, Ohio. Running-gear for street-cars	472,001	Mar. 29	3608	921 922	58	1830
Robertson, Thomas, Toronto, Canada. Confectionery-machine	488,404	Dec. 20	1928	483 484	61	1738
Robertson, Thomas W., Dublin, Ireland. Pneumatic tire	483,583	Oct. 4	104	25	61	22
Robertson, William, assignor to J. A. McPherson, Hamilton, Canada, and E. D. Weyburn, Chicago, Ill. Cementing-machine	483,367	Sept. 27	2354	591	60	1833
Robertson, William F., Cincinnati, Ohio. Hoop-fastener	472,142	Apr. 5	205	55	59	39
Robertson, William J. and J., Chicago, Ill. Hitching-weight device and support	466,837	Jan. 12	859	219	58	173
Robertson, William J., and J. B. Genin, St. Albans, assignors to themselves and E. L. Ripley, Burlington, Vt. Extension-ladder	478,969	July 12	1382	340	60	287
Robertson, William M., Newark, N. J. Machine for dyeing fabrics	468,579	Feb. 9	1058	269	58	739
Robinett, William H., Kansas City, Mo. Hydraulic motor	476,174	May 31	3654	925 926	59	1403
Robinson, Aaron J., Fremont, N. H. Grinding-mill	470,601	Mar. 8	1500	391	58	1397
Robinson, Alba H., Meeker, Colo. Fountain-pen	478,944	July 12	1338	332	60	280
Robinson, Albert S., Albany, N. Y. Bale-tie	468,467	Feb. 9	872	222	58	703
Robinson, Albert S., Montague, Tex. Apparatus for elevating and cleaning seed-cotton	470,403	Mar. 8	1216	310	58	1339
Robinson, Alfred A., Lowell, Mass. Toy	480,279	Aug. 9	854	218	60	758
Robinson, Arthur W., Bucyrus, Ohio. Excavator	471,246	Mar. 22	2492	632	58	1610
Robinson, Arthur W., Sheldon, England. Vehicle or other wheel	484,675	Oct. 18	1788	455	61	386
Robinson, Charles H. (See Sisson, Harry D., assignor.)						
Robinson, Charles H., St. Paul, Minn., assignor to A. S. Brown, Washington, D. C. Steam-heating apparatus	467,900	Jan. 26	2592	657	58	515
Robinson & Co., J. M. (See Colling, Charles J., assignor.)						
Robinson, Cyrus R., East Concord, N. H. Reducer and nozzle for hose	477,894	June 28	2556	640	59	1985
Robinson, Cyrus R., East Concord, N. H. Hose-nozzle holder	479,841	Aug. 2	100	25	60	601
Robinson, Dighton A., Minneapolis, Minn. Elevator-belt drive	481,150	Aug. 16	2255	556 557	60	1041
Robinson, Dighton A., Minneapolis, Minn. Means for transmitting power to grain-elevators	484,048	Oct. 11	791	199 200	61	177
Robinson, Frank, Sand Lake, Mich. Potato-planter	475,610	May 24	2746	696	59	1211
Robinson, Frank L., Hartland, Me. Shirt-collar holder	481,425	Aug. 23	2723	669	60	1143
Robinson, Frank S., et al. (See Whitley, Albert, assignor.)						
Robinson, George F., New York, N. Y. Feed-trough	476,071	May 31	3483	878	59	1370
Robinson, Henry, et al. (See Pope, Frederick W., assignor.)						
Robinson, Henry D., Chester, Ind. Tension device	471,571	Mar. 29	2964	755	58	1708
Robinson, James, Iowa, Wis. Garden-hoe	469,350	Feb. 23	2268	581	58	994
Robinson, James, Newark, N. J. Advertising novelty or display-card	486,899	Nov. 29	2786	723	61	1199
Robinson, James J., River View, W. Va. Elevated carrier	476,072	May 31	3484	878	59	1370
Robinson, James T., et al. (See Dobeck, Frank H., assignor.)						
Robinson, Joe and R., assignors of one-half to O. B. Lister, Dudley Hill, near Bradford, England. Support for whirls of spindle-bobbins	482,605	Sept. 13	1277	313	60	1598
Robinson, John E., Philadelphia, Pa. Constructing foundations for buildings	468,228	Feb. 2	481	118	58	618
Robinson, John E., Philadelphia, Pa. Foundation for buildings	468,229	Feb. 2	482	118	58	619
Robinson, Jonathan M., Vacaville, Cal. Propelling vessels	468,694	Feb. 9	1231	313	58	774
Robinson, Joseph, London, England. Electric-telegraph apparatus	469,273	Feb. 23	2131	548 549	58	968
Robinson, Laurence B., assignor to H. E. Payne, Milton, Tex. Turfing implement	477,453	June 21	1947	482	59	1848
Robinson, Orton H., Grand Rapids, Mich. Pencil-sharpener	471,435	Mar. 22	2779	709	58	1605
Robinson, Peter, Manchester, England. Slide-trombone	468,116	Feb. 2	312	75	58	584

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Robinson Rea Manufacturing Company <i>et al.</i> (See Cribb, Ira P., assignor.)						
Robinson, Richard. (See Robinson, Joe and R.)						
Robinson, Robert E. (See Duntfee, John C., assignor.)						
Robinson, Stillman W., Columbus, Ohio. Gage for measuring the velocity of fluids.....	481,310	Aug. 23	2544	625	60	1108
Robinson, Thomas, Cambridge, Mass. Decorating wood and other surfaces.....	470,899	Mar. 15	1958	.....	58	1495
Robinson, Thomas A. (See Teweles and Robinson.)						
Robinson, Thomas C., assignor of three-fourths to R. Stephenson and E. B. Welch, Boston, Mass. Guide for sewing-machines.....	486,811	Nov. 22	2597	676	61	1144
Robinson, Thomas H. (See Wigg, Edmund T., assignor.)						
Robinson, Walter, Syracuse, N. Y. Wall-plaster.....	472,511	Apr. 5	792	.....	59	151
Robinson, Walter, Onondaga, assignor of five-eighths to S. W. and L. S. Terry, Syracuse, N. Y. Plastering composition.....	471,081	Mar. 15	2235	.....	58	1549
Robinson, Walter H., assignor of one-half to T. R. C. Taylor, St. Paul, Minn. Clamp.....	471,437	Mar. 22	2780	710	58	1665
Robinson, William D., assignor of one-third to W. H. Savage, El Paso, Tex. Nut-lock.....	473,430	Apr. 19	2245	565	59	453
Robinson, William D., assignor of one-third to W. H. Savage, El Paso, Tex. Nut-lock.....	467,684	Dec. 6	722	186	61	1464
Robinson, William G., Morrison, Ill. Holder and support for milk-cans.....	477,454	June 21	1948	483	59	1848
Robinson, William H. (See Nowotny, John S., assignor.)						
Robinson, William N., Galt, Canada. Car-coupling.....	473,346	Apr. 19	2109	529	59	427
Robinson, William S., Chicago, Ill. Beam-compasses.....	487,892	Dec. 13	1079	270	61	1552
Robinson, William T., Birmingham, Ala. Wheel.....	486,125	Nov. 15	1523	402	61	916
Robischung, Henry B., Kalamazoo, Mich. Brake-beam.....	485,823	Nov. 8	1007	270	61	795
Robischung, Henry B., Kalamazoo, Mich. Brake-beam.....	486,218	Nov. 15	1656	438	61	942
Robischung, Henry B., Kalamazoo, Mich. Brake-beam.....	486,568	Nov. 22	2199	578	61	1064
Robischung, Henry B., Kalamazoo, Mich., assignor to National Hollow Brake Beam Company, Chicago, Ill. Brake-beam.....	466,984	Jan. 12	1103	279	58	218
Robison, Alasco C. (See West, Elbridge G., assignor.)						
Robison, Lena. (See Robison, Ralph E., assignor.)						
Robison, Ralph E., assignor to L. Robison, Atoka, Tenn. Animal-tether.....	484,377	Oct. 11	1305	334	61	278
Roche, Edward, Providence, R. I. Waterproof shoe.....	483,229	Sept. 27	2249	566	60	1813
Roche, Edward P., Bath, Me. Urethral syringe.....	488,089	Dec. 13	1413	351	61	1621
Roche, Herriek H., assignor of two-thirds to M. M. Roche, Brooklyn, N. Y. Bookbinding.....	474,483	May 10	965	249	59	834
Roche, James, assignor of one-half to H. B. Plumb, Terryville, Conn. Lock.....	470,412	Mar. 8	1227	313	58	1341
Roche, James, assignor of one-half to H. B. Plumb, Terryville, Conn. Lock.....	470,413	Mar. 8	1228	314	58	1342
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Permutation-lock.....	475,520	May 24	2609	663	59	1184
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Lock.....	476,559	June 7	500	118	59	1537
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Lock.....	481,736	Aug. 30	3231	787	60	1257
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Lock-case.....	485,685	Nov. 8	1117	295	61	817
Roche, James, assignor to Eagle Lock Company, Terryville, Conn. Trunk-lock.....	487,449	Dec. 6	368	96	61	1593
Roche, Mary M. (See Roche, Herriek H., assignor.)						
Roche, Patrick C., and C. Coleough, Gertrude, Ga. Canting-block for sawmill-carriages.....	472,821	Apr. 12	1237	317	59	247
Rochelle, Henry L., <i>et al.</i> (See Calcutt, Marvin V., assignor.)						
Rochester Hosiery Company. (See Almy, Willey H., assignor.)						
Rochford, Walter J., and E. W. Kemper, Chicago, Ill. Elevator.....	484,766	Oct. 18	1929	491	61	417
Rochlitz, William, Chicago, Ill. Apparatus for distilling water.....	473,164	Apr. 19	1791	452	59	365
Rochlitz, William, assignor to E. Roos, Chicago, Ill. Rest or bracket for easels.....	480,280	Aug. 9	855	218	60	758
Rocholl, Arnold. (See Buoroester, Paul, assignor.)						
Rock, Frederick W., assignor to Rock Lubricator Company, Detroit, Mich. Lubricator.....	468,727	Feb. 9	1280	326	58	785
Rock Lubricator Company. (See Rock, Frederick W., assignor.)						
Rockenfield, George W., Parkersburg, W. Va. Punching and shearing machine.....	474,971	May 17	1748	443	59	1001
Rockey, Aaron W., Devon, Kans. Hedge-trimming machine.....	467,022	Jan. 12	1161	294	58	229
Rockfellow, Andrew, South Richland, N. Y. Stock-watering apparatus.....	479,197	July 19	1747	438	60	367
Rockford Bolt Works. (See Mutimer, Frederick, assignor.)						
Rockhill, Robert A., <i>et al.</i> (See Marsden, Mark W., assignor.)						
Rockingham Machine Company. (See Kicker, James H., assignor.)						
Rockliff, William A., and J. P. Foley, Rumsey, Mont. Hydraulic mining-pump.....	482,810	Sept. 20	1456	361	60	1646
Rockteacher, Martin C., and J. H. McKeon, Eagle, Wis. Plumb-level.....	477,312	June 21	1731	421	59	1807
Rockwell, Albert F., Bristol, Conn. Animal-trap.....	474,303	May 3	648	164	59	763
Rockwell, Edward D., assignor to New Departure Bell Company, Bristol, Conn. Bell.....	471,982	Mar. 29	3584	914	58	1825
Rockwell, Edward D., assignor to New Departure Bell Company, Bristol, Conn. Bell.....	471,983	Mar. 29	3585	915	58	1825
Rockwell, Edward D., assignor to New Departure Bell Company, Bristol, Conn. Bell.....	482,696	Sept. 13	1278	313	60	1598
Rockwell, Edward D., assignor to New Departure Bell Company, Bristol, Conn. Bicycle-bell.....	483,084	Sept. 20	1887	477	60	1732
Rockwell, Edward D., Bristol, Conn., assignor to New Departure Bell Company, of Connecticut. Bell.....	473,854	Apr. 26	2937	740	59	607
Rockwell, F. C. (See Green, Henry, assignor.)						
Rockwell, Frederick C., Hartford, Conn. Incandescent-lamp socket.....	475,345	May 24	2330	597	59	1133
Rockwell, Frederick C., Hartford, Conn. Pedal for velocipedes.....	483,238	Sept. 27	2140	542	60	1794
Rockwell, Frederick C., Hartford, Conn. Incandescent-electric-lamp base.....	483,222	Dec. 20	1641	409	61	1682
Rockwell, Samuel O., <i>et al.</i> (See Ball, Hosea, assignor.)						
Roddey, Joseph W., <i>et al.</i> (See Hoke, Quinton J., assignor.)						
Rodding, Max. (See Biltzingslöwen, Bruno von, assignor.)						
Rodecap, George W., Middletown, Ind. Folding bed.....	478,761	July 12	1065	264	60	227
Rodecker, Peter W., assignor of one-half to C. E. Given, J. C. Royon, and J. F. Given, Sidney, Ohio. Leather-punching machine.....	488,324	Dec. 20	1799	451	61	1712
Rodenbach-Mergaert, Edouard. (See Croes, Rodenbach-Mergaert, and Lapin.)				452		
Rodenhausen, Leonhard, Philadelphia, Pa. Dumping-cart.....	477,702	June 28	2363	591	59	1950
Rodes, Joseph, San Diego, Cal. Camera-tripod.....	487,295	Dec. 6	87	26	61	1339
Rodes, Philip, Greenfield, Va. Still and process.....	476,073	May 31	3486	878	59	1370
Rodes, Tyree T., Paris, Mo. Hand-cultivator.....	478,468	July 5	624	152	60	123
Rodgers, Alexander, Sr., assignor to Rodgers Iron Manufacturing Company, Muskegon, Mich. Sawing-machine.....	482,319	Sept. 6	665	159	60	1465
Rodgers, Alexander, Sr., assignor to Rodgers Iron Manufacturing Company, Muskegon, Mich. Sawing-machine.....	482,697	Sept. 13	1279	313	60	1599
Rodgers Iron Manufacturing Company. (See Rodgers, Alexander, Sr., assignor.)						
Rodgers, James G., and A. W. Grant, assignors to Tricycle Manufacturing Company, Springfield, Ohio. Vehicle-wheel.....	468,538	Feb. 9	996	255	58	727
Rodgers, John, New York, N. Y. Cart-saddle.....	473,962	May 3	125	29	59	661
Rodgers, Richard, Cheyenne, Wyo. Vehicle.....	469,092	Feb. 16	1859	475	58	908

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Rodgers, Samuel, assignor to United States Smokeless Powder Company, San Francisco, Cal. Explosive compound	478,366	July 5	477		60	95
Rodgers, William D., Warrenton, N. C. Nut-lock	476,316	June 7	132	32	59	1463
Rodgers, William H., Bay Side, N. Y. Water-indicator for boilers	486,054	Nov. 8	1382	367	61	871
Rodman, Rollin L., Kingman, Kans. Device for steaming or tempering grain	482,590	Sept. 13	1119	270	60	1568
Rodwell, George J. B. (See Martyn, Arthur, assignor.)						
Rodwell Manufacturing Company. (See Barrett, John E., assignor.)						
Rodwell Manufacturing Company. (See Martyn, Arthur, assignor.)						
Roe, Fayette W., Omaha, Nebr. Perpetual calendar for watchcases	468,263	Feb. 2	548	134	58	630
Roe, Fayette W., Omaha, Nebr. Calendar for watch-charms	478,888	July 12	1257	311	60	264
Roe, Fayette W., U. S. Army. Perpetual calendar for watch-charms	475,156	May 17	2029	512	59	1355
Roe, Justus, Patchogue, N. Y. Tape-measure reel	475,470	May 24	2527	643	59	1168
Roe, Mary, Dayton, Minn. Heating apparatus	479,463	July 26	2197	551	60	471
Roe, William C., Honolulu, Hawaii. Lathe-center	474,265	May 3	580	143	59	750
Roehuck, Samuel, New York, N. Y. Window-screen	482,811	Sept. 20	1458	362	60	1646
Roehl, Frederick, <i>et al.</i> (See Curran, William, assignor.)						
Roehm, Edward R., assignor to Roehm & Son, Detroit, Mich. Program and score-card chatelette	481,195	Aug. 23	2328	574	60	1070
Roehm & Son. (See Roehm, Edward R., assignor.)						
Roelker, Hugo B., New York, N. Y. Return-air cooler	484,979	Oct. 25	2294	592	61	501
Röell, Cornelis F. A., London, England. Coin-operated toy	474,304	May 3	648	164 165 166 167	59	763
Roemer, William, Newark, N. J. Corner-piece for traveling-bags, boxes, &c	466,966	Jan. 12	1069	271	58	211
Roemer, William, Newark, N. J. Frame for traveling-bags. (Reissue)	11,278	Oct. 18	1934	492	61	418
Roenigk, Edwin O., Pittsburg, Pa. Awning	476,074	May 31	3487	879	59	1371
Roeser, George P., <i>et al.</i> (See McConnell, Frances S., assignor.)						
Roesler, Heinrich, assignor of one-half to B. Edelmann, Frankfort-on-the-Main, Germany. Desilvering argentiferous lead	480,416	Aug. 9	1077		60	797
Rooth, Louis, New York, N. Y. Support for bicycles	467,709	Jan. 26	2286	580	58	457
Rogers, Augustus H., North Amherst, Ohio. Wire-and-picket-fence machine	478,173	July 5	761	42	60	34
Rogers, Augustus J., Milwaukee, Wis. Process of and apparatus for controlling the discharge of molten contents of crucibles or other vessels	469,454	Feb. 23	2414	618	58	1022
Rogers, Charles A., Chicago, Ill. Trick egg	472,822	Apr. 12	1239	318	59	247
Rogers, Charles D., assignor to American Screw Company, Providence, R. I. Wood-screw and making the same	479,175	July 19	1712	429 430	60	361
Rogers, Charles S., San Antonio, Tex. Clamp or fastener for wire fences	476,411	June 7	290	68	59	1494
Rogers, Charles S., San Antonio, Tex., assignor of one-half to L. J. Overcash, New York, N. Y. Supporter for trousers and similar garments	480,672	Aug. 9	1482	369	60	877
Rogers, Charles W., Chicago, Ill. Hygrometric valve-controller	483,725	Oct. 4	298	74	61	62
Rogers, David J., assignor of two-thirds to M. W. Rogers, Lebanon, Ky., and T. T. Rogers, Perry, Mo. Picture-exhibitor	488,134	Dec. 13	1480	373	61	1634
Rogers, Edgar D., <i>et al.</i> (See Crighton, William, assignor.)						
Rogers, Edward E. (See Wright and Rogers.)						
Rogers, Ernest L., Worcester, Mass. Sheet-metal knob-fastening device	470,919	Mar. 15	1988	509	58	1500
Rogers, Eugene F., <i>et al.</i> (See Jessup, Robert W., assignor.)						
Rogers Fence Company. (See Earnest, George H., assignor.)						
Rogers, George E., Greenfield, assignor to Miller's Falls Company, Miller's Falls, Mass. Auger-handle	484,050	Oct. 11	794	200	61	177
Rogers, Hamilton, assignor to S. Mack and M. Rogers, Toledo, Ohio. Thread and needle case	470,850	Mar. 15	1892	484	58	1482
Rogers, Henry E., South Manchester, Conn. Machine for polishing paper	478,762	July 12	1067	265	60	228
Rogers, Ichabod R., Lynn, Mass. Heel-packer	484,609	Oct. 18	1666	422	61	362
Rogers, J. S., New York, N. Y. Process of and apparatus for generating electricity	487,644	Dec. 6	657	169	61	1451
Rogers, James S., Saratoga Springs, N. Y. Gas-burner for furnaces	471,275	Mar. 22	2535	644	58	1618
Rogers, James S., Saratoga Springs, N. Y. Gas generator and burner	471,361	Mar. 22	2666	677	58	1644
Rogers, James S., and J. H. Baker, Saratoga Springs, N. Y., assignors to Aeme Liquid Fuel Company, of New York. Apparatus for the manufacture of gas	471,398	Mar. 22	2720	694	58	1654
Rogers, John, Elkhart, Ind. Grinding-machine	483,749	Oct. 4	340	85	61	71
Rogers, John F., Belfast, Me. Vamp-marking machine	480,438	Aug. 9	1109	277 278	60	803
Rogers, John H. (See Jenkins, Thomas, assignor.)						
Rogers, Lebbens H., assignor to Rogers Manifold and Carbon Paper Company, New York, N. Y. Box for type-writer ribbons	485,712	Nov. 8	862	231	61	766
Rogers Manifold and Carbon Paper Company. (See Rogers, Lebbens H., assignor.)						
Rogers, Miko W., <i>et al.</i> (See Rogers, David J., assignor.)						
Rogers, Myrtie, <i>et al.</i> (See Rogers, Hamilton, assignor.)						
Rogers, Philip, Swansea, and J. Player, Clydach, near Swansea, England. Apparatus for coating metal plates with tin	471,437	Mar. 22	2781	710 711	58	1665
Rogers, Silas M. N., Bell's, Tex. Fire-kindler	488,223	Dec. 20	1643	409	61	1682
Rogers, Thompson T., <i>et al.</i> (See Rogers, David J., assignor.)						
Rogers, Thompson T., Perry, Mo. Latch	466,373	Jan. 5	90	28	58	22
Rogers, Timothy, Springfield, Ohio. Cash-register	473,887	Apr. 26	2997	756 757	59	619
Rogers, Timothy, assignor of one-half to A. Ferrell, Springfield, Ohio. Water-heating device	476,949	June 14	1126	270 271	59	1674
Rogers, William C. (See Brooks, Franklin W., assignor.)						
Rogers, William D., Alameda, and J. D. Van Buren, San Francisco, Cal. Envelope-opener	478,889	July 12	1259	311	60	264
Rogers, William H., Amherst, Canada. Fishway	484,676	Oct. 18	1789	455	61	386
Rogers, Winfield S., Troy, N. Y. Railway-car ventilator	481,196	Aug. 23	2329	574	60	1070
Rogerson, Robert. (See Rogerson, Roland and L.)						
Rogerson, Roland and R., Chicago, Ill. Smoke-consumer	471,774	Mar. 29	3285	838	58	1767
Rogowski, Hermann G., New York, N. Y. Cloth-cutting machine	472,715	Apr. 12	1090	280	59	219
Rohan, Philip, St. Louis, Mo. Shearing-machine	478,023	June 28	2875	719	59	2047
Rohan, Philip, assignor to St. Louis Improved Shear and Tool Manufacturing Company, St. Louis, Mo. Sheet-metal trimmer and cutter	476,075	May 31	3489	879 880	59	1371
Rohlen, Olot, Galesburg, Ill. Frame for screens or pictures	467,561	Jan. 26	2064	521	58	416
Rohlf, Henry J., Chicago, Ill. Safety-gate for bridges	486,738	Nov. 22	2473	645	61	1120
Rohlfing, William, Jr., Milwaukee, Wis. Pianoforte	472,588	Apr. 12	899	231	59	185
Rohlfis, Dietrich, <i>et al.</i> (See Sommer, Jacques, assignor.)						
Rohlmann, Joseph, St. Joseph, Mo. Attachment for carving-machines	477,229	June 21	1588	389	59	1779
Rohlmann, Joseph, St. Joseph, Mo. Carving-machine	478,640	July 12	880	217 218	60	196

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Rohr, Herman J., Alexis, Ill. Wire-stretcher.....	475,892	May 31	3215	813	59	1314
Rohrbach, Gabriel, Del Rio, Tex. Gate-hinge.....	468,210	Feb. 2	456	113	58	614
Rohrbach, Lloyd T. (See Edgar and Rohrbach.)						
Rohrer, Albert L., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Combined switch and switch-box.....	468,474	Feb. 9	885	{ 224 225 }	58	705
Roitman, Natan, St. Louis, Mo. Central-draft lamp.....	484,242	Oct. 11	1089	276	61	236
Roland, Richard E., Decatur, Ill. Tweezers for microscopes.....	467,630	Jan. 26	2155	548	58	433
Rolfe, Charles A., Chicago, Ill. Police-telegraph system.....	483,768	Oct. 4	367	92, 93	61	77
Rolfing, Albert, Brooklyn, N. Y. Can for liquids.....	477,455	June 21	1949	483	59	1849
Roll, Albert, South Amboy, N. J. Coal-lifter.....	483,791	Oct. 4	406	101	61	85
Rolland, Nestor, and H. François, Brussels, Belgium. Churn.....	475,346	May 24	2331	{ 597 598 }	59	1132
Roller, Frank, West Berkeley, assignor to Giant Powder Company, San Francisco, Cal. Manufacture of explosives.....	474,529	May 10	1039	.....	59	847
Rollins, Ellsworth H., <i>et al.</i> (See Morrill, George W., assignor.)						
Rollins, Fred. H. (See Clements and Rollins.)						
Rollins, George O. (See Rollins, John P., assignor.)						
Rollins, John B., <i>et al.</i> (See Glazier, George W., assignor.)						
Rollins, John P., assignor of one-half to G. O. Rollins, Cedar Rapids, Iowa. Car-coupling	479,990	Aug. 2	359	89	60	649
Rollins, Joseph B., Memphis, Tenn., assignor of one-third to O. Seyppels, Seyppels Land- ing, Ark. Bale-tie.....	486,795	Nov. 22	2571	670	61	1139
Rollman, Elmer A., Eaton, Ohio. Tobacco-planter.....	478,289	July 5	361	87	60	73
Romaine, Charles N. (See Grande, Clemente del, assignor.)						
Romaine, Charles N., Petersburg, Va. Trunk.....	474,148	May 3	403	98	59	716
Römer, Peter, Bernburg, Germany. Making potassium carbonate.....	484,921	Oct. 25	2307	568	61	484
Romkey, Frank C., Toledo, Ohio. Method of and apparatus for generating motive power.....	467,834	Jan. 26	2478	629	58	494
Romkey, Frank C., Toledo, Ohio. Steam-generator.....	467,835	Jan. 26	2482	630	58	495
Ronan, Anson G., Toronto, Canada. Tool-post.....	467,437	Jan. 19	1834	468	58	365
Roney, William R., Chicago, Ill. Furnace-grate.....	474,346	May 3	743	194	59	779
Roney, William R., Chicago, Ill., assignor to Westinghouse, Church, Kerr & Company, New York, N. Y. Grate.....	473,963	May 3	126	29	59	662
Roney, William R., and J. T. Arnold, Chicago, Ill. Grate.....	474,345	May 3	740	193	59	779
Rontke, Albert, assignor to J. Bolton, Chicago, Ill. Oscillating hook for sewing-machines	484,462	Oct. 18	1443	368	61	317
Rood, Albert O., assignor to V. P. Travers, New York, N. Y. Producing hammock-bodies.	487,857	Dec. 13	1026	257	61	1542
Roof, George R. (See Simons and Roof.)						
Rooms, Eyo, Nevada, Mo. Machine for making retorts, &c.....	480,138	Aug. 2	607	154	60	698
Rooney, John, Brooklyn, assignor to Kiggins & Tooker Company, New York, N. Y. Scrap- book.....	471,276	Mar. 22	2537	644	58	1618
Rooney, John J. (See Brophy, Owen, assignor.)						
Rooney, Michael, Quincy, Ill. Tether.....	466,529	Jan. 5	354	89	58	68
Roorbach, Orville A. (See Schofield, William B., assignor.)						
Roos, Edward. (See Rochlitz, William, assignor.)						
Roos, Edward, Chicago, Ill. Hook-rack.....	477,270	June 21	1658	405	59	1793
Roos, Israel, Frankfort-on-the-Main, Germany. Making salicylaldehyde-alpha-phenylme- thylhydrazone.....	483,290	Sept. 27	2250	.....	60	1813
Roos, Jacob, Brooklyn, N. Y. Liquid-measuring device.....	481,872	Aug. 30	3452	847	60	1300
Root, Albert A., Detroit, Mich. Safe.....	479,464	July 26	2198	552	60	471
Root, Francis H. (See Bell and Root.)						
Root, Francis H., Chicago, Ill. Galvanic battery.....	470,792	Mar. 15	1790	460	58	1462
Root, Francis H., assignor to G. H. Bliss, Chicago, Ill. Automatic gas-extinguisher.....	476,412	June 7	290	69	59	1495
Root, Samuel D., and G. C. Vineyard, Anaconda, Mont. Cable railway.....	480,519	Aug. 9	1231	{ 308 309 }	60	829
Root, Sanford O., Lodi, N. Y. Pliers.....	477,066	June 14	1304	317	59	1711
Root, William B., Springfield Centre, N. Y. Thill-coupling.....	487,350	Dec. 6	370	97	61	1394
Roper, George D. (See Warren, Edrick C., assignor.)						
Roper, James W. (See Lang and Roper.)						
Ropp, Christian. (See Hardy, John J., assignor.)						
Rosa, Edgar C., assignor to himself, R. and L. Vierling, Chicago, Ill. Vestibule connec- tion for passenger-cars.....	487,776	Dec. 13	885	224	61	1515
Rosamyer, Henry, Jr., Rochester, Pa. Wrapping-paper cutter.....	467,201	Jan. 19	1475	377	58	297
Rosback, Fredrick P., Chicago, Ill., assignor of one-half to H. F. Band, San Francisco, Cal. Fence.....	467,836	Jan. 26	2485	630	58	496
Rose, A. G. (See Aldrich, Truman H., assignor.)						
Rose, Albert F. (See Bowman, Rose, and Morse.)						
Rose, Byron H., assignor to Pullman Sash Balance Company, Rochester, N. Y. Sash-bal- ance.....	469,598	Feb. 23	2637	676	58	1065
Rose, Byron H., assignor to Pullman Sash Balance Company, Rochester, N. Y. Sash-bal- ance.....	474,329	May 3	708	183	59	773
Rose, Edward P. (See Bryant, Emory A., assignor.)						
Rose, Edwin H., Colton, Cal. Sewer, water, and drain pipe laying device.....	478,024	June 28	2875	719	59	2047
Rose, Frank H., Syracuse, assignor to Valentine & Company, New York, N. Y. Sample of paints, &c. (Reissue).....	11,226	Feb. 23	2745	705	58	1090
Rose, George, Glasgow, Scotland. Liquid-fuel furnace.....	482,834	Sept. 20	1492	371	60	1653
Rose, George, assignor of two-thirds to A. and M. B. Baird, Glasgow, Scotland. Appara- tus for burning hydrocarbon or other oils for lighting and heating.....	477,271	June 21	1659	{ 405 406 }	59	1793
Rose, Henry. (See Hay, Gilbert, assignor.)						
Rose, James E., assignor of one-half to L. R. Klumpp, Weedsport, N. Y. Sash-holder....	473,711	Apr. 26	2717	684	59	565
Rose, James M. (See Seaman, Horace W., assignor.)						
Rose, Jeffrey H. and W. A., Brooklyn, N. Y. Transom-lifter.....	474,065	May 3	291	70	59	693
Rose, Joseph, Memphis, Tenn. Elevator-brake.....	486,168	Nov. 15	1586	420	61	929
Rose, Robert, Calliope, assignor to W. W. Hall, F. E. Watkins, and T. G. Betts, Hawar- den, Iowa. Furnace-grate. (Reissue).....	11,221	Nov. 29	3352	853	61	1307
Rose, Rufus E., Kissinimmee, Fla. Process of and apparatus for washing and drying phos- phate rock, &c.....	485,660	Nov. 8	781	{ 207 208 }	61	748
Rose, William, Chestertown, Md. Puzzle.....	471,228	Mar. 22	2469	627	58	1605
Rose, William A. (See Rose, Jeffrey H. and W. A.)						
Rose, William B., St. Louis, Mo. Garbage-receptacle.....	477,576	June 21	2138	531	59	1887
Rose, William J., Horseheads, assignor of one-half to N. M. Compton, Sullivanville, N. Y. Whiffletree.....	482,698	Sept. 13	1280	314	60	1599
Rosebrook, Harry N. (See Richards, Garwood, and Rosebrook.)						
Rosenbury, Lewis H., Philadelphia, Pa. Steam-boiler.....	484,463	Oct. 18	1445	368	61	317
Rosenbaum, Henry W., and E. Neubert, New York, N. Y., assignors to said Rosenbaum. Registering-stamp.....	480,965	Aug. 16	1938	485	60	982

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Rosenbaum, Henry W., and E. Neubert, New York, N. Y., assignors to said Rosenbaum. Coin-actuated stamp	480,966	Aug. 16	1940	485	60	982
Rosenbaum, William A., <i>et al.</i> (See Ashley, Frank M., assignor.)						
Rosenberg, Samuel C. (See Docter, Albert M., assignor.)						
Rosencrans, Josephus, Judson, Kans. Weed-cutter for cultivator-plows	471,687	Mar. 29	3140	800	58	1740
Rosenfeld, Louis, New York, N. Y. Feeder for coal, ore, &c	482,652	Sept. 13	1202	293	60	1583
Rosenfeld, William, Manistee, Mich. Heel-plate and ice-creeper	472,396	Apr. 5	612	155	59	114
Rosenfeld, William, Manistee, Mich. Heel-plate-attaching machine	472,397	Apr. 5	613	155	59	115
Rosenfeld, William W., New York, N. Y., assignor to Empire Cash Register Company. Column-printing device	478,524	July 5	710	172	60	141
Rosenholz, Alfred, Wardner, Idaho. Wave-power motor	472,398	Apr. 5	614	156	59	115
Rosenstein, Louis. (See Davis, John B., assignor.)						
Rosenstiehl, Daniel A., Paris, France. Making azo colors	483,368	Sept. 27	2355		60	1833
Rosenstock, Moritz, New York, N. Y. Suspenders	474,530	May 10	1010	266	59	847
Rosenthal, Adolph, assignor of three-fourths to C. Rosenthal, H. Goldstein, and L. Bash, Boston, Mass. Hat, cap, &c	482,950	Sept. 20	1636	424	60	1690
Rosenthal, Benjamin, and O. D. Noble, Chicago, Ill. Lard-cooling tank	469,305	Feb. 23	2190	561	58	978
Rosenthal, Charles, <i>et al.</i> (See Rosenthal, Adolph, assignor.)						
Rosenthal, Gunther F. C., Philadelphia, Pa. Draft-guard for cars	475,611	May 24	2747	696	59	1212
Rosenthal, Louis, and S. Frank, Frankfurt-on-the-Main, Germany. Apparatus for reproducing sounds	474,410	May 10	852	223	59	813
Rosentreter, Albert J., and J. G. O'Brien, Rochester, N. Y. Sash-balance	488,699	Dec. 27	2409	597	61	1849
Rosentreter, Frank L., assignor to Caldwell Manufacturing Company, Rochester, N. Y. Sash-balance	487,335	Dec. 6	158	45	61	1352
Rosenzweig, Max S., New York, N. Y. Tray	479,664	July 26	2512	625	60	529
Rosier, Charles S., Chaffee, N. Y. Cattle-stanchion	486,353	Nov. 15	1873	493	61	987
Rosine, Conrad, Chicago, Ill. Automatic screw-cutting machine	471,194	Mar. 22	2415	614 615	58	1594
Ross, Alva, Virden, Ill. Swinging gate	472,716	Apr. 12	1092	280 281	59	219
Ross, Benjamin M., Syracuse, N. Y. Ventilating cars	470,602	Mar. 8	1502	392	58	1397
Ross, Charles, Milwaukee, Wis. Elevator	474,609	May 10	1165	296	59	872
Ross, David C. H., Cedar Rapids, Iowa. Combined blotter and ruler	472,079	Apr. 5	104	28	59	21
Ross, Frank A., assignor to Fraser & Chalmers, Chicago, Ill. Ore-crusher	475,347	May 24	2333	598	59	1132
Ross, George S., Rochester, Mich. Truss	466,517	Jan. 5	336	84	58	65
Ross, Herbert C. (See Brower and Ross.)						
Ross, James J., assignor of one-half to G. R. Holden, Detroit, Mich. Electro-magnetic bell	486,354	Nov. 15	1874	493	61	987
Ross, James J., assignor of one-half to G. R. Holden, Detroit, Mich. Electric signaling device	486,569	Nov. 22	2200	579	61	1065
Ross, James W., Youngstown, Ohio. Door-bell	468,403	Feb. 9	782	194	53	685
Ross, Jerrold D., Minneapolis, and E. Westcott, Brownville, Minn.; said Westcott assignor of one-half to said Ross. Cooking utensil	472,002	Mar. 29	3610	922	58	1831
Ross, John P., Waterloo, Ala. Tire-tightener	487,777	Dec. 13	866	225	61	1515
Ross, Oliver P., Olean, N. Y., assignor to White Ross Manufacturing Company, Carlisle, Pa. Fishing-reel	468,180	Feb. 2	413	102	58	605
Ross, Robert N., and H. H. Keller, assignors of one-half to M. S. Bowman, St. Louis, Mo. Brick-machine	487,161	Nov. 29	3198	819 820	61	1280
Ross, Simon, Cincinnati, Ohio. Sole-trimming machine	472,399	Apr. 5	615	156 157	59	115
Ross, Simon, Jr., Cincinnati, Ohio. Abrading and finishing tool	472,823	Apr. 12	1240	318	59	247
Ross, Simon, Jr., Cincinnati, Ohio. Press for attaching abrasive material to tools	472,824	Apr. 12	1241	318	59	247
Ross, William, Willard, Tex. Grinding-machine	477,067	June 14	1306	317 318	59	1711
Ross, William L., Boston, Mass. Support for bicycles	468,920	Feb. 16	1582	401	58	853
Ross, William S., Madisonville, Ky. Urinal	482,754	Sept. 20	1378	341 342	60	1629
Rossberg, Godfrey, Brooklyn, N. Y. Button	476,076	May 31	3490	880	59	1371
Rosse, James M., Nyack, N. Y. Ice-forming and preserving room	485,805	Nov. 8	982	264	61	791
Rossell, William T., and H. F. Hayden, Washington, D. C. Garbage-receptacle	486,619	Nov. 22	2290	597	61	1082
Rossi, Auguste J., New York, assignor of one-half to J. MacNaughton, Albany, N. Y. Reducing ores	486,941	Nov. 29	2861		61	1213
Rossmann, William W., assignor of one-half to C. K. Day, Detroit, Minn. Turbine water-wheel	488,029	Dec. 13	1310	327	61	1599
Rost, Ernest C., <i>et al.</i> (See Schwartz, William, assignor.)						
Rost, Maximilian. (See Ortmann, Paul, assignor.)						
Röstel, Carl, assignor to Grusonwerk, Magdeburg, Germany. Breech-loading firearm	480,627	Aug. 9	1409	351 352	60	863
Rotary Engine Syndicate. (See Towlson, Edward, assignor.)						
Rotary Steam Joint Company. (See Morgan, John B., assignor.)						
Roth, Charles F., assignor of one-half to Kelly Nail and Iron Company, Ironton, Ohio. Attachment for cut-nail machines	483,085	Sept. 20	1889	478 479	60	1733
Roth, Charles H., Cincinnati, Ohio. Pneumatic tire	481,197	Aug. 23	2330	574	60	1070
Roth, George, Highland, Ill. Can-cleaning machine	477,703	June 28	2364	591	59	1930
Rothacker, George F., Jr. (See Schultz, Frederick W., assignor.)						
Rothan, George J., Peoria, Ill. Adjustable screen-frame	476,077	May 31	3490	880	59	1371
Rothe, Anton, Chicago, Ill. Shirt-bosom	484,243	Oct. 11	1092	277	61	236
Rothensbücher, George, New York, N. Y. Valve-gear	477,848	June 28	2601	652	59	1994
Rotherham, George, Philadelphia, Pa. Belt-fastening for driving machinery	471,140	Mar. 22	2339	599	58	1580
Rothfuss, Michael, Williamsport, Pa. Engine-governor	473,712	Apr. 26	2718	684	59	565
Rothfuss, Michael, Williamsport, Pa. Rotary valve	472,717	Apr. 12	1091	281	59	219
Rothlisberger, Ernesto, Lima, Ohio. Electric low-water alarm	480,673	Aug. 9	1484	369	60	877
Rothrock, Lewis W., Morrisdale Mines, Pa. Neck-yoke	481,825	Aug. 30	3366	830	60	1287
Rothschild, Isaac, and E. F. Van Cotte, assignors to S. Adler, New York, N. Y. Detachable music rest or holder	475,249	May 17	2174	553	59	1084
Rothwell, John H., <i>et al.</i> (See Sneddon, William, assignor.)						
Rotté, Alexandre, P., and P. Gauthier, Blois, France. Crimping-machine	488,252	Dec. 20	1685	421	61	1691
Round, Richard W. (See Sherman, John J., assignor.)						
Rounds, Albert W. (See Dewar, Hector, assignor.)						
Rounds, George M., Taunton, Mass. Bale-tie cutter	480,876	Aug. 16	1796	449	60	955
Rountree, Frank, <i>et al.</i> (See Nolley, David D., assignor.)						
Rountree, Henry W., Richmond, Va. Trunk	471,899	Mar. 29	3469	885	58	1803
Rounke, John, assignor of one-half to A. C. Giltner, Denver, Colo. Smelting or reducing plant	484,942	Oct. 25	2238	576 577	61	490

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Rouse, Albion M., assignor to G. R. Williamson, Boulder, Colo. Method of and apparatus for separating slime or fines from water used in milling ores	439,599	Feb. 23	2638	{ 676 677 }	58	1065
Rouse, George. (See Rouse and Hanley.)						
Rouse, John H., Advance, Mo. Harrow	468,551	Feb. 9	1013	259	58	731
Rouse, John H., Advance, Mo. Treadle	469,426	Feb. 23	2373	609	58	1014
Rouse, John H., assignor of one-half to J. T. Stratman, Jr., Advance, Mo. Rail-joint	484,341	Oct. 11	1250	319	61	267
Rouse, Lewis and G., and W. H. Hanley, Baldwinville, N. Y. Sulky-plow	486,266	Nov. 15	1742	459	61	961
Rouse, Seymour A., Indianapolis, Ind. Windmill-hinge	472,825	Apr. 12	1242	318	59	248
Rouse, Seymour A., Indianapolis, Ind. Wind-engine	478,945	July 12	1340	{ 332 333 }	60	280
Rousseau, Alphonse, assignor of one-half to J. P. Rousseau, Fall River, Mass. Clothes-pounder	471,025	Mar. 15	2151	553	58	1532
Rousseau, Frank X., Detroit, Mich. Tackle-block	476,078	May 31	3492	880	59	1372
Rousseau, John P. (See Rousseau, Alphonse, assignor.)						
Rousseau, Paul C., M. J. de Chantérac, Paris, and M. J. D. A. de la Baume, Tourtour, France. Purification of alcoholic liquids	470,447	Mar. 8	1289	-----	58	1354
Rouston, John F., Detroit, Mich. Lathe-chuck	471,572	Mar. 29	2965	755	58	1709
Routh, Oswald R., Jersey City, N. J. Apparatus for burning petroleum-oils, &c	476,560	June 7	503	118	59	1537
Rover, John and W. A., Lima, Ohio. Draw-timber for cars	482,653	Sept. 13	1203	293	60	1583
Rover, William A. (See Rover, John and W. A.)						
Rowan, John. (See Underwood, Thomas M., assignor.)						
Rowan, John K., North Washington, Pa. Carriage-guide	486,299	Nov. 15	1789	470	61	971
Rowan, John L., Joplin, Mo. Rotary steam-engine	478,240	July 5	287	70	60	58
Rowan, William. (See Morton and Rowan.)						
Rowand, Lewis G., Camden, N. J., assignor to H. C. Terry, Philadelphia, Pa. Thermostat	474,149	May 3	404	98	59	717
Rowand, Lewis G., Camden, N. J., assignor to H. C. Terry, Philadelphia, Pa. Fire-alarm system	477,068	June 14	1308	{ 318 319 }	58	1712
Rowand, Lewis G., Camden, N. J., assignor to H. C. Terry, Philadelphia, Pa. Fire-alarm system	477,069	June 14	1320	320	59	1714
Rowand, Lewis G., Camden, N. J., assignor to H. C. Terry, Philadelphia, Pa. Fire-alarm system	477,070	June 14	1322	320	59	1715
Rowand, Lewis G., Camden, N. J., assignor to H. C. Terry, Philadelphia, Pa. Annunciator	477,071	June 14	1324	321	59	1715
Rowe, Alfred M., Chicago, Ill. Feed-water heater	468,181	Feb. 2	414	103	58	605
Rowe, Elijah F., Granite Falls, Minn. Combined scrubber and mop-head	472,486	Apr. 5	748	190	59	142
Rowe, George H., Belton, Tex. Peg for violins	473,347	Apr. 19	2110	530	59	427
Rowe, Henry L., New York, N. Y., and G. W. McDonald, Franklin, N. J. Washing-machine attachment	480,037	Aug. 2	448	{ 113 114 }	60	667
Rowe, Isaac N., assignor of one-half to D. D. Mims, Wood's, Tex. Collecting, conveying, and unloading apparatus	466,625	Jan. 5	503	129	58	97
Rowe, Isaac N., assignor of one-half to D. D. Minis, Wood's, Tex. Conveying apparatus	483,120	Sept. 20	1943	491	60	1744
Rowe, John P. W. (See Munn and Rowe.)						
Rowell, Benton C., Boston, Mass. Device for automatically operating power car-brakes	475,893	May 31	3217	814	59	1315
Rowell, Benton C., assignor of one-half to D. H. Vincent, Boston, Mass. Extensible electrical conductor	466,427	Jan. 5	187	49	58	36
Rowell, Herbert M. (See Boyden, Lewis H., assignor.)						
Rowell, James H., Minneapolis, Minn. Horse-boot	487,296	Dec. 6	88	27	61	1339
Rowell, Loren G., et al. (See Burton, Clarence A., assignor.)						
Rowell, William M., Fort Meade, Fla. Method of and device for grafting	471,573	Mar. 29	2966	756	58	1709
Rowland, Charles L., Brooklyn, N. Y. Valve-operating mechanism	486,219	Nov. 15	1658	438	61	943
Rowland, George R., Brooklyn, N. Y. Toy money-safe	478,890	July 12	1259	311	60	264
Rowland, Thomas F., New York, N. Y. Hydraulic elevating machinery	488,836	Dec. 27	2613	{ 647 648 }	61	1890
Rowland, Thomas F., New York, N. Y. Hydraulic elevating machinery	488,837	Dec. 27	2616	{ 648 649 }	61	1891
Rowland, Thomas F., New York, N. Y. Mechanism for operating ordnance	488,838	Dec. 27	2617	{ 649 650 }	61	1891
Rowland, Thomas F., Jr., assignor to Continental Iron Works, Brooklyn, N. Y. Welding-machine	468,009	Feb. 2	157	38	58	554
Rowland, William L., Philadelphia, Pa. Ammonia-distilling apparatus	478,132	July 5	76	20	60	17
Rowlett, Jacob V., Richmond, Ind. Rake	479,842	Aug. 2	101	26	60	602
Rowlett, Jacob V., Richmond, Ind. Lawn-mower	479,843	Aug. 2	102	26	60	602
Rowlett, James H., Ludlow, Mo. Replanting attachment for cultivators	473,964	May 3	129	29	59	662
Rowntree, Harold, Kansas City, Mo., assignor to Crane Elevator Company, Chicago, Ill. Elevator-controlling device	473,198	Apr. 19	1862	469	59	377
Rowntree, Harold, assignor of one-half to J. B. Burdett, Kansas City, Mo. Device for operating elevator-doors	479,956	Aug. 2	253	71	60	636
Rowntree, Harold, Kansas City, Mo., and I. Veeder, assignors to Crane Elevator Company, Chicago, Ill. Elevator-controller	473,199	Apr. 19	1864	{ 469 470 }	59	377
Roxby, Richard, Dartmouth, Canada. Rail-joint	477,156	June 14	1443	354	59	1739
Roy, Freand M. S., New York, N. Y. Thermocauter	488,454	Dec. 20	2012	502	61	1756
Royal Machine Company. (See Brown, Charles F., assignor.)						
Royau, Alexandre A., Châtillon-Sous-Bagneux, near Paris, France. Candle-molding machine	475,521	May 24	2612	{ 664 665 }	59	1184
Royce, Charles. (See Miller, Charles W., assignor.)						
Royer, Joseph R., assignor to M. S. Royer, Lancaster, Pa. Door-securer	485,661	Nov. 8	783	208	61	749
Royer, Leander K., Anderson, Ind. Preserving-can	488,839	Dec. 27	2623	650	61	1892
Royer, Milton S. (See Royer, Joseph R., assignor.)						
Royon, Joseph C., et al. (See Rodecker, Peter W., assignor.)						
Royse, John, Bonham, Tex. Ant trap	473,965	May 3	131	30	59	662
Royle, John, Jr. (See Royle, Vernon, and J., Jr.)						
Royle, Vernon and J., Jr., Paterson, N. J. Machine for covering wire, cables, &c., and for making tubing and cord	466,910	Jan. 12	986	252	58	197
Ru Ton, Hiram W., assignor to Goshen Folding Bed Company, Goshen, Ind. Attachment for folding beds	475,250	May 17	2175	554	59	1085
Rubber Tipped Arrow Company. (See Porter, Stephen, assignor.)						
Rubel, Joseph S., Le Mars, Iowa. Incubator	482,755	Sept. 20	1379	342	60	1630
Rubenstein, Nathan, New York, N. Y. Automatic alarm	476,217	May 31	3740	{ 944 945 }	59	1418
Rubin, Eduard, Thun, Switzerland. Cartridge	468,580	Feb. 9	1060	270	58	740
Rubin, Jacob. (See Shostak, Joseph, assignor.)						
Ruble American Blower and Injector Company. (See Ruble, Martin R., assignor.)						
Ruble, Martin R., Newark, N. J. Centrifugal steam-injector	467,655	Jan. 26	2194	{ 557 558 }	58	440

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Ruble, Martin R., assignor to Ruble American Blower and Injector Company, Newark, N. J. Centrifugal blower.....	487,883	Dec. 13	1065	267	61	1549
Ruch, Jacob, and E. Stair, Mount Eaton, Ohio; said Stair assignor to said Ruch. Vehicle.....	471,026	Mar. 15	2151	553	58	1532
Ruecht, Christian, Louisville, Ohio. Faucet.....	471,574	Mar. 29	2967	756	58	1709
Rudall, Alfred, St. Agnes, England. Telescope.....	471,708	Mar. 29	3169	808	58	1746
Rudasill, Jacob, Cherryville, N. C. Machine for cleaning wheat.....	478,469	July 5	625	152	60	124
Rudd, Charles H., assignor to Western Electric Company, Chicago, Ill. System of testing electric circuits.....	476,317	June 7	133	32	59	1464
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. System of testing for electric circuits.....	476,490	June 7	407	95	59	1516
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Testing apparatus for electric-lighting circuits.....	480,038	Aug. 2	449	114	60	667
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Device for measuring electrical currents.....	480,039	Aug. 2	451	{ 114 115 }	{ 60 60 }	668
Rudd, Charles H., Evanston, assignor to Western Electric Company, Chicago, Ill. Measuring the strength of magnets.....	483,168	Sept. 27	2030	513	60	1772
Rudd, Charles R. (See Rudd, Harrison and C. R.)						
Rudd, David, Lacona, N. Y. Finger-bar.....	466,428	Jan. 5	189	49	58	36
Rudd, Harrison and C. R., Fulton, N. Y. Split pulley.....	488,253	Dec. 20	1688	421	61	1691
Rudd, Peter C. H., Chicago, Ill. Rotary oven.....	485,300	Nov. 1	217	61, 62	61	617
Ruddell, Thomas, Onstie, Canada. Grate-cleaner and cinder and ash separator.....	470,212	Mar. 8	874	216	58	1277
Ruddock, William H., et al. (See Beckwith, Theodore A., assignor.)						
Rudert, George K., Pittsburg, Pa. Chain gate.....	484,572	Oct. 18	1610	409	61	350
Rudge, Frederick S., Brooklyn, N. Y. Adjustable button and buttonhole.....	488,090	Dec. 13	1414	351	61	1621
Rudolph, Alexander J., San Francisco, Cal. Continuous revolving file and index.....	473,348	Apr. 19	2111	530	59	427
Rudolph, Alexander J., San Francisco, Cal. Continuous file or index.....	483,312	Sept. 27	2280	573	60	1819
Rudolph, Alexander J., San Francisco, Cal. Library catalogue.....	483,313	Sept. 27	2281	573	60	1819
Rudolph, Christian, assignor to Firm of K. Oehler, Offenbach, Germany. Azo dye.....	468,049	Feb. 2	215	.....	58	567
Rudolph, Ernst B., deceased; W. E. Boulter, Washington, D. C., administrator. Leading-in device for overedge sewing-machines.....	473,996	May 3	174	41	59	672
Rudolph, Franklin. (See Clause, John J., assignor.)						
Rudorf, George R., St. Louis, Mo. Support for chamber-vessels.....	472,826	Apr. 12	1243	319	59	248
Rudyard, Clarence A., New York, N. Y. Attachment for canes, umbrellas, &c.....	485,806	Nov. 8	984	264	61	791
Rue, Isaac T., Matawan, N. J. Enamelled brick and making the same.....	479,021	July 19	1471	.....	60	315
Ruede, James H., Woodville, Mo. Clothes-drier.....	487,429	Dec. 6	329	84	61	1386
Ruef, Charles S., assignor to Grand Detour Plow Company, Dixon, Ill. Draft-equalizer.....	485,138	Oct. 25	2533	650	61	550
Rueff, Frederick W., San Francisco, Cal. Fermenting process.....	481,061	Aug. 16	2104	523	60	1013
Ruehle, Friedrich O. and A. G. Schmidt, assignors to American Art Stove and Mantel Company, Newark, N. J. Stove.....	484,113	Oct. 11	874	222	61	193
Ruemmeli, Albert, and F. Bauer, St. Louis, Mo., assignors to De La Vergne Refrigerating Machine Company, of New York. Ice-discharging apparatus.....	469,320	Feb. 23	2207	566	58	982
Rueter, Henry A., Boston, Mass. Covered electric wire.....	473,713	Apr. 26	2719	684	59	565
Ruff, William J., Quincy, Ill. Spraying device.....	471,141	Mar. 22	2340	599	58	1580
Ruffin, Marie C. A. (See Bang and Ruffin.)						
Ruffin, Powhattan. (See Toliver and Ruffin.)						
Ruge, Orlando C. (See Peterson and Ruge.)						
Ruger, James W., Buffalo, N. Y. Cracker-machine.....	467,710	Jan. 26	2288	{ 580 581 }	{ 58 58 }	458
Ruger, Nelson, Elmira, N. Y. Churn.....	483,584	Oct. 4	105	26	61	23
Rugg, Ephraim T., Alexandria, Ohio. Rope-hold.....	482,756	Sept. 20	1380	342	60	1630
Ruhe, Henry, et al. (See Widmer, Jacob A., assignor.)						
Ruhl, Christian H., trustee. (See Jackson, Calvin, assignor.)						
Ruhl, David L. (See Ruhl, John W., assignor.)						
Ruhl, John W., assignor of one-half to D. L. Ruhl, Mifflinburg, Pa. Gate.....	479,665	July 26	2513	625	60	529
Ruhlow, August F., Pierce, Nebr. Bridle-bit.....	484,342	Oct. 11	1250	319	61	267
Rulofson, Alfred C., San Francisco, Cal. Currycomb.....	472,550	Apr. 12	848	217	59	175
Rumely, William N., Laporte, Ind. Journal-bearing.....	477,272	June 21	1662	406	59	1793
Rumford Chemical Works. (See Catlin, Charles A., assignor.)						
Rumpf, Martin H., Paris, France. Fabric-guiding device for embroidering-machines.....	486,355	Nov. 15	1876	{ 493 494 }	{ 61 61 }	987
Rumsey, Charles B., assignor to Wire Fabric Company, Homer, N. Y. Galvanizing or tinning wire-cloth.....	474,567	May 10	1104	282	59	861
Rundell, W. G., et al. (See Taylor, Barnett, assignor.)						
Rundle, Anthony M. (See Murphy, Frank J., assignor.)						
Rundle, William O., De Smet, S. D. Corn-planter.....	483,872	Oct. 4	522	131	61	108
Rundquist-Wanner, Frans H., Stockholm, Sweden. Wheel.....	479,722	July 26	2624	651	60	549
Runge, Gustave. (See Bingham and Runge.)						
Runkel, Friedrich, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Triphenylmethane dye.....	476,413	June 7	292	.....	59	1495
Runkel, Friedrich, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Triphenylmethane dye.....	476,414	June 7	293	.....	59	1495
Runkel, John P., Milwaukee, Wis. Device for operating doors to elevator-wells.....	475,022	May 17	1828	463	59	1016
Runser, Sebastian, Greenville, Pa. Setting for steam-boilers. (Reissue).....	11,268	Sept. 6	687	{ 163 164 }	{ 60 60 }	1470
Runser, Sebastian, Sharon, Pa. Steam-boiler and boiler-furnace.....	482,197	Sept. 6	452	109	60	1424
Runyon, Charles, Rochester, Pa. Packing glassware for shipment.....	485,985	Nov. 8	1273	337	61	850
Rupert, Charles G. (See Frist and Rupert.)						
Rupert, Dennis R., and W. H. Worst, Williamsport, N. D. Mowing-machine.....	468,264	Feb. 2	549	135	58	630
Rupert, George G., assignor of one-half to W. H. Logan, Decatur, Ill. Attachment for latches.....	479,723	July 26	2625	651	60	549
Ruple, Daniel B., Columbus, Ohio. Vehicle-gearing.....	476,822	June 14	914	224	59	1632
Ruppel, Henry, assignor to Dangler Stove and Manufacturing Company, Cleveland, Ohio. Stove for burning hydrocarbon oil and its vapors.....	471,399	Mar. 22	2724	{ 694 695 }	{ 58 58 }	1655
Ruppel, Henry, Cleveland, Ohio, assignor to Dangler Stove and Manufacturing Company. Vapor-stove.....	480,281	Aug. 9	856	{ 218 219 }	{ 60 60 }	758
Ruppert, Jacob, Jr., et al. (See Cudner, Gustavis L., assignor.)						
Rupprecht, George J., Philadelphia, Pa. Tronsers.....	472,273	Apr. 5	416	107	59	78
Rupprecht, Joseph, St. Louis, Mo. Street-sprinkler.....	467,303	Jan. 19	1632	415	58	326
Rusch, Christian, assignor of one-half to F. C. Hamm, Milwaukee, Wis. Stovepipe-faster.....	479,844	Aug. 2	103	26	60	602
Ruscoe, John, Hyde, England. Apparatus for charging gas-retorts.....	476,685	June 7	685	{ 166 167 }	{ 59 59 }	1573
Ruscoe, John, Hyde, England. Apparatus for drawing gas-retorts.....	476,686	June 7	688	{ 168 169 }	{ 59 59 }	1573

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
Rusden, Ethelbert A., Providence, R. I. Roller washing-machine	470,828	Mar. 15	1862	477	58	1476
Rusden, Ethelbert A., Providence, R. I. Machine for cleaning and soaping fabrics	473,266	Apr. 19	1973	{ 494 495 }	59	400
Rusden, Ethelbert A., Providence, R. I. Oxidizing apparatus	485,357	Nov. 1	323	86, 87	61	638
Russgrove, Henry W., Everett, Mass., assignor to Boston and Lockport Block Company, Jersey City, N. J. Differential block	485,115	Oct. 25	2496	641	61	543
Rush & Gildemeyer Manufacturing Company. (See Broomell, Henry, assignor.)						
Rush, John S., Denver, Colo. Dry closet	481,155	Aug. 16	2263	{ 558 559 }	60	1043
Rush, John T., assignor of seven-eighths to J. G. McCamant and G. W. Friedly, Tyrone, Pa. Machine for scoring and marking shingles	481,198	Aug. 23	2332	574	60	1071
Rush, Ulysses S., assignor of two-thirds to H. L. Jenkins and W. G. Gossin, Tacoma, Wash. Photographic-printing apparatus and process	487,937	Dec. 13	1152	288	61	1566
Rush, William, assignor of one-half to S. L. Smith, Tyrone, Pa. Level	474,861	May 17	1575	401	59	966
Rush, William H., Elmwood, Nebr. Extension-feed for corn-shellers	483,239	Sept. 27	2141	{ 542 543 }	60	1794
Rushmore, Samuel W., Brooklyn, N. Y. Electric-arc lamp	472,274	Apr. 5	417	107	59	78
Russ Jones Desk Company. (See Jones, John R., assignor.)						
Russell, Jacob B., Willow Street, Pa. Bed-spring	488,030	Dec. 13	1311	327	61	1569
Russell, Benjamin, Portsmouth, N. H. Construction of buildings	484,244	Oct. 11	1092	277	61	236
Russell, Charles A., Providence, R. I. Finger-ring	477,825	June 28	2557	640	59	1985
Russell, Charles F., New Haven, Conn. Sash-fastener	473,670	Apr. 26	2654	669	59	553
Russell, Charles H., et al. (See Collum, George S., assignor.)						
Russell, Charles S., administrator. (See Russell, George E.)						
Russell, Dan, et al. (See Jones and Myers, assignors.)						
Russell, Edward P., Newburyport, Mass. Bracket for trolley-wire supports, &c	466,956	Jan. 12	1055	{ 267 268 }	58	209
Russell & Erwin Manufacturing Company. (See Allen, Howard D., assignor.)						
Russell & Erwin Manufacturing Company. (See Burgess, Charles M., assignor.)						
Russell & Erwin Manufacturing Company. (See Forrest, Earnest J., assignor.)						
Russell & Erwin Manufacturing Company. (See Foster and Rackliff, assignors.)						
Russell & Erwin Manufacturing Company. (See Hurd, Norman B., assignor.)						
Russell & Erwin Manufacturing Company. (See Jones, Horace K., assignor.)						
Russell & Erwin Manufacturing Company. (See Voight, Henry G., assignor.)						
Russell, Francis T., Minneapolis, Minn. Car-coupling	485,061	Oct. 25	2421	622	61	526
Russell, Frank R. (See Russell and Gierding, assignors.)						
Russell, George B., Fort Payne, Ala. Machine for pointing pickets and shingles	485,431	Nov. 1	432	115	61	661
Russell, George E., deceased, Memphis, Tenn.; C. S. Russell, administrator. Grain scouring, polishing, and separating machine	470,077	Mar. 1	650	161	58	1225
Russell, George F., Lawrence, assignor to American Sulphite Pulp Company, Boston, Mass. Pulp-digester. (Reissue)	11,282	Nov. 15	1978	525	61	1008
Russell, George W., Jr., and D. B. Minor, assignors to said Russell and A. V. Officer, Denver, Colo. Circuit-switch	483,123	Sept. 20	1950	493	60	1745
Russell, Henry T., Chicago, Ill. Hydrocarbon-burner	471,721	Mar. 29	3201	816	58	1751
Russell, Henry T., Chicago, Ill. Oil-burning device	473,165	Apr. 19	1793	{ 452 453 }	59	365
Russell, Irvin A., assignor of one-half to J. E. Burgess, Minneapolis, Minn. Vehicle-wheel	476,415	June 7	295	69	59	1495
Russell, James W., Boston, Mass. Snow-plow	470,951	Mar. 15	2037	521	58	1510
Russell, John, Richmond, Ind. Bed-lounge	472,589	Apr. 12	900	231	59	185
Russell, John A., Chicago, Ill. Loop-taker for sewing-machines	472,512	Apr. 5	792	203	59	151
Russell, John R., assignor of one-half to F. C. Keller, San Francisco, Cal. Ore-feeder	466,881	Jan. 12	941	240	58	188
Russell, John T., and J. D. Williams, Rogers, Ark. Hay-press	484,757	Oct. 18	1910	{ 487 488 }	61	412
Russell, Justin E., Chicago, Ill. Fitting or connection for supply-pipes and branch pipes of radiators	483,392	Sept. 27	2397	{ 602 603 }	60	1841
Russell, Madison J., Los Angeles, Cal. Bicycle-stand	477,705	June 28	2367	592	59	1950
Russell, Nathan B. (See Tomey, John J., assignor.)						
Russell, Philip G., et al. (See Pollard, James M., assignor.)						
Russell, Richard V., Rochester, Minn. Combination-case for barbers	471,752	Mar. 29	3249	827	58	1760
Russell, Robert S., Brownsville, Tenn. Car-coupling	477,577	June 21	2139	532	59	1888
Russell, Sullivan J., Jersey City, N. J. Stemming device for flowers	477,704	June 28	2366	591	59	1950
Russell, Susie M. (See Gilbert, Franklin T., assignor.)						
Russell, Thomas, et al., trustees. (See Hill, Charles, assignor.)						
Russell, William, assignor of one-half to S. M. Kenney, Hamilton, Canada. Machine for shocking grain	475,612	May 24	2748	697	59	1912
Russell, William N., and T. N. Gierding, assignors of one-third to F. R. Russell, New Haven, Conn. Coin-controlled fortune-wheel	487,968	Dec. 13	1191	297	61	1574
Russell, William R., assignor of one-half to E. E. Harrold, Adelaide, and W. Heithersay, Petersburg, South Australia. Plowshare	472,400	Apr. 5	618	157	59	116
Russell, Willis W., Norwood, and J. Walt, Cincinnati, Ohio. Shutter-fastener	472,551	Apr. 12	849	217	59	175
Russmann, Claus H. P., Hamburg, Germany. Apparatus for transmitting motion	485,597	Nov. 1	679	180	61	714
Rnst, Ezra. (See Gohl, Christian H., assignor.)						
Rutherford, Norman F., Bathurst, New South Wales. Electric-arc lamp	477,273	June 21	1663	406	59	1793
Ruthrauff, John M., Dixon, Ill. Kneading-machine	478,133	July 5	78	21	60	18
Ruthven, Robert C., Buffalo, N. Y., assignor to Barber Asphalt Paving Company, New York, N. Y. Combination road-roller	482,757	Sept. 20	1381	{ 342 343 }	60	1630
Rutschman, George H., Philadelphia, Pa. Slate-pencil sharpener	472,313	Apr. 5	480	124	59	90
Rutter, Alfred T., Cape Town, Cape Colony. Harness-collar	468,898	Feb. 16	1542	392	58	845
Rutter, Nathaniel P., Waltham, Mass. Bolt for milk-cans	483,982	Oct. 4	633	173	61	143
Rutty, Ernest G. (See Booth and Rutty.)						
Rutz, Carl G., Brooklyn, N. Y. Hand-piece for fishing-rods	467,202	Jan. 19	1476	377	58	297
Ruud, Edwin, assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Automatic steam-regulator for gas-producers	482,320	Sept. 6	668	159	60	1466
Ruud, Edwin, assignor to Fuel Gas and Manufacturing Company, Pittsburg, Pa. Gas heating-stove	483,086	Sept. 20	1893	479	60	1733
Ryan, Andrew, Bayfield, Wis. Tug-hook	479,465	July 26	2200	552	60	471
Ryan, Daniel W. (See Fietsch, Herman, Jr., assignor.)						
Ryan, Frank M., assignor of one-half to C. Smith, San Francisco, Cal. Car-coupling	488,718	Dec. 27	2436	604	61	1854
Ryan, Hugh, et al. (See Wickham, Horace, assignor.)						
Ryan, James, New York, N. Y. Life-net fire-escape	480,139	Aug. 2	608	{ 154 155 }	60	698
Ryan, James, Atlanta, Ga. Card-attacher	486,840	Nov. 22	2648	691	61	1156
Ryan, James B., New York, N. Y. Bed-bottom	480,282	Aug. 9	857	219	60	759
Ryan, John, New York, N. Y. Wrench	476,079	May 31	3494	881	59	1372

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Ryan, John, New York, N. Y. Wrench.....	482,198	Sept. 6	453	110	60	1424
Ryan, Matthew, Washington, D. C. Hand implement.....	483,477	Sept. 27	2502	630	60	1862
Ryan, Michael B., St. Louis, Mo. Car-step.....	468,899	Feb. 16	1543	392	58	845
Ryan, Thomas. (See Downing and Hall, assignors.)						
Ryckman, Garrett E. (See Moran, William, assignor.)						
Ryder, Andrew V., Unionport, Ohio. Spring harrow-tooth.....	474,461	May 10	936	240	59	828
Ryder, Benjamin L., Chambersburg, Pa. Drier for teas and fruits.....	478,134	July 5	79	21	60	18
Ryder, Charles J., Patchogue, N. Y. Safety-vessel for oils.....	472,910	Apr. 12	1364	350	59	274
Ryder, Hiram. (See Arnold and Wetmore, assignors.)						
Ryder, Thomas F. (See Fountain, Vincent, assignor.)						
Ryder, William W., Alsea, Oreg. Saw-tooth swage.....	484,163	Oct. 11	960	246	61	210
Ryland, Marion W., Warsaw, Ind., assignor to C. J. Keen, Toledo, Ohio. Hame-tug.....	487,379	Dec. 6	229	62	61	1366
Rylands, Dan. (See Husselbee, Alfred, assignor.)						
Rylands, Dan, Barnsley, England. Fruit-jar.....	472,401	Apr. 5	619	158	59	116
Rylands, Dan, Stairfoot, England. Receptacle for preserved meat.....	473,349	Apr. 19	2113	530	59	428
Rymer, William, Detroit, Mich. Four-way valve.....	477,706	June 28	2369	592	59	1951
Ryntowtt-Prince, Czeslaw, Geneva, Switzerland. Type-writing machine.....	470,871	Mar. 15	1918	490	58	1487
Rynders, A., et al. (See Stults, William H., assignor.)				491		
Ryon, Wallace H. (See Mulford, Clarence C., assignor.)						
S. A. Woods Machine Company. (See Thomas, John R., assignor.)						
S. H. Sinclair Company. (See Nelson, Peter H., assignor.)						
S. H. Sinclair Company. (See Walker, Frederick A., assignor.)						
S. H. Wetmore Company. (See Blackman, Charles M., assignor.)						
S. S. White Dental Manufacturing Company. (See Drennan, John M., assignor.)						
S. S. White Dental Manufacturing Company. (See Gilbert, William H., assignor.)						
S. S. White Dental Manufacturing Company. (See Gilmore, Steele F.)						
S. S. White Dental Manufacturing Company. (See How, Woodbury S., assignor.)						
S. S. White Dental Manufacturing Company. (See Johnston and Browne, assignors.)						
S. S. White Dental Manufacturing Company. (See Wilkerson, Basil M., assignor.)						
Saalfeld, Richard. (See Oberländer, Carl, assignor.)						
Saalmiller, George, South Chicago, Ill. Railway-switch.....	486,126	Nov. 15	1524	403	61	916
Sabold, John, Boyertown, Pa. Bag-bundling press.....	480,967	Aug. 16	1942	456	60	923
Sabold, John, Boyertown, Pa. Sad-iron.....	483,739	Oct. 4	373	93	61	78
Sabourin, David C. and J., Lowell, Mass. Vise.....	488,368	Dec. 20	1877	40	61	1728
Sabourin, Joseph. (See Sabourin, David C. and J.)						
Sachs, Albert, Hamilton, Ohio. Calendar.....	476,929	June 14	1089	263	59	1667
Sachs, Joseph, New York, N. Y. Auxiliary fire-alarm system.....	481,590	Aug. 30	2928	733	60	1211
Sachs, Joseph, assignor of one-half to C. S. Van Nuis, New York, N. Y. Device for suspending trolley-wires.....	477,781	June 28	2484	692	59	1973
Sack, Carl, Berlin, Germany. Cauterizing-point holder.....	474,972	May 17	1749	443	59	1001
Sacket, S. F. (See Sommerfeld, Heinrich, assignor.)						
Sackett, Frank R., et al. (See Jenks, Charles F., assignor.)						
Sackett, Joseph T. (See Abundi, Ellis, and Sackett.)						
Sackett, Joseph T. (See Blake and Sackett.)						
Sadd, Clarence R., Ellington, Conn. Cash-carrier.....	474,973	May 17	1750	443	59	1001
Sadler, Clarence W. (See Tibbits and Sadler.)						
Sadler, Hymenus G., et al. (See McClintock, Charles E., assignor.)						
Sadler, James F. (See Gibson, Wyatt, assignor.)						
Sadler, Ralph A., et al. (See McClintock, Charles E., assignor.)						
Sadler, Samuel, St. Louis, Mo. Machine for rolling glass.....	474,484	May 10	966	249	59	834
Saeltzer, Edith. (See Devantery, Joseph A., assignor.)						
Safety Car Heating and Lighting Company. (See Dixon, Robert M., assignor.)						
Safety Car Heating and Lighting Company. (See Shinn, Joseph A., assignor.)						
Safety Cylinder Valve Company. (See Schreidt, Frank, assignor.)						
Safety Oil Stove Company. (See Stinson, Charles K., assignor.)						
Safford, Alfred G., Washington, D. C. Electro-magnetic telegraph apparatus.....	485,334	Nov. 1	280	76	61	629
Safford, James B., Chicago, Ill., and F. W. Parsons, Boston, Mass. Draw-bar.....	474,862	May 17	1576	402	59	966
Safford, Joseph A., Boston, Mass. Leather splitting and skiving machine.....	477,456	June 21	1950	483	59	1849
Safford, Joseph A., Malden, Mass. Leather-splitting machine.....	477,457	June 21	1952	484	59	1850
Safford, Joseph A., Malden, Mass. Leather-skiving machine.....	477,458	June 21	1954	485	59	1850
Safford, Joseph A., Malden, Mass. Leather-skiving machine.....	477,459	June 21	1956	486	59	1850
Safford, Joseph A., Malden, Mass. Leather-rolling machine.....	477,460	June 21	1959	487	59	1851
Safford, Joseph A., Malden, Mass. Leather-splitting machine.....	477,461	June 21	1960	487	59	1851
Safford, Joseph A., Malden, Mass. Leather-splitting machine.....	477,462	June 21	1962	488	59	1851
Safford, Larkin S., Kelso, N. D. Fence.....	484,245	Oct. 11	1094	277	61	236
Sage, Alfred C., Clifton Hill, near Melbourne, assignor of one-half to D. White, Parkville, near Melbourne, Victoria. Convertible victoria.....	478,641	July 12	883	218	60	191
Sage, George W., Plymouth, Mich. Spring air-gun.....	477,385	June 21	1845	454	59	1829
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Sheet-metal lock-joint.....	468,484	Feb. 9	907	230	58	709
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Machine for locking sheet-metal joints.....	468,485	Feb. 9	908	231	58	709
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic facing for buildings.....	471,722	Mar. 29	3204	816	58	1751
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Roofing-tool.....	478,642	July 12	886	219	60	191
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic facing for buildings.....	483,240	Sept. 27	2142	543	60	1794
Sagendorph, Longley L., Philadelphia, Pa., assignor of one-half to C. N. Harder, Philmont, N. Y. Metallic ceiling-plate.....	488,254	Dec. 20	1689	422	61	1691
Sagendorph, Longley L., assignor of one-half to C. N. Harder, Philmont, N. Y. Manufacture of metallic facing-plates.....	484,508	Oct. 18	1518	386	61	331
Sageug, Halvor O., Dalton, Minn. Horseshoe with self-sharpening calks.....	487,645	Dec. 6	658	169	61	1452
Sager, James H., assignor to Rich & Sager, Rochester, N. Y. Seat for bicycles.....	479,845	Aug. 2	104	26	60	662
Sager, James H., assignor to Rich & Sager, Rochester, N. Y. Luggage-carrier for bicycles.....	479,846	Aug. 2	106	27	60	603
Sager, Jean J., Berne, Switzerland. Lock for trunks, valises, boxes, &c.....	471,277	Mar. 22	2538	644	58	1618
Sague, James E., Brooklyn, N. Y. Car-coupling.....	480,628	Aug. 9	1414	352	60	864
Sabland, Edward, Quincy, Ill. Shoe for cistern-tubing.....	482,812	Sept. 20	1459	362	60	1646

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Sahler, Carl, assignor to F. A. Herbertz, Cologne-on-the-Rhine, Germany. Cupola-furnace.	468,306	Feb. 2	623	155	58	644
Sahlfeld, Fritz, Hanover, Germany. Fire-lighter and receptacle.	474,190	May 3	473	114	59	729
Sahlin, Axel, New Brighton, assignor to Cyclone Pulverizer Company, New York, N. Y. Pulverizing-machine.	475,471	May 24	2528	{ 643 644 }	{ 59 }	1168
Sahlin, Max, <i>et al.</i> (See Hunter, Joseph, assignor.)						
Sailer, John M., assignor of one-half to H. H. Harris, Janesville, Wis. Wire-fence gate.	473,855	Apr. 26	2940	741	59	608
Sailor, David A., Little Rock, Ark. Cotton-press.	467,783	Jan. 26	2398	609	58	479
Sailor, David A., assignor to Dudley E. Jones Company, Little Rock, Ark. Condenser for cotton-gins.	474,799	May 10	1467	373	59	932
Salada, Joseph. (See Shaffer and Salada.)						
Salada, Samuel T. (See Shaffer and Salada.)						
Saladee, Cyrus W., Cleveland, Ohio, assignor to J. W. Henney, Freeport, Ill. Saddle for cycles.	475,613	May 24	2752	698	59	1213
Saladee, Cyrus W., Cleveland, Ohio, assignor to W. N. Woodruff, Hartford, Conn. Velocipede.	466,055	Nov. 8	1384	{ 367 368 }	{ 61 }	872
Saladee, Cyrus W., Cleveland, Ohio, assignor to W. N. Woodruff, Hartford, Conn. Cycle-vehicle.	466,056	Nov. 8	1388	368	61	872
Saladee, Cyrus W., Cleveland, Ohio, assignor to Whitten-Godding Cycle Company, Providence, R. I. Saddle for cycle-vehicles.	466,197	Nov. 15	1621	430	61	936
Saladin, Jules, Nancy, France. Malting apparatus.	485,986	Nov. 8	1274	337	61	850
Salberg, Swain, Ridgway, Pa. Apparatus for making lampblack.	486,127	Nov. 15	1526	403	61	917
Salenius, Erik G. N., Stockholm, Sweden. Thrashing-machine.	469,871	Mar. 1	331	84, 85	58	1166
Salenius, Erik G. N., Stockholm, Sweden. Shaking sieve for winnowers.	472,275	Apr. 5	418	{ 107 108 }	{ 59 }	78
Salias, Philip W., Jersey City, N. J. Inkstand.	477,707	June 28	2371	592	59	1951
Salick, Charles J., and E. Sipp, Watertown, Wis. Shade for incandescent electric lamps.	481,285	Aug. 23	2500	615	60	1101
Salinger, Sally, New York, N. Y. Pocket attachment.	476,687	June 7	690	170	59	1574
Salisbury, Charles H., De Kalb, Ill. Wire-stretcher.	466,911	Jan. 12	988	253	58	197
Salisbury, Franklin, Catskill, N. Y. Spraying-machine.	481,718	Aug. 30	3197	781	60	1250
Salisbury, George P., New Haven, Conn. Trimming-machine for paper-boxes.	466,374	Jan. 5	100	29, 30	58	22
Salisbury, George P., assignor to E. K. Plumly, Philadelphia, Pa. Machine for making paper boxes.	470,414	Mar. 8	1229	{ 314 315 }	{ 58 }	1342
Salisbury Manufacturing Company. (See Fitch, Nathan T., assignor.)						
Salisbury, Walter A., Losantville, Ind. Car-coupling.	471,195	Mar. 22	2417	615	58	1595
Salisbury, Wilbur S., Chicago, Ill. Boat-propelling apparatus.	466,684	Nov. 22	2389	624	61	1102
Sallee, William H. H., Rutledge, Mo. Gate.	479,532	July 26	2313	578	60	492
Sallenger, Matthew. (See Walshe and Sallenger.)						
Salling, N. P. (See Gronloff, Albert, assignor.)						
Salls, Herlet C. (See Wortham, John E., assignor.)						
Salmon, Samuel. (See Cox and Salmon.)						
Salmons, Robert H. (See Lawton, Charles F., assignor.)						
Salomon, Carl, Brunswick, Germany. Roasting coffee.	474,531	May 10	1040	-----	59	848
Salomon, Ferdinand. (See Bringer, Hermann, assignor.)						
Saltmarsh, Nehemiah, Concord, N. H. Shutter-worker.	481,705	Aug. 30	3169	774	60	1245
Salverds, Isaac W., and L. Shadbolt, Scottsville, N. Y. Fire-ladder.	481,199	Aug. 23	2333	575	60	1071
Salzer, Henry. (See Laubheimer and Salzer.)						
Salzer, Henry, Baltimore, Md. Means for packing food articles.	477,849	June 28	2602	652	59	1994
Salzer, Henry, Baltimore, Md. Preserving meat.	477,850	June 28	2603	-----	59	1994
Salzman, Christian A., <i>et al.</i> (See Seip, Thomas A., assignor.)						
Sample, John A., Wilkensburg, Pa. Car-coupling.	482,461	Sept. 13	906	220	60	1525
Sample, Newton C., Philadelphia, Pa. Plow.	477,230	June 21	1591	390	59	1780
Sampson, George T., Dayton, Ohio. Clothes-drier.	476,416	June 7	296	69	59	1496
Sampson, Gilbert A., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Sampson, Lewis S., New York, N. Y. Cuff-holder.	484,246	Oct. 11	1096	277	61	237
Sampson, Winslow F., Saugus, Mass., assignor to Crown Wax Heel Machine Company, Kittery, Me. Burnishing heels, &c., of boots, &c.	466,429	Jan. 5	190	49	58	36
Samsel, Elwood M., Marceline, Mo. Dehorning implement.	474,696	May 10	1305	333	59	900
Samson, Elias, assignor of one-half to D. London, New York, N. Y. Fruit or vegetable cutter or grater.	477,826	June 28	2558	640	59	1985
Samstag, Frederick H. (See Devine, James E., assignor.)						
Samuel C. Tatum Company. (See Martin, Frank, assignor.)						
Samuel C. Tatum Company. (See Mendenhall, Walter S., assignor.)						
Samuel, David, New York, N. Y. Cap.	473,784	Apr. 26	2825	710	59	586
Samuel, Edward, Philadelphia, Pa. Combined foot and brace for railway-rails.	483,873	Oct. 4	524	{ 131 132 }	{ 61 }	108
Samuel, Edward, Philadelphia, Pa. Joint-plate for railway-rails.	487,078	Nov. 29	3062	786	61	1253
Samuel, Edward, V. Angerer, and C. A. Psilander, assignors to William Wharton, Jr., & Company, Incorporated, Philadelphia, Pa. Switch and frog.	488,405	Dec. 20	1932	484	61	1739
Samuel, Lawrence, London, England. Door-check.	473,785	Apr. 26	2825	710	59	586
Samuels, Lewis J., <i>et al.</i> (See Monday, Robert, assignor.)						
Sanborn, A. W. (See Briggs, Ira J., assignor.)						
Sanborn, A. W. (See Finch, John Q., assignor.)						
Sanborn, A. W. (See Ives, Henry, assignor.)						
Sanborn, Benjamin F., Flatlands, assignor to A. V. Whiteman, Port Chester, N. Y. Bottle-stopper.	485,139	Oct. 25	2535	651	61	550
Sanborn, William H., Rutland, Vt. Rein-button.	479,847	Aug. 2	107	27	60	603
Sanborn, William W. (See Thomas and Reynolds, assignors.)						
Sanche, Hercules, Detroit, Mich. Electric terminal.	476,080	May 31	3496	881	59	1372
Sand, John Q. A. (See Lawrence, Patterson, and Sand.)						
Sand, John Q. A., assignor of two-thirds to D. M. Patterson and M. B. Lawrence, Baltimore, Md. Ventilating curtain-fixture.	468,286	Feb. 2	583	145	58	637
Sandall, John, New York, N. Y. Lubricator.	472,827	Apr. 12	1244	319	59	248
Sandberg, Albert, Freystadt, Germany. Veneered gun-rod.	480,746	Aug. 16	1597	400	60	915
Sandberg, Alexander, <i>et al.</i> (See Johansson, Samuel A., assignor.)						
Sandberg, John, <i>et al.</i> (See Johansson, Samuel A., assignor.)						
Sandberg, Peter, <i>et al.</i> (See Gunnarson, Wahlter, assignor.)						
Sandburg, Leonard, Chicago, Ill. Combined chair and sofa.	467,756	Jan. 26	2362	599	58	472
Sandelin, Johan E. (See Lindberg, Oskar, assignor.)						
Sanders, Adolphus M., Reedsburg, Wis. Stitching-horse.	476,898	June 14	1032	250	59	1656
Sanders, Adolphus M. and R. J., Reedsburg, Wis. Metallic tenon.	487,778	Dec. 13	887	225	61	1515
Sanders, Alfred M., Morristown, Tenn. Broom.	477,762	June 28	2485	622	59	1973
Sanders, Barney H. (See Ette and Sanders.)						
Sanders, David H., assignor of one-half to E. O. Wood, Flint, Mich. Revolving hat-case.	466,626	Jan. 5	504	130	58	97
Sanders, David P., Williamsport, Pa. Artificial block for pavements.	486,356	Nov. 15	1878	494	61	988

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr't	Vol.	Page.
Sanders, Edward A., Chicago, Ill. Shears.....	481,200	Aug. 23	2335	575	60	1071
Sanders, Frank, Brooklyn, N. Y., assignor to J. Wetter, Memphis, Tenn. Consecutive-numbering head.....	488,577	Dec. 27	2214	549	61	1811
Sanders, George A., et al. (See Newman, Nelson, assignor.)						
Sanders, Henry C., London, England. Manufacturing collapsible tubes.....	478,525	July 5	713	172	60	141
Sanders, Jasper N., and D. C. Herrington, Grain Valley, Mo. Cane-mill.....	488,031	Dec. 13	1313	327 328	61	1600
Sanders, John H., New York, and J. E. Carlin, Brooklyn, N. Y. Machine for carrotting fur.	478,470	July 5	626	152		
Sanders, Levi S. (See Williams, Willard C., assignor.)						
Sanders, Louis M., Hancock, Mich. Steam steering-gear.....	471,142	Mar. 22	2342	599	58	1581
Sanders, Richard H. (See Thompson and Sanders.)						
Sanders, Roscoe J. (See Sanders, Adolphus M. and R. J.)						
Sanders, William, Liverpool, England. Photographic camera.....	488,799	Dec. 27	2558	635	61	1879
Sanderson, Ephraim, and F. C. Base, Cleveland, Ohio. Suction apparatus for paper-mills..	478,290	July 5	362	88	60	73
Sanderson, Frederick, Chicago, Ill. Type-writing machine.....	475,894	May 31	3218	814	59	1315
Sanderson, James G., New York, N. Y. Drier.....	474,305	May 3	654	167	59	764
Sanderson, Samuel, Barton, Canada. Fishway.....	474,863	May 17	1578	402	59	966
Sandford, C. N. (See Holmes, Franklin, assignor.)						
Sandford, William P., et al. (See Spofford, Charles, assignor.)						
Sandgren, Arvid J., Hartford, Conn. Signal apparatus for bicycles.....	483,585	Oct. 4	107	26	61	23
Sands, George, Beaver Falls, Pa. Car-brake shoe.....	472,955	Apr. 12	1439	367	59	287
Sands, John, assignor of one-half to H. W. R., G. W. H., and J. H. White, Seattle, Wash. Motor	469,306	Feb. 23	2191	561	58	978
Sandwich Enterprise Company. (See Radley and Beal, assignors.)						
Sandy, John W., Creal Springs, Ill. Wagon-body hoist.....	471,900	Mar. 29	3470	886	58	1804
Sanford, Charles E., Brooklyn, N. Y. Automatic cut-out.....	484,865	Oct. 25	2102	541 542	61	464
Sanford Foundry and Machine Works. (See Edgar, William, assignor.)						
Sanford, George S., Mount Clemens, Mich. Carpet-sweeper.....	481,826	Aug. 30	3387	830 831	60	1287
Sanford, George S., Mount Clemens, Mich. Carpet-sweeper.....	481,827	Aug. 30	3389	831 832		
Sanford, George S., Mount Clemens, Mich. Carpet-sweeper.....	481,828	Aug. 30	3391	832	60	1288
Sanford, George S., Mount Clemens, Mich. Carpet-sweeper.....	481,829	Aug. 30	3392	832 833	60	1288
Sanford, George S., Mount Clemens, assignor of one-half to W. H. Hill, Detroit, Mich. Oil or gas burner.....	471,753	Mar. 29	3250	827 828		
Sanford Mills et al. (See Poole, George, assignor.)						
Sanford, William R., North Adams, Mass. Sad-iron.....	470,367	Mar. 8	1156	295	58	1329
Sanford, William R., Brooklyn, N. Y. Advertising-sign.....	473,239	Apr. 19	1932	486	59	391
Sanger, Eugene M. (See Leng, Charles, assignor.)						
Sanitary Manufacturing Company. (See Lewis, Leroy S., assignor.)						
Sankey, Frederick E. (See Burton, Wingfield, assignor.)						
Sankey, William J., assignor to S. C. Sweet, Des Moines, Iowa. Scaffold.....	472,514	Apr. 5	794	203	59	151
Sansousy, Charles E., Duluth, Minn. Fire-escape.....	482,654	Sept. 13	1204	293	60	15-3
Santee, Elmer V., Easton, Pa. Road-vehicle.....	478,715	July 12	982	244	60	211
Santurio, Bonifacio M., Buenos Ayres, Argentine Republic. Filter.....	482,140	Sept. 6	347	83	60	1404
Sanzonbacher, John, Canfield, Ohio. Finishing leather.....	482,199	Sept. 6	455		60	1424
Sapp, Joseph R., Cuyahoga Falls, Ohio. Vapor-burner.....	484,114	Oct. 11	875	222	61	193
Sapp, Samuel M., assignor of one-half to J. W. Millard, Geneseo, Kans. Educational appliance.....	468,475	Feb. 9	887	225	58	705
Sapp, Samuel M., assignor of one-half to J. G. and J. M. McEntarfer, Geneseo, Kans. Surgical apparatus.....	486,198	Nov. 15	1625	430	61	937
Sardy, Etta L. (See Sardy, John L., assignor.)						
Sardy, John L., assignor to E. L. Sardy, Pelham Manor, N. Y. Sprinkling device.....	481,873	Aug. 30	3455	847 848	60	1300
Sare, Storm B., Narka, Kans. Check-row planter.....	482,437	Sept. 13	870	208		
Sargent, Allan C. (See Sargent, Frederick G. and A. C.)						
Sargent & Company. (See Page, Albert A., assignor.)						
Sargent & Company. (See Sargent, Russell, assignor.)						
Sargent & Company. (See Shaw, John H., assignor.)						
Sargent & Company. (See Sparks, William E., assignor.)						
Sargent & Company. (See Wright, Granville W., assignor.)						
Sargent, Frederick G. and A. C., Graniteville, Mass. Wool-washing machine.....	468,453	Feb. 9	848	214 215	58	698
Sargent, Frederick G. and A. C., Graniteville, Mass. Wool-washing machine.....	480,283	Aug. 9	858	219		
Sargent, Henry C., Macbias, Me. Cinder-conductor.....	484,164	Oct. 11	961	247	61	210
Sargent, James, Rochester, N. Y. Smoke-consumer.....	481,719	Aug. 30	3201	782	60	1251
Sargent, James T., Cleveland, Ohio. Washboard.....	467,438	Jan. 19	1836	469	58	365
Sargent, James T., Cleveland, Ohio. Washboard.....	467,439	Jan. 19	1837	469	58	365
Sargent, James T., Cleveland, Ohio. Washboard.....	467,440	Jan. 19	1838	469	58	366
Sargent, James T., Cleveland, Ohio. Washboard.....	469,980	Mar. 1	513	127 128	58	1198
Sargent, John W., Scranton, Pa. Steam-engine.....	485,432	Nov. 1	433	116		
Sargent, John W., Scranton, Pa. Steam-engine valve-gear.....	485,433	Nov. 1	437	117	61	661
Sargent, Richard S. (See Brower, John H., assignor.)						
Sargent, Russell, assignor to Sargent & Company, New Haven, Conn. Cylinder-lock.....	487,969	Dec. 13	1193	298	61	1574
Sargent, William D., Evanston, assignor to Congdon Brake Shoe Company, Chicago, Ill. Brake-shoe.....	468,581	Feb. 9	1060	270	58	740
Sargent, Charles A., Rochester, Pa. Apparatus for inserting or withdrawing casing for oil or like wells.....	484,051	Oct. 11	795	200 201	61	177
Saroni, Herrman S., Marietta, Ohio. Musical instrument.....	468,265	Feb. 2	551	135		
Saroni, Herrman S., Marietta, Ohio. Piano-action.....	470,448	Mar. 8	1290	329	58	1354
Sarvis, John E., Newburg, N. Y. Rail-joint.....	486,605	Nov. 22	2267	592	61	1077
Sater, Hans H., Madison, Wis. Plow-beam.....	474,485	May 10	969	249	59	834
Sattelkan, Paul. (See Burdon, David P., assignor.)						
Satter, Jakob, Annweiler, Germany. Folding rule.....	475,419	May 24	2446	624	59	1153
Sattley, W. N. (See Henry, Jacob A., assignor.)						
Sauer, Andrew. (See Krotz, Alvaro S., assignor.)						
Sauer, Emil L., Chicago, Ill. Steam-engine valve.....	482,415	Sept. 13	832	200	60	1512
Saner, John H., Stacy, Minn. Potato-digger.....	472,552	Apr. 12	850	217 218	59	175
Sauerman, John F., assignor of one-half to E. S. Stiewel, Coal Hill, Ark. Combination bevel and surface gage.....	467,562	Jan. 26	2065	522		

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. gr.	Vol.	Page.
Sauerman, John F., assignor of one-half to E. S. Stiewel, Coal Hill, Ark. Chain pipe-wrench.	480,140	Aug. 2	609	155	60	698
Sauerston, George E., Newport, Ky., assignor to himself, C. C. Macbrair, and H. Strobridge, Cincinnati, Ohio. Packing-box for caramels.	469,981	Mar. 1	515	128	58	1198
Saul, Warren A., Steelton, Pa. Curtain-fixture.	487,970	Dec. 13	1194	298	61	1574
Sault, Thomas, New Haven, Conn. Photographic film-holder.	477,337	June 21	1763	432	59	1813
Saunders, Charles A. L. (See Saunders, Samuel L. and C. A. L.)						
Saunders, Emmett A., assignor to Goodyear's Metallic Rubber Shoe Company, Naugatuck, Conn. Rubber shoe.	477,851	June 28	2605	652	59	1994
Saunders, Lewis. (See Fowler, Walter B., assignor.)						
Saunders, Samuel L., Lynn, Mass. Spool-holder.	467,549	Jan. 26	2047	516	58	412
Saunders, Samuel L., Lynn, Mass. Spring for supporting vehicle-seats.	470,707	Mar. 15	1666	431	58	1438
Saunders, Samuel L., Lynn, Mass. Spring for ships' berths, car-seats, &c.	476,823	June 14	916	224	59	1633
Saunders, Samuel L. and C. A. L., Lynn, Mass. Book-mark.	475,348	May 24	2334	598	59	1133
Saunders, Samuel Q., New Bridge, Oreg. Car-coupling.	475,706	May 24	2888	730	59	1238
Saunders, William H. (See Webster and Saunders.)						
Saunders, William H., J. J. Range, and E. N. Foote, assignors to Boston Cash Register Company, Northampton, Mass. Cash-register.	479,337	July 19	1951	487	60	408
Saunders, William L., North Plainfield, N. J., assignor of one-half to Ingersoll Sergeant Drill Company, New York, N. Y. Increasing the efficiency of motor fluids.	486,411	Nov. 15	1965	522	61	1006
Saubrey, George J., Columbus, Ohio. Hasp-seal.	474,411	May 10	854	224	59	813
Saubrey, George J., Columbus, Ohio. Steam-propelled vehicle.	468,224	Dec. 20	1643	409 410 411	61	1683
Sauter, Johann. (See Dühm, Block, and Sauter.)						
Sautter, Harry J. (See Curtis and Sautter.)						
Savage, Edmund, Albany, N. Y. Device for operating elevator-doors.	474,066	May 3	292	71	59	694
Savage, Granville L., New York, N. Y., assignor to Golden Gate Safety Fancet Company, San Francisco, Cal. Auger.	478,970	July 12	1384	341	60	287
Savage, James, Canarsie, N. Y. Steering mechanism for boats.	475,420	May 24	2447	624	59	1153
Savage, James, Canarsie, N. Y. Boat.	478,763	July 12	1069	265	60	228
Savage, Luman W. (See Johnston, Micajah, assignor.)						
Savage, William C. (See Anthony and Savage.)						
Savage, William H. (See Robinson, William D., assignor.)						
Savidge, Windfield S. (See Duck, Savidge, and Wolfe.)						
Saville, Clifford, New York, N. Y. Food product.	472,644	Apr. 12	980		59	199
Savits, Samuel F., Plimpton, Ohio. Plow attachment.	472,179	Apr. 5	267	70	59	50
Sawer, James F., and J. L. Purves, Manchester, England. Prepayment sale and delivery mechanism.	468,999	Feb. 16	1726	440 441	58	881
Sawin, Charles A., Waltham, Mass. Heating apparatus.	471,754	Mar. 29	3251	828	58	1760
Sawtelle, Edwin. (See Deane, Herbert C., assignor.)						
Sawyer, Annette F., administratrix. (See Sawyer, William A.)						
Sawyer, Burnside E., assignor to L. S. Starrett, Athol, Mass. Plotter.	467,664	Jan. 26	2207	561	58	442
Sawyer, George H., La Moille, Ill. Vehicle.	468,496	Feb. 9	927	236	58	713
Sawyer, Harry, assignor to Shaw Electric Crane Company, Muskegon, Mich. Crane.	486,412	Nov. 15	1968	522	61	1006
Sawyer, Herbert L., Springfield, Ohio. Letter-file.	484,247	Oct. 11	1096	278	61	237
Sawyer, Houghton, San Francisco, Cal. Electric-arc lamp.	469,093	Feb. 16	1860	476	58	908
Sawyer, Roswell D. (See Baldwin, William A., assignor.)						
Sawyer, William A., deceased; A. F. Sawyer, Danvers, Mass., administratrix. Hoop.	474,101	May 3	346	82	59	704
Sawyer, William H., assignor to American Electrical Works, Providence, R. I. Electric cable.	473,267	Apr. 19	1974	495	59	400
Sawyer, William H., assignor to American Electrical Works, Providence, R. I. Electric cable.	473,351	Apr. 19	2118	532	59	428
Sawyer, William H., assignor to American Electrical Works, Providence, R. I. Electric cable.	473,352	Apr. 19	2119	532	59	428
Sawyer, William H., assignor to American Electrical Works, Providence, R. I. Electric cable.	473,353	Apr. 19	2120	532	59	429
Sawyer, William H., assignor to American Electrical Works, Providence, R. I. Electric cable.	478,367	July 5	477	116	60	95
Sawyer, William J., London, England. Inkstand.	467,053	Jan. 12	1215	307	58	239
Sawyer, William M., Detroit, Mich. Pegging-jack support.	481,374	Aug. 23	2631	647	60	1125
Sax, Constantine. (See Smith and Sax.)						
Saxby, George, East Bloomfield, N. Y. Clevis.	476,899	June 14	1034	251	59	1656
Saxe, John G. (See Little, Robert H., assignor.)						
Saxlehner, Wittwe Andreas. (See Pichler, Francis S., assignor.)						
Saxon, Frank, Worthington, Minn. Cog-wheel.	487,129	Nov. 29	3147	806	61	1269
Saxton Combined Whip Lock and Socket Company. (See Saxton, Harry J., assignor.)						
Saxton, Harry J., assignor to Saxton Combined Whip Lock and Socket Company, St. Louis, Mo. Combined whip lock and socket.	471,652	Mar. 29	3079	783	58	1729
Saxton, Harry J., assignor to F. Kollas and J. V. Saxton, St. Louis, Mo. Shutter-fastener.	473,888	Apr. 26	3000	757	59	619
Saxton, Harry J., St. Louis, Mo., assignor to J. Gamble, New York, N. Y. Game apparatus.	484,115	Oct. 11	876	223	61	194
Saxton, Harry J., assignor to W. H. Baumgartner, M. B. Harrison, and S. Knapp, St. Louis, Mo. Combined tobacco box and cutter.	487,162	Nov. 29	3200	820	61	1280
Saxton, James V., et al. (See Saxton, Harry J., assignor.)						
Sayer, Robert C., Bristol, England. Railway-car brake.	471,849	Mar. 29	3402	868	58	1790
Sayer, Robert C., Bristol, England. Electric control of railway-trains.	481,062	Aug. 16	2105	523 524	60	1014
Sayers, Tom, Bombay, India. Railway joint-chair.	481,122	Aug. 16	2196	543	60	1031
Saylor, A. R., et al. (See Manderfield, George J., assignor.)						
Saylor, John R., Philadelphia, Pa. Portable machine for drilling.	480,040	Aug. 2	452	115	60	668
Sayre, Samuel H., Jr., Hampton, Va. Windlass water-elevator.	467,837	Jan. 26	2487	630 631	58	497
Sayre, Samuel H., Jr., Hampton, Va. Well-fixture.	469,922	Mar. 1	408	102	58	1179
Sayre, Thomas J., Cape May, N. J. Well-pump.	471,829	Mar. 29	3376	860	58	1785
Sayre, Winthrop M., South Orange, N. J. Thill-coupling.	484,052	Oct. 11	797	201	61	178
Scace, John B., Albany, N. Y. Wire-support on drawbridges.	485,662	Nov. 8	785	209	61	749
Scallen, Daniel A., Ellicott City, Md. Roller grinding-mill.	488,455	Dec. 20	2013	502	61	1756
Scamahorn, Aaron, Pursley, W. Va. Stave-saw grinner.	482,386	Sept. 13	791	190	60	1504
Scandlin, William I., Brooklyn, N. Y. Photographer's background-holder.	484,165	Oct. 11	962	247	61	211
Scandraco, Petre, and I. Dimovich, Brailhor, Roumania. Seed-drill.	488,775	Dec. 27	2516	626	61	1870
Scanlan, Edward, Louisville, Ky. Combined stove and grate.	474,191	May 3	474	114	59	730
Scanlan, Patrick, Chicago, Ill. Garbage-receptacle.	469,000	Feb. 16	1734	441	58	883
Scarles, Benjamin, Clinton, Mass. Dress-shield or protector.	475,603	May 31	3050	772	59	1982
Scarles, Benjamin, Clinton, Mass. Wire-netting.	488,032	Dec. 13	1315	328	61	1600

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Searles, Benjamin, assignor to Clinton Wire Cloth Company, Clinton, Mass. Wire-netting machine	483,969	Oct. 4	669	168	61	139
Scarlett, Alfred, West Superior, Wis. Prop for poles or shafts	488,406	Dec. 20	1933	485	61	1739
Scarr, Abraham C., Harrison, Canada, assignor to Scarr Railway Signal Company of Harrison, Limited. Railway time-signal	469,066	Feb. 16	1824	467	58	901
Scarr Railway Signal Company of Harrison. (See Scarr, Abraham C., assignor.)						
Scarritt, Sanford G., St. Louis, Mo. Spring-seat	483,699	Oct. 4	266	66	61	56
Scates, George R., Knoxville, Tenn. Open-fireplace heater	485,301	Nov. 1	218	62	61	617
Seacoe, Edward M., assignor of one-half to J. B. P. Smith, Paris, Mo. Ice-cream freezer	468,900	Feb. 16	1544	393	58	845
Sealey, Mary L., New York, N. Y. Hair-waver	476,824	June 14	916	224	59	1633
Schaaf, Albert, Halle, Germany. Drying-stove for bricks or other materials	483,018	Sept. 20	1797	453	60	1713
Schaaf, Frederick. (See Scott and Schaaf.)						
Schaake, Henry. (See Kendall and Schaake.)						
Schaake, Henry, Baltimore, Md., assignor to C. B. Kendall, Newton, Mass. Press-stripper	473,889	Apr. 26	3002	757	59	620
Schade, Edmund A., assignor to Stanley Rule and Level Company, New Britain, Conn. Plane-iron	473,087	Apr. 19	1558	422	59	340
Schade, John, Brooklyn, N. Y. Coin-operated vending apparatus	470,508	Mar. 8	1374	359	58	1370
Schaefer, Adam. (See Richter and Schaefer.)						
Schaefer, Adam, et al. (See Richter, Ernst, assignor.)						
Schaefer, Charles W., Cleveland, Ohio. Cloth-shrinking machine	486,739	Nov. 22	2477	646	61	1120
Schaefer, Edmund, Lynchburg, Va. Railway-signal	488,225	Dec. 20	1646	411	61	1683
Schaefer, George N., et al. (See Schaefer, John H., assignor.)						
Schaefer, John H., assignor to J. H. Schaefer, Jr., and G. N. Schaefer, Baltimore, Md. Meat-mixing apparatus	480,674	Aug. 9	1485	369	60	878
Schaefer, Ludwig, Heilbronn, Germany. Producing photo-mechanical printing-plates	470,012	Mar. 1	552	137	58	1206
Schaeffer, Christian H., Chicago, Ill. Box-lid support	480,832	Aug. 16	1731	432	60	942
Schaeffer, Henri N. F., Lowell, Mass. Dyeing with alizarin	481,591	Aug. 30	2990		60	1211
Schaeffer, Henry, Ridgway, Colo., assignor of two-thirds to M. E. and C. E. Criswell and J. L. Smith. Car-coupling	488,507	Dec. 20	2098	521	61	1773
Schaf, Joseph, Geneva, Nebr. Buckle	473,477	Apr. 26	2333	591	59	492
Schafer, Christian, Three Rivers, Mich. Hand-car	471,143	Mar. 22	2344	600	58	1581
Schäfer, Wilhelm, Wheeling, W. Va. Roundabout	480,477	Aug. 9	1178	296	60	817
Schaffer, John, Kirkwood, Mo. Deepening rivers or other water-channels	486,957	Nov. 29	2880	744	61	1217
Schafhaus, Jean, assignor of one-half to G. Jetter, New York, N. Y. Distilling and rectifying apparatus	476,930	June 14	1091	263	59	1668
Schan, John P., Brooklyn, N. Y. Combined fountain-syringe and air-cushion	480,785	Aug. 16	1658	414	60	927
Schantz, Andrew. (See Fitch and Schantz.)						
Schaper, Henry. (See Ashby and Seybold, assignors.)						
Scharf, Paul, assignor of one-fourth to R. Latzko, Vienna, Austria-Hungary. Incandescent electric lamp	480,284	Aug. 9	861	219	60	759
Scharf, Samuel R., Washington, D. C. Apparatus for weighing asphalt	480,141	Aug. 2	610	155	60	699
Scharf, Samuel R., Washington, D. C. Fastening for railway-rails	488,578	Dec. 27	2216	549	61	1811
Scharfe, Gottlieb, Annapolis, Md. Apparatus for the manufacture of gas	473,350	Apr. 19	2115	531	59	428
Scharfe, Gottlieb, Annapolis, Md. Gas purifier and condenser	482,141	Sept. 6	348	83, 84	60	1404
Scharff, Augustus E., Tacoma, Wash. Brake for children's carriages	467,054	Jan. 12	1216	307	58	239
Scharff, Charles A., San Francisco, Cal. Water-wheel nozzle	485,663	Nov. 8	785	209	61	749
Scharff, Ernst and G. A., Frankfurt-on-the-Main, Germany. Safety-razor	471,070	Mar. 15	2218	569	58	1546
Scharff, Gottfried A. (See Scharff, Ernst and G. A.)						
Scharling, John H., assignor to Wymble Manufacturing Company, Newark, N. J. Decorating glass	472,230	Apr. 5	349	90	59	65
Scharr, Jonathan, Philadelphia, Pa. Soap compound	486,267	Nov. 15	1743		61	961
Schatz, Adam E., et al. (See Cudner, Gustav L., assignor.)						
Schaum, Otto W., Philadelphia, Pa. Batten for looms	485,886	Nov. 8	1118	295	61	817
Schaum, Otto W., Philadelphia, Pa. Griff-guide for Jacquard mechanism	488,226	Dec. 20	1648	412	61	1683
Schaum & Uhlinger. (See Krantz, Hubert, assignor.)						
Schaum & Uhlinger. (See Wagner, August, assignor.)						
Schautman, John, Anaheim, assignor of one-half to H. Giese, Los Angeles, Cal. Orchard-cultivator	474,763	May 10	1403	356	59	919
Schaurer, Peter, Wellington, Kans. Spring-power fan	471,196	Mar. 22	2418	615	58	1595
Schanweiler, William, Pittsburg, Pa. Nut-lock	470,708	Mar. 15	1666	431	58	1438
Schauweker, William, Pittsburg, Pa. Nut-lock	473,642	Apr. 26	2614	658	59	545
Scheer, Louis. (See Reed, Theodore J., assignor.)						
Scheer, William H., Frankfort Station, Ill. Motor	469,094	Feb. 16	1863	476	58	908
Scheffbauer, Rupert, Paterson, N. J., assignor to Edison General Electric Company, New York, N. Y. Electric-arc lamp	480,968	Aug. 16	1944	466	60	983
Scheffer, David M., New Castle, Ind., assignor to Charles Truax, Green & Company, Chicago, Ill. Veterinary dental forceps	476,688	June 7	691	170	59	1574
Scheffler, Theodore, Paterson, N. J. Steam-engine	480,213	Aug. 2	735	185	60	721
Scheibel, Adolf, assignor to Berliner Maschinenbau Actien-Gesellschaft, vormals L. Schwartzkopff, Berlin, Germany. Torpedo-launching apparatus	472,553	Apr. 12	851	218	59	176
Scheibel, Charles, San Francisco, Cal. Sash-holder	473,354	Apr. 19	2121	532	59	429
Scheid, George W., Fort Recovery, Ohio. Wrench	486,300	Nov. 15	1790	470	61	971
Scheidreiter, Carl, Ottensen, Germany. Ink blotter or pad	483,874	Oct. 4	525	132	61	109
Scheidt, Frederick, Baltimore, Md. Work-holder for boring-machines	481,737	Aug. 30	3234	788	60	1257
Scheilein, John. (See Seebick, George, assignor.)						
Schelling, Gustav A., Mishawaka, Ind. Foot-railing for counters	482,591	Sept. 13	1121	271	60	1568
Schenck, John C. F., Moline, Ill. Attachment for plow-colters	482,387	Sept. 13	792	190	60	1505
Schenck, John D. P., Nashville, Tenn., assignor of one-half to G. Mathews, Cincinnati, and W. W. Peabody, Madisonville, Ohio. Governor for air-brakes	488,369	Dec. 20	1880	470	61	1720
Schenck, John D. P., Nashville, Tenn., assignor of one-half to G. Mathews, Cincinnati, and W. W. Peabody, Madisonville, Ohio. Pressure-regulator	488,370	Dec. 20	1882	471	61	1729
Schenck, Remsen, New York, N. Y. Sash-pull	478,471	July 5	628	153	60	124
Schenck, William A., Richmond, Va. Safe-hinge	486,237	Nov. 15	1687	446	61	949
Schenck, William T., Maroa, Ill. Check-hook	488,700	Dec. 27	2411	598	61	1849
Scherer, Carl, Langen, Germany. Apparatus for fixing capsules on bottles	483,019	Sept. 20	1798	453	60	1714
Scherer, Charles, Brooklyn, assignor to Scheuer & Brother, New York, N. Y. Belt	472,402	Apr. 5	620	158	59	116
Schetzel, Marx P., San Francisco, Cal. Apparatus for the propulsion and transmission of water	482,655	Sept. 13	1205	294	60	1584
Schetzel, Marx P., San Francisco, Cal. Covering for buildings	487,585	Dec. 6	563	144	61	1433
Scheubeck, Johann, Chicago, Ill. Bridge-gate	469,321	Feb. 23	2209	567	58	982
Scheuber, August W., Brooklyn, assignor to S. Zinn, New York, N. Y. Frame for pocket-books, &c	471,144	Mar. 22	2345	600	58	1581

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Scheuer & Brother. (See Scherer, Charles, assignor.)						
Scheuer, Max, New York, N. Y. Buckle	469,982	Mar. 1	516	128	58	1198
Scheuer, Max, New York, N. Y. Leggin	480,348	Aug. 9	965	244	60	777
Scheuer, Max, New York, N. Y. Purse or pocket-book	488,742	Dec. 27	2469	613	61	1861
Scheuer, Simon, New York, N. Y. Frame for pocket-books, purses, or satchels	485,830	Nov. 1	116	35	61	597
Scheuer, Simon, New York, N. Y. Frame for pocket-books	486,128	Nov. 15	1528	404	61	917
Scheultz, Edward, Jr. (See Giesberg and Scheultz.)						
Schiele, John. (See Steiner and Schiele.)						
Schiele, Lewis, New York, N. Y. Corset	479,573	July 26	2373	591	60	503
Schiele, Lewis, New York, N. Y. Corset	479,574	July 26	2374	592	60	503
Schiemer, Jacob, Detroit, Mich., assignor of two-thirds to H. S. Hopkins, St. Louis, Mo., and W. H. Parmenter, Boston, Mass. Cash-carrier apparatus	484,248	Oct. 11	1099	278	61	238
Schier, Adolph, Chicago, Ill. Soda-fountain	477,463	June 21	1966	488	59	1852
Schill, John. (See Schill, Joseph, J., and P.)						
Schill, Joseph, J., and P., Crestline, Ohio. Fire-pot	466,943	Jan. 12	1031	263	58	205
Schill, Joseph, J., and P., Crestline, Ohio. Magazine hot-air furnace	466,944	Jan. 12	1033	265	58	205
Schill, Joseph, J., and P., Crestline, Ohio. Fire-pot	470,509	Mar. 8	1378	360	58	1371
Schill, Peter. (See Schill, Joseph, J., and P.)						
Schiller, Engelbert J., Grant, Nebr. Pump	475,895	May 31	3219	814	59	1315
Schilling, Charles R., Bellevue, Ky. Wrapping-machine	480,239	Aug. 2	773	195 196 197	60	729
Schilling, George W., Philadelphia, Pa. Boiler-foeder	482,564	Sept. 13	1084	263	60	1560
Schilling, Joseph, assignor of one-half to D. Koster, Erie, Pa. Paper-rolling machine	468,728	Feb. 9	1281	326	58	785
Schillo, Ernest, McDonald, Pa. Mining cage or car	481,592	Aug. 30	2991	733	60	1211
Schilz, Frank, H., and N., Milwaukee, Wis. Clothes-drying apparatus	481,738	Aug. 30	3236	788	60	1257
Schilz, Henry. (See Schilz, Frank, H., and N.)						
Schilz, Nicolaus. (See Schilz, Frank, H., and N.)						
Schimper & Co., William. (See Old-nbusch, Ernest, assignor.)						
Schimper, Frederick, Weehawken, N. J., and C. Zoller, New York, N. Y. Hose-coupling	487,893	Dec. 13	1080	270	61	1552
Schimpf, Frank A., and W. C. Hunter, Philadelphia, Pa. Lithographic or other printing	468,695	Feb. 9	1232	314	58	774
Schindewolf, Henry. (See Friedly, Michael, assignor.)						
Schindler, Caspar C. A., Basle, Switzerland. Seat	483,265	Sept. 27	2211	555	60	1806
Schindler, Caspar C. A., Basle, Switzerland. Seat	483,266	Sept. 27	2212	556	60	1806
Schinke, Max G., Milwaukee, Wis. Submerged pipe	486,986	Nov. 29	2925	754	61	1226
Schirmer, Valentine, New York, N. Y. Window	476,081	May 31	3498	881 882	59	1373
Schirmer, Valentine, New York, N. Y. Swinging jack for window-sashes	486,740	Nov. 22	2478	646	61	1121
Schirra, Julius, Pittsburg, Pa. Cable-grip	475,896	May 31	3220	814	59	1316
Schissel, John G. (See Sellers and Schissel.)						
Schive, Hans H., Christiania, Norway. Inkstand	479,774	July 26	2720	676	60	569
Schlabach, Daniel C., Farmerstown, Ohio. Saw	481,201	Aug. 23	2337	576	60	1072
Schlagel, Charles C. (See Hunt, Marshall E., assignor.)						
Schlagenhauser, Charles. (See Blumer and Schlagenauser.)						
Schlangen, Simon, Chicago, Ill. Faucet and connection	478,716	July 12	984	245	60	212
Schlegelmilch, George E. (See Welch, Robert K., assignor.)						
Schlei, Charles, Brillion, Wis. Pipe	471,775	Mar. 29	3287	838	58	1767
Schleicher, Charles, Louisville, Ky. Car-coupling	466,967	Jan. 12	1070	271	58	211
Schleicher, Schumm & Co. (See Winand, Paul A. N., assignor.)						
Schleicher, Ulrich, et al. (See Ziegler, Josef, assignor.)						
Schlener, Adolph G. (See Allan, John W., assignor.)						
Schlesinger, Augustus D., College Point, assignor to India Rubber Comb Company, New York, N. Y. Pocket-rask	468,829	Feb. 16	1439	366	58	825
Schlesinger, David, New York, N. Y. Hat	480,041	Aug. 2	454	116	60	668
Schleussner, William. (See Chedister, Winfield S., assignor.)						
Schlich, Josef, Philadelphia, Pa. Combined carriage and cradle	472,314	Apr. 5	482	124 125	59	91
Schlittenbauer, Max, Munich, Germany. Tuning-instrument	467,203	Jan. 19	1477	378	58	298
Schloerb, Henry, assignor to M. B. Schloerb, Greenville, N. J. Adjustable lamp-shade	470,603	Mar. 8	1503	392	58	1398
Schloerb, Maria B. (See Schloerb, Henry, assignor.)						
Schlorff, Joseph E., Pesotum, Ill. Projectile	480,142	Aug. 2	612	155	60	699
Schloss, Nathan J., New York, N. Y. Waistband for trousers	471,830	Mar. 29	3377	861	58	1785
Schloss & Sons. (See Janssen, Henry, assignor.)						
Schlosser, Frank P., assignor to F. P. Schlosser Electric Signal and Alarm Company, Birmingham, Ala. Electric railway-signal	488,615	Dec. 27	2269	563	61	1822
Schlosser, George J., Leadville, Colo. Wagon-jack	476,417	June 7	297	70	59	1496
Schlosstein, John F., Buffalo, Wis. Lock	488,091	Dec. 13	1414	352	61	1621
Schlumberger, Albert, Paris, France. Safety-paper	481,770	Aug. 30	3293	801	60	1270
Schmaedel, Joseph von. (See Krumpelhuber and von Schmaedel.)						
Schmah, Eduard, et al. (See Laesacke, Friedrich A., assignor.)						
Schmahl, Emil C., Chicago, Ill. Adjustable canopy for light-fixtures	483,171	Sept. 27	2033	514	60	1773
Schmelz, Charles F., Worcester, Mass., assignor to himself, and H. Kendall, Providence, R. I. Machine for issuing purchase-checks and adding the amounts	467,483	Jan. 19	1905	487 488	58	379
Schmid, Adolph G. (See Schmid, Ernst A. and A. G.)						
Schmid, Carl, Seeburg, Germany. Apparatus for stretching the vertebral column	474,486	May 10	969	250	59	834
Schmid, Charles, assignor of two-thirds to H. Schuetzler and P. Friedrich, Chicago, Ill. Arc lamp	480,285	Aug. 9	862	220	60	759
Schmid, Ernst A. and A. G., Peoria, Ill. Printer's quoin	483,792	Oct. 4	407	101	61	85
Schmid, Jakob. (See Gnehm and Schmid.)						
Schmid, John, Eatontown, N. J. Artificial leg	473,671	Apr. 26	2655	669	59	553
Schmid, Mathew, Philadelphia, Pa. Building	474,647	May 10	1225	313	59	883
Schmidt, Albert G. (See Ruehle and Schmidt.)						
Schmidt, August, New York, N. Y. Construction of hogsheds or barrels	483,478	Sept. 27	2503	630	60	1863
Schmidt, Carl, assignor to G. Gillischewski, Berlin, Germany. Fireworks	475,897	May 31	3221	.....	59	1316
Schmidt, Charles E., assignor to Henry McShane Manufacturing Company of Baltimore, Baltimore, Md. Joint or coupling for pipes and pipe-fittings	485,116	Oct. 25	2497	642	61	543
Schmidt & Co., C. (See Ahrens and Oostendorp, assignors.)						
Schmidt, Ferdinand, Berlin, Germany. Bottle-stopper	469,095	Feb. 16	1864	476	58	909
Schmidt, Frederick M., Brooklyn, N. Y. Electric self-winding clock	475,809	May 31	3070	777	59	1286
Schmidt, Fritz G., New York, N. Y. Eyeglasses	483,812	Oct. 4	434	107	61	90
Schmidt, George A., Chicago, Ill. Toilet-soap fixture	472,315	Apr. 5	482	125	59	91
Schmidt, Gottlieb, Philadelphia, Pa. Reversible window-sash	485,887	Nov. 8	1119	295	61	817
Schmidt, Henry. (See Glader and Schmidt.)						
Schmidt, Jacob A. (See Hamann and Schmidt.)						
Schmidt, Johann P., Jersey City, N. J. Machine for forming fuel-bricks	474,412	May 10	855	224	59	814

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Schmidt, Joseph G., Philadelphia, Pa. Clasp	469,274	Feb. 23	2137	549	58	968
Schmidt, Otto, Berlin, Germany. Catch for rib-points of umbrellas	476,561	June 7	505	119	59	1537
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarine derivative	476,418	June 7	299	.....	59	1496
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarine dye	476,419	June 7	300	.....	59	1496
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarine derivative	476,420	June 7	301	.....	59	1497
Schmidt, Robert E., assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Alizarine dye	476,401	June 7	409	.....	59	1517
Schmidt, Rudolf, Berne, Switzerland. Breech-loading firearm	471,362	Mar. 22	2668	678	58	1644
Schmidt, Theodore F. W., assignor of one-half to Dayton Paper Novelty Company, Dayton, Ohio. Paper box	483,502	Sept. 27	2542	639	60	1870
Schmidt, William F., St. Louis, Mo. Chuck	481,426	Aug. 23	2724	669	60	1143
Schmidt, William N. (See Gamage and Schmidt.)						
Schmiedl, Anton J., assignor to E. B. Jordan, Philadelphia, Pa. Leather-beading machine	472,609	Apr. 12	933	241	59	191
Schmirk, Maurice, Fayette, Mo. Table and embroidery-frame	478,891	July 12	1260	312	60	264
Schmitt, Johann R., Bingen, Germany. Cigar-bunching machine	485,987	Nov. 8	1275	337 338 339	61	850
Schmitz, Egon L., New York, N. Y. Safety-razor	4-3,116	Oct. 11	877	223	61	194
Schmitz, Egon L., New York, N. Y. Razor-stopping device	485,849	Nov. 8	1049	280	61	803
Schmitz, Michael, Urbana, Iowa. Combined truck and wire-stretcher	468,182	Feb. 2	416	103	58	605
Schmuck, Solomon H., Cleveland, Ohio. Washing-machine	477,578	June 21	2141	532	59	1888
Schnucker, Lewis G. (See Steel, Robert, assignor.)						
Schnabel, Herman E., assignor to Hartman Manufacturing Company, Beaver Falls, Pa. Machine for forming wire-fencing bands	468,696	Feb. 9	1233	314 315	58	775
Schnarr, Henry R., Rock Island, assignor of one-fourth to U. Bortner, Moline, Ill. Holdback for carriages	484,464	Oct. 18	1446	368 251 252	67	317
Schnarrenberger, John F., assignor to C. E. Funk, Chicago, Ill. Cash-register	476,900	June 14	1034	252 270 271	59	1657
Schneekloth, Hans A., New York, N. Y. Machine for bending metal bars	468,582	Feb. 9	1061	270 271	58	740
Schneekloth, Wilhelm M. (See Reimers and Schneekloth.)						
Schneewind, Hugo, Crefeld, Germany. Gravitating door-closer	483,169	Sept. 27	2032	513	60	1773
Schneible, Carl A. (See Schneible, Joseph and C. A.)						
Schneible, Carl A., New York, and J. Schneible, Brooklyn, N. Y. Apparatus for aerating liquids	474,414	May 10	859	225	59	814
Schneible, Carl A., New York, and J. Schneible, Brooklyn, N. Y. Art of and apparatus for carbonating liquids	484,901	Oct. 25	2166	557	61	477
Schneible, Joseph. (See Schneible, Carl A. and J.)						
Schneible, Joseph, Brooklyn, and C. A. Schneible, New York, N. Y. Art of and apparatus for aerating liquids	474,413	May 10	857	224	59	814
Schneider, Adam, Lyons, Iowa. Cured tobacco	467,055	Jan. 12	1218	.....	58	239
Schneider, Adelbert. (See Woessner, Charles F., assignor.)						
Schneider, Adolf F., New York, N. Y. Vending-machine	488,840	Dec. 27	2624	651	61	1892
Schneider, Albert F., St. Louis, Mo. Apparatus for condensing fumes	487,971	Dec. 13	1195	298	61	1574
Schneider, Carl, Brooklyn, N. Y. Game apparatus	467,676	Jan. 26	2927	567	58	446
Schneider, Christian, Jamaica Plain, Mass. Fire escape	471,145	Mar. 22	2346	600	58	1582
Schneider & Co. (See Schneider, Henri, assignor.)						
Schneider, Ferdinand T., Washington, D. C. Portable stove	478,830	July 12	1173	290	60	248
Schneider, Frederick W. A., Toronto, Canada. Rheostat	475,898	May 31	3221	815	59	1316
Schneider, Henri, assignor to Schneider & Co., Paris, France. Mechanism for quick-firing guns	470,449	Mar. 8	1291	330 331	58	1354
Schneider, Henry J., assignor to C. Pape, Fort Wayne, Ind. Road-grader	479,466	July 26	2200	552	60	471
Schneider, John F., Livingston, Wis. Reel-carrier	481,641	Aug. 30	3066	748 749	60	1225
Schneider, Leopold E., Galena, Ill. Permutation-lock	473,786	Apr. 26	2827	710 711	59	586
Schneider, William R. (See Schuster and Schneider.)						
Schneiter, George. (See Tompkins and Schneiter.)						
Schnell, Frank B. (See Schnell, Joseph J. and F. B.)						
Schnell, Joseph J. and F. B., Dubois, Pa. Game-counter	470,604	Mar. 8	1504	392 393	58	1398
Schnelle, Otto, Berlin, Germany. Sieve-surface	483,170	Sept. 27	2032	514	60	1773
Schneller, George O., Ansonia, Conn. Machine for covering dress-stays	488,288	Dec. 20	1743	439 440	61	1702
Schnepp, Benard, Louisville, Ky. Off-bearing pole for leather sides	470,872	Mar. 15	1924	492	58	1488
Schnippering, Carl, Cassel, Germany. Cartridge-magazine for breech-loading small-arms	488,456	Dec. 20	2014	503	61	1756
Schnoor, Christian F., Gano, Ill. Coin-operated vending apparatus	484,573	Oct. 18	1610	409	61	350
Schnopp, Ernst, Brooklyn, N. Y. Pocket-book or purse	480,143	Aug. 2	613	156	60	699
Schoch, Martin L., New Berlin, Pa. Bicycle-support	474,415	May 10	861	225	59	814
Schock, Gustav, New York, N. Y. Mash-stirrer	494,883	Oct. 25	2123	547	61	469
Schock, Gustav, New York, N. Y. Grinding-mill	484,884	Oct. 25	2131	548	61	469
Schoder, Herman, et al. (See Sommer, Jacques, assignor.)						
Schodsky, Max, assignor of one-half to R. J. Victor, New York, N. Y. Buckle	466,803	Jan. 12	801	206	58	162
Schoeb, Albert W., Saratoga, Kans. Car-coupling	488,907	Dec. 27	2734	674	61	1916
Schoen, Charles T. (See Stagg, Fenn, and Schoen.)						
Schoen, Charles T., Allegheny, Pa. Strut for brake-beams	468,830	Feb. 16	1439	366	58	825
Schoen, Charles T., Allegheny, Pa. Ventilating car-door	469,794	Mar. 1	206	54	58	1141
Schoen, Charles T., Allegheny, Pa. Brake-shoe	481,973	Sept. 6	77	20	60	1350
Schoen, Charles T., Allegheny, Pa. Car journal-box	482,200	Sept. 6	456	110	60	1424
Schoen, Charles T., Allegheny, Pa. Art of and apparatus for making brake-shoes	484,666	Oct. 25	2103	542	61	464
Schoen, Charles T., Allegheny, Pa. Draw-bar carrier and face-plate	487,779	Dec. 13	888	225	61	1515
Schoen, Charles T., Philadelphia, Pa. Car-bolster	475,023	May 17	1830	464	59	1016
Schoen, George, New York, N. Y. Urinal attachment	487,130	Nov. 29	3148	807	61	1270
Schoen, Paul, Hoboken, N. J. Machine for sewing on buttons	487,972	Dec. 13	1197	299 300	61	1575
Schoenberg, Friedrich E., St. Louis, Mo. Combined sign bracket and frame	488,092	Dec. 13	1416	352	61	1621
Schoenberg, Ralph A., New York, N. Y. Resetting device for annunciators	468,697	Feb. 9	1240	315	58	776
Schoenfeld, William A. (See Moomy, Samuel C., assignor.)						
Schoenmehl, Charles B., Waterbury, Conn. Battery-zinc	467,239	Jan. 19	1530	390	58	308
Schoenmehl, Charles B., Waterbury, Conn. Electric battery	467,240	Jan. 19	1531	391	55	308
Schoenwaelder, Heinrich, Friedenshütte, Germany. Furnace	480,969	Aug. 16	1947	487	60	983
Schofield, Albert B., Brooklyn, N. Y. Car-starter	466,912	Jan. 12	989	253	58	197

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Schofield, Albert B., Brooklyn, N. Y. Can-opener	471,776	Mar. 29	3288	539	58	1768
Schofield, Albert B., Brooklyn, N. Y. Gage-knife	474,532	May 10	1042	267	59	848
Schofield, Albert B., Brooklyn, N. Y. Chopping-knife	488,229	Dec. 20	1749	440	61	1703
Schofield, Charles H., <i>et al.</i> (See Parks, Dana, assignor.)						
Schofield, George W., Jacksonville, Ill. Fence-post with applied holder	457,780	Dec. 13	889	225	61	1515
Schofield, James M., assignor of one-half to E. S. O'Brien, Merced, Cal. Wooden liquid-containing vessel	484,249	Oct. 11	1102	279	61	238
Schofield, John, New York, N. Y. Fraud-preventive device for slot-machines	475,899	May 31	3222	815	59	1316
Schofield, Silas C., Freeport, Ill. Potato-planter	481,642	Aug. 30	3067	749	60	1225
Schofield, William B., assignor of one-half to O. A. Roorbach, New York, N. Y. Ruler for use on desks	468,921	Feb. 16	1583	401	58	853
Scholes, Thomas A., <i>et al.</i> (See Washington, Samuel, assignor.)						
Schofield, Ira V., Jr., San Francisco, Cal. Air-supply for boiler-furnaces	481,831	Aug. 30	3393	833	60	1238
Schofield, Joseph J. (See Schofield, Socrates, assignor.)						
Schofield, Joseph J., Providence, R. I. Split pulley or wheel	470,952	Mar. 15	2039	521	58	1511
Schofield, Joseph J., Providence, R. I. Split wheel	470,953	Mar. 15	2040	522	58	1511
Schofield, Joseph J., Providence, R. I. Machine for guiding the edges of textile webs	487,352	Dec. 6	187	51, 52	61	1357
Schofield, Socrates, Providence, R. I. Means for driving bobbins in roving-frames	488,952	Dec. 27	2804	691	61	1930
Schofield, Socrates, assignor to J. J. Schofield, Providence, R. I. Means for driving bobbins in speeder-frames	488,961	Dec. 27	2803	590	61	1844
Schollenberger, Jacob M., Chicago, Ill. Cloth-cutting machine	485,888	Nov. 8	1120	296	61	818
Scholvien, Ludwig, assignor to J. D. Riedel, Berlin, Germany. Iodine derivatives of acetyl paramido-phenetole	472,898	Apr. 12	1245		59	248
Scholz, Anton, Brooklyn, N. Y. Game apparatus	481,830	Aug. 30	3393	833	60	1238
Scholz, Samuel G., Billings, Mo. Attachment for straw-stackers. (Reissue)	11,281	Nov. 1	681	180	61	714
Schomburg, Albert M. (See Clauss and Schomburg.)						
Schomburg, Herman H. E., Berlin, Germany. Air-feeding device for furnaces	479,022	July 19	1472	366	60	315
Schon, Anton, New Southgate, England. Bottle	467,727	Jan. 26	2319	589	58	463
Schon, Carl, Toledo, Ohio. Rotary water-meter	484,465	Oct. 18	1447	369	61	317
Schooley, Will C., Braddock, Pa. Torpedo clip-fastening	480,520	Aug. 9	1234	309	60	829
Schoonmaker, Cornelius L., Kingston, N. Y. Horse-boot	475,421	May 24	2448	624	59	1153
Schopbach, Emil. (See Anderson, John A. E., assignor.)						
Schopfer, William F., Newark, N. J. Tap-hole protector for casks or barrels	469,872	Mar. 1	333	85	58	1166
Schorn, Frederik M., Buffalo, N. Y. Steam-actuated valve	475,900	May 31	3223	815 816	59	1316
Schorpp, Georg and L., assignors of one-third to C. F. Mertz, Philadelphia, Pa. Grip for cable railways	481,512	Aug. 23	2857	702	60	1169
Schorpp, Louis. (See Schorpp, Georg and L.)						
Schorr, John W., <i>et al.</i> (See Trendley, John, assignor.)						
Schott, William, Brooklyn, N. Y. Scalpel	488,616	Dec. 27	2271	563	61	1832
Schon, Nils A. B., Christiania, Norway. Tourist's tent	470,900	Mar. 15	1960	501	58	1496
Schrade, George, New York, N. Y. Feeding mechanism for sewing-machines	487,079	Nov. 29	3064	787	61	1253
Schrade, George, assignor to G. Schrade, New York, N. Y. Pocket-knife	470,605	Mar. 8	1505	393	58	1399
Schrade, Gottlieb. (See Schrade, George, assignor.)						
Schrade & Hall Novelty Manufacturing Company. (See Hall, George F., assignor.)						
Schrader, Frederick, Philadelphia, Pa. Wheel-tire	466,577	Jan. 5	428	110	58	83
Schrader, George H. F., New York, N. Y. Valve	473,672	Apr. 26	2656	669	59	554
Schrader, George H. F., New York, N. Y. Valve for pneumatic tires	473,673	Apr. 26	2658	670	59	554
Schrader, George H. F., New York, N. Y. Valved stopper for water-bags	476,421	June 7	301	70	59	1497
Schrader, George H. F., New York, N. Y. Valve for pneumatic tires	483,172	Sept. 27	2034	514	60	1773
Schrader, George H. F., New York, N. Y. Screw-stopper for water-bags, &c.	483,330	Sept. 27	2308	580	60	1824
Schrader, George H. F., New York, N. Y. Valve	484,509	Oct. 18	1519	386	61	331
Schrader, Henry, Philadelphia, Pa. Gas governor and burner	481,771	Aug. 30	3294	802	60	1270
Schrader, Henry C., Wheeling, W. Va. Machine for grinding drinking-glasses	486,591	Nov. 22	2238	587 588	61	1072
Schrader, John C., <i>et al.</i> (See Penniman, Russell S., assignor.)						
Schrader, Lambert P., assignor of one-half to J. C. Johnston, Clay Centre, Kans. Cultivator for listed corn	482,321	Sept. 6	669	159 160	60	1466
Schrader, Wolfgang, assignor to C. L. P. Fleck & Söhne, Berlin, Germany. Veneer-cutting machine	468,307	Feb. 2	624	155 156	58	644
Schraff, Bernard, <i>et al.</i> (See Christy, James A., assignor.)						
Schraud, George A., Seneca, Ill. Grain-separator	477,783	June 28	2487	622	59	1973
Schraudner, Frederick, assignor of one-half to G. A. V. Brecht, St. Louis, Mo. Meat-rack	478,025	June 28	2878	719	59	2048
Schreder, Henry E., Maiteno, Ill. Whip-socket	481,063	Aug. 16	2107	524	60	1014
Schreiber, O. T., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Schreidt, Frank, assignor to Safety Cylinder Valve Company, Mansfield, Ohio. Automatic relief-valve	479,794	July 26	2625	651	60	549
Schreuder, Jens G., Edgewood, Pa. Switch and signal apparatus	479,225	July 19	1787	448	60	374
Schreuder, Jens G. L., Edgewood, Pa. Switch and signal apparatus	479,666	July 26	2514	625 626	60	530
Schrih, Juni, McGregor, Tex. Provision-safe	473,478	Apr. 26	2334	591	59	492
Schroder, John B., Cincinnati, Ohio. Handle	479,176	July 19	1715	430	60	361
Schroeder, August, Weston, N. J. Car-coupling	485,062	Oct. 25	2423	623	61	527
Schroeder, Conrad, Milwaukee, Wis. Corking bottles	487,452	Dec. 6	372	97	61	1394
Schroeder, Conrad, assignor of nine-twentieths to A. Stollenwerk, Milwaukee, Wis. Corking bottles	487,451	Dec. 6	370	97	61	1394
Schroeder, Frederick C., Alameda, Cal. Floor-scraping machine	483,173	Sept. 27	2037	514 515	60	1774
Schroeder, George G., <i>et al.</i> (See Miltimore, Alonzo E., assignor.)						
Schroeder, Gottlieb W., Huntington, Ind. Automatic watering device	478,472	July 5	629	153	60	124
Schroeder, John, and H. T. Hahn, Davenport, Iowa. Washing-machine	467,241	Jan. 19	1532	391	58	318
Schroeder, Richard D., San Francisco, Cal. Drink-mixer	473,643	Apr. 26	2615	658 659	59	515
Schroeder, William S., Chicago, Ill. Grain-car door	475,422	May 24	2449	624	59	1153
Schroeffel, John, and F. L. Voegtly, Allegheny, Pa.; said Schroeffel assignor to said Voegtly. Stove	487,541	Dec. 6	504	131	61	1420
Schroll, Carl, Chicago, Ill. Boiler-furnace	486,505	Nov. 22	2104	556	61	1047
Schryver, Washington I., assignor of one-half to A. E. Loomis, Prophetstown, Ill. Pole-tip	486,942	Nov. 29	2863	739	61	1213
Schubert, Charles W., Cottonwood, Iowa. Belt-reel	485,664	Nov. 8	746	209	61	750
Schubert, George, Walnut, Tex. Grain-binder	468,552	Feb. 9	1014	259 260	58	731
Schubert, George, Walnut, Tex. Gear-shifting mechanism for harvester-conveyers	469,275	Feb. 23	2137	549	58	968
Schubert, George, Walnut, Tex. Grain-conveyor for binders, &c.	470,213	Mar. 8	875	216	58	1278

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Schubert, George, Walnut, Tex. Gear-shifting mechanism for conveyors for harvesters...	471,197	Mar. 22	2419	616	58	1596
Schubert, George, Walnut, Tex. Grain-binder	472,143	Apr. 5	207	55, 56	59	39
Schubert, George, Walnut, Tex. Compressor and discharging mechanism for grain-binders	473,021	Apr. 19	1556	396	59	323
Schubert, George, Walnut, Tex. Butt-board for grain-binders	473,559	Apr. 26	2463	625	59	518
Schubert, George, Walnut, Tex. Grain-conveyor for harvesters and binders	474,416	May 10	862	225	59	815
Schubert, George, Walnut, Tex. Grain-conveyor for binders, &c.	475,423	May 24	2450	625	59	1153
Schubert, George, Walnut, Tex. Vertical gearing for harvesters and binders	476,901	June 14	1037	252	59	1657
Schubert, George, Walnut, Tex. Raising and lowering mechanism for harvesters	476,902	June 14	1041	253	59	1658
Schubert, George, Walnut, Tex. Raising and lowering mechanism for harvesters	478,717	July 12	985	245	60	212
Schubert, George, Walnut, Tex. Grain-conveyor for binders, &c.	479,467	July 26	2302	553	60	472
Schubert, George, Walnut, Tex. Mechanism for harvester-reels	479,848	Aug. 2	109	27	60	603
Schubert, George, Walnut, Tex. Gear-shifting mechanism for harvesters	481,202	Aug. 23	2338	576	60	1672
Schubert, George, Walnut, Tex. Grain-binder	481,974	Sept. 6	78	21	60	1350
Schubert, George, Walnut, Tex. Grain-binder	482,758	Sept. 20	1383	343	60	1631
Schubert, George, Walnut, Tex. Conveyor-gearing for harvesters	486,900	Nov. 29	2757	{ 723 724 }	61	1199
Schubert, Hermann, and R. Werth, Berlin, Germany. Door closing and checking apparatus	467,997	Feb. 2	138	33	58	550
Schubert, Max, Cottbus, assignor of one-half to M. Kohn, Berlin, Germany. Water-closet cover	473,714	Apr. 26	2720	{ 684 685 }	59	565
Schubert, Otto, Hanover, Germany. Self-closing water-trap	470,510	Mar. 8	1379	360	58	1371
Schuckers, Jacobs W., Philadelphia, Pa., assignor to Electric Typographic Company New York, N. Y. Mechanism for justifying composed lines of type	474,306	May 3	656	{ 167 168 169 170 171 }	59	764
Schuerman Brothers. (See Schuerman, Frederick G., assignor.)						
Schuerman, Frederick G., assignor to Schuerman Brothers, Twin Bluffs, Wis. Water-supply regulator	478,526	July 5	714	173	60	142
Schuetzler, Henry, et al. (See Schmid, Charles, assignor.)						
Schulenburg, Adolph, San Francisco, Cal. Concentrator	473,644	Apr. 26	2616	{ 659 660 }	59	546
Schulenburg, Albert R. (See Haskins, Schulenburg, and Chadwick.)						
Schuler, August J. (See Fell, Charles J., assignor.)						
Schuler, Bartholomew A., Chicago, Ill. Crupper-stuffing machine	485,231	Nov. 1	117	36	61	597
Schuler, Julius, et al. (See Rinderknecht, Charles J., assignor.)						
Schulhoff, John F., New Bremen, Ohio. Tobacco-pipe	473,088	Apr. 19	1659	422	59	340
Schülke, Julius, Gross Lichterfelde, Germany. Regenerative hydrocarbon-lamp	474,192	May 3	475	115	59	730
Schulman, Louis. (See Abramson, Joseph, assignor.)						
Schulte, John R. (See Etzkorn, Herman C., assignor.)						
Schulte, William H., Hopedale, Ill. Grain-separator	469,827	Mar. 1	260	67	58	1152
Schults, Charles A., Ames, N. Y. Counter-protector	472,771	Apr. 12	1167	299	59	233
Schultz, Carl H., New York, N. Y. Process of and apparatus for aerating liquids	485,665	Nov. 8	787	209	61	750
Schultz, Charles P., New York, N. Y. Dental engine	471,146	Mar. 22	2347	601	58	1582
Schultz, John F., Brooklyn, N. Y. Drawbridge for sidewalks, &c.	479,533	July 26	2314	579	60	493
Schultz, John H. (See Ibach and Schultz.)						
Schultz, Louis, New York, N. Y. Machine for laying out or cutting cams	466,757	Jan. 5	717	185	58	126
Schultz, Louis, New York, N. Y. Machine for laying out cams	466,758	Jan. 5	718	185	58	137
Schultz, William J., Detroit, Mich. Electric switch	486,987	Nov. 29	2926	755	61	1226
Schultze, Gustav F. W., San Francisco, Cal. Coin-controlled apparatus	475,743	May 24	2953	748	59	1219
Schultze, Frederick W., assignor of one-half to G. F. Rothacker, Jr., Philadelphia, Pa. Padlock	486,685	Nov. 22	2391	625	61	1103
Schulze, Andrew, Temple, Tex. Seed-cotton receiver	478,473	July 5	630	153	60	125
Schulze, Hans I. F., New York, N. Y. Toy puzzle	467,364	Jan. 19	1752	447	58	349
Schumacher, Adam J., Butte City, Mont. Discharge-trough for smelting-furnaces	470,511	Mar. 8	1380	360	58	1372
Schumacher, Adam J., Butte City, Mont. Fore-hearth	475,614	May 24	2755	698	59	1213
Schumacher, Gerhard, Milwaukee, Wis. Switch-operating device	484,250	Oct. 11	1102	279	61	233
Schumacher, Gymnasium Company. (See Peterson, Theodore, assignor.)						
Schumacher, John H., Saugatuck, Mich. Shearing-machine for fruit-packages	487,781	Dec. 13	890	226	61	1516
Schuman, John, assignor to J. S. Ellis, Detroit, Mich. Game apparatus	474,102	May 3	347	83	59	704
Schumann, Wilhelm O., Leipsic, Germany. Water-gage	468,508	Feb. 9	944	240	58	717
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Oil-motor engine	482,201	Sept. 6	457	110	60	1424
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne-Deutz, Germany. Gas or oil motor engine	482,202	Sept. 6	458	{ 110 111 }	60	1425
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne, Germany. Valve-apparatus for gas or petroleum motor engines	486,301	Nov. 15	1791	470	61	971
Schumm, Hermann, assignor to Gas-Motoren-Fabrik-Deutz, Cologne, Germany. Igniting apparatus for gas-engines	488,093	Dec. 13	1416	352	61	1621
Schumpert, Thomas E., Spring Ridge, La. Seed-planter and fertilizer-distributor	469,096	Feb. 16	1865	477	58	909
Schuscha, Johann. (See Heider and Schuscha.)						
Schuster, Carl, Berlin, Germany. School-desk	469,378	Feb. 23	2299	591	58	1001
Schuster, Frederick W., and W. R. Schneider, St. Louis, Mo. Washing-machine	488,094	Dec. 13	1417	353	61	1622
Schuster, Martin. (See Baader, Stephan, assignor.)						
Schutte, Louis, Philadelphia, Pa. Injector	468,698	Feb. 9	1241	316	58	776
Schutte, Louis, Philadelphia, Pa., and J. B. Ladd, Baltimore, Md.; said Ladd assignor to said Schutte. Pneumatic conveyor	469,175	Feb. 16	1964	503	58	929
Schuttler Manufacturing Company. (See Higgins, Crafts W., assignor.)						
Schutz, Emile. (See Henderson and Schutz.)						
Schuyler Electric Company. (See Lemp, Hermann, assignor.)						
Schuyler, Spencer D., et al. (See Batcheller, Birney C., assignor.)						
Schwab, Gustave, New York, N. Y. Photographic album	479,667	July 26	2518	627	60	530
Schwab, Julius, et al. (See Wood, Joseph M., assignor.)						
Schwalen, Peter C., and J. M. Powers, Minneapolis, Minn. Vehicle-spring	467,204	Jan. 19	1478	378	58	298
Schwabenberger, Andreas, Düren, Germany. Manufacture of envelopes	478,474	July 5	633	154	60	126
Schwane, Christian C., Winterset, Iowa. Winker-brace support and buckle	473,022	Apr. 19	1560	397	59	323
Schwartz, Charles, Brooklyn, N. Y. Spinning toy	476,825	June 14	917	224	59	1633
Schwartz, William, assignor to himself, H. Guttman, and E. C. Rost, New York, N. Y. Transfer-paper and composition for coating the same	478,892	July 12	1261	.....	60	265
Schwarz, David W., et al. (See Demareuz, Charles, assignor.)						
Schwarz, David W., et al. (See Demareuz, Charles, assignor.) (Reissue.)						
Schwarz, Josef. (See Hauptmann and Schwarz.)						
Schwarz, Michael, Dresden, Germany. Fire-escape	482,813	Sept. 20	1460	362	60	1646

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Schwarzwald, Caroline. (See Schwarzwald, Gustav, assignor.)						
Schwarzwald, Gustav, assignor to C. Schwarzwald, New York, N. Y. Composition of matter for pencils or crayons	471,438	Mar. 22	2785	.....	58	1666
Schwedtmann, Ferdinand. (See Wagner and Schwedtmann.)						
Schwieger, Carl T. H., assignor to Siemens & Halske, Berlin, Germany. Conduit for electric railways	478,026	June 28	2880	730	59	2018
Schweim, Claus J., Glückstadt, and W. Schweim, Krempdorf, Germany. Currycomb	488,291	Dec. 20	1751	440	61	1703
Schweim, Wilhelm. (See Schweim, Claus J. and W.)						
Schwer, Theodore, <i>et al.</i> (See Stewart, Harry B., assignor.)						
Schwerdt, Charles F. G. R., London, England. Sale-card for buttons	481,832	Aug. 30	3394	834	60	1288
Schwerdt, Charles F. G. R., London, England. Sale-card for buttons	484,677	Oct. 18	1790	455	61	387
Schwittler, Charles, Brooklyn, N. Y. Watchcase-pendant	477,338	June 21	1765	432	59	1814
Scigliano, Emmanuel P., Boston, Mass. Nut-wrench	485,775	Nov. 8	947	254	61	784
Sciofield, Charles H., assignor of one-half to J. T. Stevens and W. M. Philleo, Utica, N. Y. House-door letter-box	475,810	May 31	3072	777 778	59	1287
Sciofield, Frederick R., Penfield, Pa. Necktie-fastener	483,947	Oct. 4	632	159	61	130
Sciofield, Levi, Grand Haven, Mich. Check-row planter	466,431	Jan. 5	193	50	58	37
Sciofield, Levi, Grand Haven, Mich. Corn-planter	469,795	Mar. 1	207	54	58	1141
Scollay, George W., New York, N. Y. Manufacture of pigments	471,147	Mar. 22	2348	601	58	1582
Scollay, George W., New York, N. Y. Treating cotton-seed oil	474,864	May 17	1579	.....	59	967
Scollay, John A., Brooklyn, N. Y. Drop-tube for steam or hot-water boilers	480,786	Aug. 16	1660	415	60	928
Scolley, Thomas F., Memphis, Tenn. Measuring-funnel	477,072	June 14	1325	321	59	1737
Scorer, William, Havant, England. Photographic camera	476,562	June 7	506	119	59	1535
Scotford, Louis K., Chicago, Ill. Type-holder	481,286	Aug. 23	2502	615	60	1101
Scott, Adam. (See Grantham, Harry M., assignor.)						
Scott, Adam, Wilmington, Ohio. Collar-pad	468,230	Feb. 2	483	119	58	619
Scott, Allen E., and J. W. Wright, San Francisco, Cal. Billiard-table	488,743	Dec. 27	2470	613	61	1861
Scott, Charles A., Lincoln, Nebr. Earth-anger	470,168	Mar. 1	787	195	58	1252
Scott, Charles A., and J. C. Gardiner, Davey, Nebr. Earth-anger	472,403	Apr. 5	621	153	59	117
Scott, Charles D., Corry, Pa. Propelling-gear for tramway-locomotives	470,078	Mar. 1	652	161	58	1225
Scott, Charles D., Sanford, Pa. Propelling-gear for tramway-locomotives	488,484	Dec. 20	2062	512	61	1766
Scott, Charles F., and A. Wurts, assignors to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Lightning-arrester	470,013	Mar. 1	553	137	58	1206
Scott, Charles F., and A. Wurts, assignors to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Fuse for electric circuits	470,014	Mar. 1	554	137	58	1206
Scott, Charles H., Gloucester, England. Multiple drilling-machine	469,600	Feb. 23	2639	677	58	1066
Scott, D. A. (See Burke, Ashbel C., assignor.)						
Scott, David W., Cozad, Nebr. Ditching-machine	473,023	Apr. 19	1560	397	59	324
Scott, Eben M., Shelton, Conn. Knockdown paper box	474,610	May 10	1166	296	59	872
Scott Electrical Manufacturing Company. (See Ward, Barton B., assignor.)						
Scott, Emmet H., assignor to Niles & Scott Company, La Porte, Ind. Welding metal wheels	478,643	July 12	887	220	60	191
Scott, Emmet H., assignor to Niles & Scott Company, La Porte, Ind. Making metal wheels	478,644	July 12	888	220	60	191
Scott, Eugene C., Elderville, assignor of one-half to G. A. Kelly, Longview, Tex. Cotton-gin attachment	475,987	May 31	3360	847	59	1343
Scott, Eugene C., Elderville, assignor of one-half to G. A. Kelly, Longview, Tex. Roll-box for cotton-gins	475,988	May 31	3361	847	59	1343
Scott, Gabriel B. (See Allison and Scott.)						
Scott, George A. (See Bergmann and Scott.)						
Scott, George H. (See Morgan and Scott.)						
Scott, George H., Worcester, Mass. Hydrocarbon-burner	472,231	Apr. 5	350	90	59	65
Scott, George W., assignor of one-half to R. F. Crawford, Santa Rosa, Cal. Hinge-seat cutter	483,677	Oct. 4	232	58	61	48
Scott, Henry C., and F. Schaaf, St. Louis, Mo. Knockdown folding chair	488,095	Dec. 13	1421	353	61	1622
Scott, Isaac, Chrisman, Ill. Grave-box cover	486,943	Nov. 29	2864	739	61	1213
Scott, Jacob R., New York, N. Y. Skiving-machine	467,441	Jan. 19	1839	470	58	366
Scott, Jacob R., New York, N. Y. Skiving-machine	470,015	Mar. 1	555	137	58	1206
Scott, Jacob R., New York, N. Y. Skiving-machine	470,016	Mar. 1	557	138	58	1207
Scott, Jacob R., New York, N. Y. Sole-trimming machine	483,393	Sept. 27	2398	603	60	1841
Scott, Jacob R., New York, N. Y. Sole-trimming machine	488,841	Dec. 27	2627	651	61	1893
Scott, Jasper E., Meadville, Miss. Vehicle-seat	480,144	Aug. 2	614	156	60	699
Scott, James, Bethany, Cal. Hame-clip	484,053	Oct. 11	798	201	61	178
Scott, James A., Shelton, Conn., assignor to G. H. Dickerman & Co., Boston, Mass. Paper box	471,400	Mar. 22	2725	695	58	1655
Scott, John. (See Richard, Jean E., assignor.)						
Scott, Josiah, Toledo, Ohio. Combined washer-plate and nut-lock	473,086	Apr. 19	1657	422	59	340
Scott, Matthew T., assignor of two-thirds to J. L. Brasfield and W. G. Gore, Blue Springs, Mo. Car-coupling	485,752	Nov. 8	919	246	61	778
Scott, Matthew T., and J. L. Brasfield, assignors of one-third to W. G. Gore, Blue Springs, Mo. Car-coupling	475,707	May 24	2889	731	59	1238
Scott, Montezuma, New Brighton, Pa., assignor to Scott Tile Company, Chicago, Ill. Apparatus for molding tiles	483,486	Sept. 27	2513	633	60	1864
Scott, N. B., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Scott, Nelson S., assignor of one-half to F. A. Allison, Taylor, Tex. Car-replacer	471,027	Mar. 15	2153	553	58	1533
Scott, Robert, Newcastle, England. Wheel-tire for velocipedes	467,984	Feb. 2	118	29	58	547
Scott, Robert D., Pontiac, Mich. Two-wheeled vehicle	474,611	May 10	1167	296	59	872
Scott, Robert W. (See Williams, Louis N. D., assignor.)						
Scott, Robert W., assignor of one-half to L. N. D. Williams, Philadelphia, Pa. Stocking and making same	473,757	Apr. 26	2830	711	59	587
Scott, Robert W., and L. N. D. Williams, Philadelphia, Pa. Circular-knitting machine	467,956	Feb. 2	74	18	58	539
Scott, Robert W., and L. N. D. Williams, Philadelphia, Pa. Knitting-machine	484,610	Oct. 18	1667	422 423 424 425	61	362
Scott, Thomas T., and J. J. Sheaffer, Mott, Cal. Sawdust-burning and air-blast apparatus	477,387	June 21	1847	454	59	1829
Scott Tile Company. (See Scott, Montezuma, assignor.)						
Scott, Walter, Hoosick Falls, N. Y. Mowing-machine	475,472	May 24	2530	644	59	1169
Scott, Walter, Hot Springs, S. D. Railway time-signal	482,699	Sept. 13	1281	314	60	1599
Scott, Walter, Plainfield, N. J. Machine for printing, folding, and cutting sheets	467,265	Jan. 19	1575	401 402	58	316
Scott, Walter, Plainfield, N. J. Printing-machine	472,554	Apr. 12	852	219	59	176
Scott, Walter, Plainfield, N. J. Printing-machine	480,042	Aug. 2	455	116	60	669
Scott, Walter, Plainfield, N. J. Printing-machine	480,970	Aug. 16	1949	487 488	60	984
Scott, Walter, Plainfield, N. J. Printing-press	482,304	Sept. 6	461	111	60	1425

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Scott, Walter, Plainfield, N. J. Sheet-delivery mechanism	484,251	Oct. 11	1104	{ 279 289 }	61	239
Scott, Walter, Plainfield, N. J. Machine for bending electrotype and stereotype plates. (Reissue)	11,279	Oct. 18	1936	{ 492 493 }	61	418
Scott, Walter, Plainfield, N. J. Printing-machine	486,129	Nov. 15	1529	404	61	917
Scott, Walter, Plainfield, N. J. Oscillating-cylinder printing-press	487,495	Dec. 6	432	{ 111 112 }	61	1406
Scott, Walter, Plainfield, N. J. Printing-machine	488,637	Dec. 27	2306	571	61	1828
Scott, Walter, Chicago, Ill., assignor, by mesne assignments, to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Sheet-delivery apparatus for printing-machines	470,307	Mar. 8	1050	{ 256 267 }	58	1310
Scott, Walter, Plainfield, N. J., assignor, by mesne assignments, to R. Hoe, S. D. Tucker, T. H. Mead, and C. W. Carpenter, New York, N. Y. Mechanism for cutting and delivering printed paper	470,308	Mar. 8	1055	267	58	1311
Scott, William. (See Young, Edward T., assignor.) (Reissue.)						
Scott, William, Detroit, Mich. Sectional steam-boiler	468,831	Feb. 16	1440	{ 366 367 }	58	826
Scott, William, Detroit, Mich. Radiator	485,018	Oct. 25	2365	608	61	515
Scott, William, Leavenworth, Kans. Injector or insufflator for the larynx, &c.	480,787	Aug. 16	1662	415	60	928
Scott, William H. (See Brower, Thaddeus B., assignor.)						
Scott, William H., San Francisco, Cal. Bed-bottom	487,430	Dec. 6	330	84	61	1386
Scott, William W., assignor of one-half to J. F. Gilmore, Algona, Iowa. Tea-kettle	477,386	June 21	1847	454	59	1829
Scottish Inventions Company. (See Cumming, James G., assignor.)						
Scottron, Samuel R., Brooklyn, N. Y. Curtain-rod	481,720	Aug. 30	3204	782	60	1252
Scovel, Minor, New York, N. Y. Steam-boiler	479,023	July 19	1473	{ 366 367 }	60	316
Scovell, Hannibal, Portland, Colo. Ore-concentrator	468,931	Feb. 16	1601	405	58	856
Scovill & Adams Company. (See Dobbs, Andrew B., assignor.)						
Scovill & Adams Company. (See Fuller, Willard H., assignor.)						
Scovill, George W., assignor of one-half to W. T. Thomson, Chicago, Ill. Safety-envelope	473,431	Apr. 19	2246	565	59	453
Scovill Manufacturing Company. (See Hyde and Lines, assignors.)						
Scovill Manufacturing Company. (See Welton, Edwin D., assignor.)						
Scoville, Myron H. (See Winget, Jasper S., assignor.)						
Scoville, Nathan S., Warsaw, N. Y. Salt-grainer	473,560	Apr. 26	2471	625	59	518
Scoville, Washington L., Manlius, N. Y. Tip for crutches and canes	483,174	Sept. 27	2039	515	60	1774
Scribner, Charles E. (See Seely and Scribner.)						
Scribner, Charles E., Chicago, Ill. Test-circuit for multiple switchboards	467,901	Jan. 26	2594	657	58	516
Scribner, Charles E., Chicago, Ill. Test-circuit for multiple switchboards	467,902	Jan. 26	2597	657	58	516
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	467,656	Jan. 26	2196	558	58	410
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Canopy telephone-exchange switchboard	472,956	Apr. 12	1440	367	59	287
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Testing apparatus for trunk-lines of telephone exchanges	473,089	Apr. 19	1660	422	59	341
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switch	473,968	May 3	131	30	59	662
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. House-telephone system	474,067	May 3	294	72	59	694
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Circuit for test-batteries and cords of multiple switchboards	476,492	June 7	409	95	59	1517
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	476,493	June 7	411	96	59	1517
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple switchboards	477,579	June 21	2142	532	59	1888
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Duplex-arc lamp	481,677	Aug. 30	3122	{ 762 763 }	60	1236
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard telephone-exchange system	481,678	Aug. 30	3125	763	60	1236
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange	481,679	Aug. 30	3127	763	60	1237
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test system for multiple switchboards	483,175	Sept. 27	2039	515	60	1774
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Regulator for dynamo-electric machines	484,611	Oct. 18	1673	{ 425 426 }	61	363
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system	484,612	Oct. 18	1675	426	61	363
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Sub-station apparatus for telephone systems	484,613	Oct. 18	1678	426	61	364
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test-circuit for multiple-switchboard systems	484,867	Oct. 25	2105	543	61	464
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric switchboard	486,506	Nov. 22	2105	557	61	1047
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Test system for multiple switchboards	486,507	Nov. 22	2106	557	61	1048
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Electric-arc lamp	486,958	Nov. 29	2882	745	61	1217
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Auxiliary fire-alarm-signal apparatus	487,095	Nov. 29	3093	{ 794 795 }	61	1259
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system	487,096	Nov. 29	3094	795	61	1259
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange system	487,097	Nov. 29	3096	795	61	1260
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switchboard apparatus	487,098	Nov. 29	3100	796	61	1266
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Means for preventing induction in cables of multiple switchboards	488,034	Dec. 13	1317	329	61	1600
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system for telephone-exchanges	488,035	Dec. 13	1320	329	61	1601
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system for telephone-exchanges	488,036	Dec. 13	1323	329	61	1602
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Telephone-switchboard apparatus	488,037	Dec. 13	1326	329	61	1602
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. Multiple-switchboard system for telephone-exchanges	488,038	Dec. 13	1329	330	61	1603

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Scribner, Charles E., assignor to Western Electric Company, Chicago, Ill. District signal-box	488,579	Dec. 27	2317	549	61	1812
Scribner, Charles E., and E. P. Warner, assignors to Western Electric Company, Chicago, Ill. Apparatus for illuminating cars of cable roads	469,873	Mar. 1	334	85, 86	58	1166
Scribner, Charles E., and E. P. Warner, assignors to Western Electric Company, Chicago, Ill. Spring-jack switch	488,033	Dec. 13	1316	328	61	1600
Scribner, Edward H., U. S. Navy. Boiler	483,369	Sept. 27	2357	{ 591 592 }	{ 60 }	1835
Scribner, George W., assignor of one-half to C. A. Bagwell, Chatham, Canada. Flue-pipe in reed and pipe organs	467,337	Jan. 19	1688	432	58	337
Scrimgeour, Charles E., and H. Gildard, Lewiston, Me. Mechanism for wrapping warp-chains	482,066	Sept. 6	233	57	60	1381
Scrimgeour, Charles E., and H. Gildard, Lewiston, Me. Mechanism for unwinding warp-threads	485,776	Nov. 8	948	{ 254 255 }	{ 61 }	784
Scriven, Jeremiah A., New York, N. Y. Undergarment	472,555	Apr. 12	854	219	59	177
Scrubby, Ernest E., Epping, England. Apparatus for purifying sewage	484,823	Oct. 25	2033	521	61	450
Scruggs, Loyd, Dalton City, Ill. Flour-sifter	484,980	Oct. 25	2296	593	61	501
Scudder, James N., Canton, Pa. Sheep-rack	486,508	Nov. 22	2109	557	61	1048
Scudder, Jotham. (See Kirkpatrick, Edgar T., assignor.)						
Seaberg, John A. W., Boston, Mass. Meat-cutting machine	469,097	Feb. 16	1866	477	58	909
Seabery, John A. W. (See Bornstein, Henry, assignor.)						
Seabury, Samuel, U. S. Navy. Means for propelling vessels	472,199	Apr. 5	295	778	59	56
Seabury, Samuel, U. S. Navy. Breech-loading cannon	474,974	May 17	1751	{ 444 445 }	{ 59 }	1001
Seabury, Samuel, U. S. Navy. Breech-loading cannon	479,609	July 26	2421	604	60	512
Seabury, Samuel, U. S. Navy. Breech-loading cannon	479,957	Aug. 2	286	71, 72	60	637
Seabury, Samuel, U. S. Navy. Breech-loading ordnance	483,267	Sept. 27	2213	556	60	1807
Seabury, Samuel, U. S. Navy. Gas-check for breech-loading ordnance	487,380	Dec. 6	230	63	61	1366
Seaman Drawer Fitting Machine Company. (See Patten, Edward K., assignor.)						
Seaman, George Q., Brooklyn, N. Y. Time-alarm bed	479,307	July 19	1907	477	60	399
Seaman, Henry B., New York, N. Y. Float bridge or platform	474,437	May 10	970	250	59	834
Seaman, Horace W., Millport, assignor to J. M. Rose, Syracuse, N. Y. Automatic-brake pulley-block	468,901	Feb. 16	1546	393	58	846
Seaman, Robert. (See Stanbrough, Rufus G., assignor.)						
Seaman, William S., Milwaukee, Wis. Carving-machine	470,450	Mar. 8	1292	{ 331 332 }	{ 58 }	1354
Seamless Rubber Company. (See Longden, Charles E., assignor.)						
Seamless Structural Company. (See White and Bigelow, assignors.)						
Search, Casper F., assignor to Appleton Manufacturing Company, Appleton, Wis. Shaft-bearing	485,890	Nov. 8	1121	296	61	818
Searcy, Charles L. (See Taylor, William W., assignor.)						
Searing, James E., Mount Vernon, N. Y. Frame for eyeglasses and spectacles	475,615	May 24	2756	698	59	1213
Searing, Lewis, Denver, Colo. Lightning-arrester	484,466	Oct. 18	1450	370	61	318
Searle, Frank, Virginia City, Mont. Violin-bow	471,028	Mar. 15	2154	553	58	1533
Searle, John Q. C., Chicago, Ill. Apparatus for heating railway-cars	474,417	May 10	864	226	59	815
Searles, A. M., et al. (See Badt, Francis B., assignor.)						
Searls, Anson, Newark, N. J. Clip for dash-bars	475,811	May 31	3075	778	59	1287
Sears, Charles, South Evanston, Ill. Matrix-making machine	475,804	May 31	3051	{ 772 773 774 774 775 776 }	{ 59 }	1282
Sears, Charles, South Evanston, Ill. Matrix-making machine	475,805	May 31	3060	{ 775 776 776 }	{ 59 }	1284
Sears, Charles, South Evanston, Ill. Matrix-making machine	475,806	May 31	3065	776	59	1285
Sears, Charles, South Evanston, Ill. Type-writing attachment for matrix-making machines	475,807	May 31	3067	776	59	1286
Sears, Cyrus. (See Williams, Elkanah G., assignor.)						
Sears, Edwin, Brooklyn, N. Y. Making rivets or bolts	469,724	Mar. 1	89	24	58	1116
Sears, Frederick W., Prophetstown, Ill. Heat-indicator	477,313	June 21	1732	424	59	1807
Sears, George, assignor of one-half to W. H. Underwood, Onslow, Iowa. Plow-point	484,758	Oct. 18	1914	488	61	413
Sears, Isaac L. (See Lage, Nicholas, assignor.)						
Sears, Willard T., Boston, Mass. Construction of buildings	470,901	Mar. 15	1961	{ 501 502 565 566 }	{ 58 }	1496
Sears, Willard T., assignor of one-half to W. M. Rhoads, Philadelphia, Pa. Pill or tablet machine	473,432	Apr. 19	2247	{ 565 566 }	{ 59 }	453
Seaton, Benjamin C., Nashville, Tenn. Yieldable gear-wheel	480,439	Aug. 9	1112	278	60	803
Seaton, Benjamin C., Nashville, Tenn. Electrical railway-signal	484,614	Oct. 18	1679	427	61	364
Seaver, Augustus, Boston, Mass. Welded boot or shoe and making the same	467,743	Jan. 26	2346	594	58	469
Seaver, Augustus, Boston, Mass. Sewing-machine for lasting boots or shoes	487,023	Nov. 29	2980	{ 767 768 }	{ 61 }	1235
Seaver Sewing Machine Company. (See Gooding, Charles S., assignor.)						
Seaver Sewing Machine Company. (See Gooding and Keith, assignors.)						
Seavey, Frank P. (See Utley, Milton R., assignor.)						
Seavey, George F., Boston, Mass. Lamp-shade and holder for incandescent lamps	473,240	Apr. 19	1933	486	59	392
Seawell, Jesse P., Clarksburg, Mo. Car-coupling brake	479,024	July 19	1476	367	60	316
Schchrist, Albert, Denver, Colo. Electric-lighting system	476,422	June 7	304	70	59	1497
Seck, Heinrich, Dresden, Germany. Sifting apparatus	469,601	Feb. 23	2640	{ 677 678 }	{ 58 }	1066
Secor, George D., South Bend, Ind. Doffing attachment for spinning-mules	475,808	May 31	3068	777	59	1286
Secor, Jerome B., Bridgeport, Conn., assignor of one-half to M. Anthony, Berkeley, Cal. Electric motor	478,475	July 5	633	{ 154 155 }	{ 60 }	126
Secor, William W. (See Williams, Seth, assignor.)						
Sectional Lead Pencil Company. (See Greenwald, Herman D., assignor.)						
Sectional Standards. (See Pitt, William, assignor.)						
Security Insulator Company. (See Green, John J., assignor.)						
Seddon, Edward H., Brooklands, England. Inflatable tire	486,509	Nov. 22	2110	557	61	1048
Sedgwick, Alonzo, assignor to A. B. Sedgwick, Poughkeepsie, N. Y. Machine for separating or feeding paper	469,366	Feb. 23	2275	{ 584 585 }	{ 58 }	996
Sedgwick, Annie B. (See Sedgwick, Alonzo, assignor.)						
Sedmiradsky, Adolf. (See Tabor and Sedmiradsky.)						
Sedmiradsky, Adolph, assignor to Kalamazoo Knitting Company, Milwaukee, Wis. Circular-knitting machine	480,043	Aug. 2	457	{ 116 117 }	{ 60 }	669
See, Alonzo B., and W. L. Tyler, Brooklyn, N. Y. Electric elevator	478,821	July 12	1174	291	60	248
See, Christian, St. Paul, Minn. Combined file and account-book	467,205	Jan. 19	1479	378	58	298

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. G.	Vol.	Page.
See & Co., A. W. (See Hammond, John F., assignor.)						
See, Horace. (See Yarrow, Alfred F., assignor.)						
See, Horace, New York, N. Y. Compound engine	469,455	Feb. 23	2416	619	58	1023
See, Horace, New York, N. Y. Ash-ejector for ships	482,759	Sept. 20	1357	344	60	1632
See, Horace, New York, N. Y. Apparatus for ejecting ashes from vessels	483,770	Oct. 4	374	93	61	78
See, James W., Hamilton, Ohio. Flooring	479,126	July 19	1635	409	60	346
Seebach, George W., New York, N. Y. Pipe-coupling	480,374	Aug. 9	1007	253	60	785
Seebick, George, Pittsburg, assignor of one-half to J. Scheillein, Allegheny, Pa. Ice-velocipede	485,335	Nov. 1	282	76	61	629
Seebold, Moritz, Berlin, Germany. Stove	488,665	Dec. 27	2352	582	61	1838
Seeley, Horace H. (See Morand, Franklin A., assignor.)						
Seely, Herman B., assignor to P. W. Herzog, trustee, Chicago, Ill. Construction of floors	467,141	Jan. 12	1379	353	58	271
Seely, John A., New York, N. Y., assignor to Western Electric Company, Chicago, Ill. Keyboard system for metallic circuits	476,494	June 7	412	96	59	1517
Seely, John A., Brooklyn, N. Y., assignor to Western Electric Company, Chicago, Ill. Telephone-exchange apparatus	476,826	June 14	918	225	59	1633
Seely, John A., New York, N. Y., and C. E. Scribner, assignors to Western Electric Company, Chicago, Ill. Circuit for multiple-switchboard systems of telephone-exchanges	472,772	Apr. 12	1169	299	59	234
Seelye, William E., Brainerd, Minn. Water-motor	483,394	Sept. 27	2399	603	60	1841
Sefton, William E., Canton, Ohio. Colter	488,457	Dec. 20	2015	503	61	1757
Segar, Charles T., Chicago, Ill. Bed-bottom	480,788	Aug. 16	1664	416	60	928
Segar, Charles T., Chicago, Ill. Bed-bottom	480,789	Aug. 16	1664	416	60	928
Segog, Byron G. (See Fisher, William H., assignor.)						
Segog, Byron G. (See Keogh, John M., assignor.)						
Segschneider, Gustav, assignor to Waring Hat Manufacturing Company, Yonkers, N. Y. Pile-wire for looms	478,368	July 5	481	116	60	95
Segschneider, Gustav, assignor to Waring Hat Manufacturing Company, Yonkers, N. Y. Pile-wire for looms	478,369	July 5	483	116	60	95
Segundo, Edward C. de, London, England. Word-counting appliance for type-writers	488,458	Dec. 20	2017	504	61	1757
Seher, August, Newark, N. J. Manufacture of compounds of pyroxyline	470,451	Mar. 8	1294		58	1355
Sehon, Lee, Denver, Colo. Hotel-ledger	473,856	Apr. 26	2941	741	59	608
Seiberling, Charles W., trustee. (See Ransom and Maynes, assignors.)						
Seiberling, John F., Akron, Ohio. Corn-harvester	468,832	Feb. 16	1441	{ 367 368 }	58	826
Seiberling, John F., Akron, Ohio. Type-writing machine	470,214	Mar. 8	877	{ 216 217 }	58	1278
Seiberling, John F., Akron, Ohio. Mowing-machine	476,318	June 7	135	32, 33	59	1464
Seiberling, John F., Akron, Ohio. Mowing-machine	483,891	Nov. 8	1122	297	61	818
Seibert, Nicholas, Boston, Mass. Sanding mechanism for cars	473,090	Apr. 19	1662	423	59	341
Seibold, Otto F., Mount Vernon, assignor to H. Hoyt, New York, N. Y. Cartridge-shell	470,971	Aug. 16	1951	488	60	985
Seidel, Joseph H., Philadelphia, Pa. Car-coupling	485,232	Nov. 1	118	36	61	598
Seidel, Victor, Leipsic, assignor to A. Richter, Rudelstadt, Germany. Cut-off valve for musical instruments	468,308	Feb. 2	626	156	58	645
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, near Dresden, Germany. Carbonate of guaiacol and cresol	466,913	Jan. 12	990	253	58	197
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, near Dresden, Germany. Making oxymethoxybenzoic acid	470,920	Mar. 15	1989		58	1501
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, Germany. Making disinfectants	482,101	Sept. 6	293		60	1393
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, Germany. Disinfectant	482,102	Sept. 6	295		60	1393
Seifert, Bruno R., assignor to F. von Heyden, Nachfolger, Radebeul, near Dresden, Germany. Making oxyvitic acid	488,290	Dec. 20	1750		61	1703
Seiffert, August, Frankenstein, Germany. Apparatus for melting tallow, wax, &c	477,023	June 14	1235	299	59	1697
Seiffried, Samuel J., assignor to Munson Type Writer Company, Chicago, Ill. Type-writing machine	474,350	May 3	753	{ 196 197 }	59	781
Seignuret, Hyppelyte J., Henderson, Minn. Gas-engine exhaust-furnace	485,988	Nov. 8	1278	339	61	851
Seller, Carl, Philadelphia, Pa. Furniture attachment	472,200	Apr. 5	298	78	59	56
Seller, Franz, Mannheim, Germany. Apparatus for recording and registering quantities of steam, &c	481,287	Aug. 23	2504	{ 615 616 }	60	1102
Seller, I. L. D., et al. (See Haas, Jacob C., assignor.)						
Seller, Paul, San Francisco, Cal. Individual alarm signal apparatus	479,308	July 19	1909	477	60	399
Seilnacht, Franz X., Ebersteinburg, near Baden-Baden, Germany. Transom-lifter	470,512	Mar. 8	1381	{ 360 361 }	58	1372
Seip, Thomas A., assignor to J. Burns & Sons, New York, N. Y. Grain or coffee cleaner	471,901	Mar. 29	3471	{ 886 887 }	58	1804
Seip, Thomas A., Dayton, assignor of one-half to P. B. Holly and C. A. Salzman, Hamilton, Ohio. Rolling screen	486,592	Nov. 22	2241	588	61	1073
Seipp, Max, Berlin, Germany. Multitubular boiler	485,507	Nov. 1	543	144	61	683
Seips, Michael. (See Manning and Seips.)						
Seither, Jacob, Keokuk, Iowa. Heating-drum	482,276	Sept. 6	580	138	60	1448
Seitz, Edward, Peoria, Ill. Apparatus for cooling beer	483,395	Sept. 27	2401	603	60	1841
Sekofsky, Louis, San Francisco, Cal. Folding bed	473,355	Apr. 19	2122	533	59	429
Selden, Arthur T., New York, N. Y. Cabinet for displaying sample goods	484,166	Oct. 11	964	248	61	217
Selden, Charles, Baltimore, Md. District-telegraph box	473,024	Apr. 19	1563	398	59	325
Selden, Charles, Baltimore, Md. Electric-lighting system	480,375	Aug. 9	1008	254	60	786
Selden, Charles, St. Louis, Mo., assignor to Combined Electric and Trip Bell Cord Company, of Illinois. Railway-train signal apparatus	478,135	July 5	82	21, 22	60	19
Selden, George, Erie, Pa. Portable tubular boiler	479,991	Aug. 2	360	89	60	649
Selden, William H. (See Jolley, Jefferson D., assignor.)						
Selt, T. P., et al. (See Johnson, Charles J. W., assignor.)						
Selkirk, Alexander, Albany, assignor, by mesne assignments, to R. Whitehill and D. Waring, Newburg, N. Y. Device for heating liquids	481,151	Aug. 16	2257	557	60	1042
Selkirk, Alexander, Albany, assignor, by mesne assignments, to R. Whitehill and D. S. Waring, Newburg, N. Y. Digesting apparatus	486,130	Nov. 15	1533	{ 404 405 }	61	918
Selkirk, Alexander, Albany, assignor, by mesne assignments, to R. Whitehill and D. S. Waring, Newburg, N. Y. Digesting apparatus	487,782	Dec. 13	891	{ 226 227 }	61	1516
Selkirk, Alexander, Albany, assignor, by mesne assignments, to R. Whitehill and D. Waring, Newburg, N. Y. Digesting apparatus	487,783	Dec. 13	896	227	61	1517
Selkirk, Alexander, Albany, assignor, by mesne assignments, to R. Whitehill and D. Waring, Newburg, N. Y. Digesting apparatus	487,784	Dec. 13	900	{ 227 228 }	61	1517
Selkreg, John H., Ithaca, N. Y. Fly and insect escape for doors, windows, &c	476,025	May 31	3409	860	59	1354
Sellers, Stephen A. (See Landroth, John F., assignor.)						
Selleck, Silas E., West Troy, N. Y. Trammel	472,829	Apr. 12	1246	319	59	248

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Selleck, William E., Chicago, Ill. Carrier	474,975	May 17	1755	445	59	1002
Sellers, Frederick L., and J. G. Schissel, Quimby, Iowa. Gate	475,708	May 24	2890	731	59	1238
Sellers, George B., Marshalltown, Iowa. Motor	480,972	Aug. 16	1951	488	60	985
Sellers, George H., Ridley Park, Pa. Rail-tie	486,959	Nov. 29	2883	745	61	1217
Sellheim, Henry, New York, N. Y. Hoisting device and support	484,252	Oct. 11	1107	280	61	239
Sellner, Leopold, Vienna, Austria-Hungary. Switch for electric signaling apparatus	470,793	Mar. 15	1791	461	55	1,662
Sellou, Charles A., Pike, N. Y. Pump-handle	476,082	May 31	3501	882	59	1373
Sellstrom, Gustaf F., Jamestown, N. Y. Meat-saw	473,130	Apr. 19	1738	430	59	354
Selover, Charles B., Owaseo, N. Y. Baling-press	475,002	May 17	1799	456	59	1010
Seltzer, Uriah D., Lebanon, Pa. Egg-beater	487,024	Nov. 29	2983	768	61	1336
Semler, Max A., Kappel, Germany. Knitting-machine	475,989	May 31	3363	848	59	1343
Semmel, Howard S., assignor of one-half to J. W. Balliet, Slatington, Pa. Slate-frame	471,902	Mar. 29	3472	820	58	1804
Sennler, Robert, Sr., Siegmur, Germany. Knot for net fabrics	483,291	Sept. 27	2250	566	60	1813
Seemple, Harry, <i>et al.</i> (See Altmeier, Matthew, assignor.)						
Sencenbaugh, John J., assignor to E. C. Clay, Chicago, Ill. Combined inhaler and medicator	473,526	Apr. 26	2412	612	59	506
Sencenbaugh, Samuel S., and A. J. Ives, Aurora, Ill. Umbrella-stand	478,645	July 12	889	230	60	192
Sencenbaugh, Samuel S., and A. J. Ives, Aurora, Ill. Umbrella-stand	478,646	July 12	890	220	60	192
Senderling, Martin L., Jersey City, N. J. Dump-wagon	488,292	Dec. 20	1751	441	61	1703
Senff, Friedrich, assignor of one-half to G. Hurlimann, Brooklyn, N. Y. Cigar cutter and lighter	468,287	Feb. 2	584	146	58	637
Senger, Henry, assignor of one-third to T. H. Musgrave, Baltimore, Md. Gymnastic striking-bag	475,252	May 17	2178	554	59	1085
Senger, Robert, New York, N. Y. Induline dye	475,616	May 24	2757		59	1213
Senner, Rudolf, Pforzheim, Germany. Automatic match-ignitor	484,253	Oct. 11	1108	280	61	239
Senner, Rudolf, assignor of one-half to the Firm of H. Drews, Pforzheim, Germany. Card-case	470,079	Mar. 1	654	162	58	1226
Sennett, Leonidas, assignor of one-half to G. P. Clancy and T. O. Demaro, Russell, Ky. Torpedo-placer	471,984	Mar. 29	3586	{ 915 916 }	{ 58 58 }	{ 1825 1825 }
Seutman, Edwin E., Philadelphia, Pa. Roll-paper holder and cutter	476,689	June 7	694	170	59	1575
Seutman, Edwin E., Philadelphia, Pa. Roll-paper holder and cutter	477,580	June 21	2143	532	59	1888
Seppmann, Herman, South Bend, Minn. Hand-planter	466,627	Jan. 5	505	130	58	97
Sequeira, Augustus, Hartford, Conn. Bicycle	474,764	May 10	1405	356	59	920
Sequeira, John C., <i>et al.</i> (See Washington, Samuel, assignor.)						
Sercombe-Bolte Manufacturing Company. (See Bolte, Frank H., assignor.)						
Sercombe, Parker H. (See Bolte, Frank H., assignor.)						
Sercombe, William, Hamworthy, Poole, England. Brick-kiln	472,404	Apr. 5	621	{ 158 159 }	{ 59 59 }	{ 117 117 }
Sergant, Henry C., Westfield, N. J., assignor to Ingersoll-Sergeant Drill Company, New York, N. Y. Bar for quarry-frames	484,117	Oct. 11	878	223	61	194
Sergant, Henry C., Westfield, N. J., assignor to Ingersoll-Sergeant Drill Company, New York, N. Y. Drill-chuck	484,118	Oct. 11	879	223	61	195
Serpollet, Leon, assignor to La Société des Générateurs à Vaporisation Instantanée, (Système Serpollet), Paris, France. Generator for the vaporization of liquids	480,286	Aug. 9	865	{ 220 221 }	{ 60 60 }	{ 760 760 }
Serrell, Harold, administrator. (See Villamor, Isidoro.)						
Serrell, James E., deceased, New York, N. Y.; M. J. Thomson, administratrix. Derrick	487,453	Dec. 6	373	97	61	1394
Servoss, Henry S., Atlanta, Ga. Drying-kiln	469,067	Feb. 16	1826	467	58	901
Servus, Ferdinand, Berlin, Germany. Photographic shutter	473,356	Apr. 19	2123	533	59	429
Servus, Ferdinand, Berlin, Germany. Support for cameras or other purposes	473,357	Apr. 19	2126	533	59	430
Servus, Ferdinand, Berlin, Germany. Photographic camera	473,358	Apr. 19	2128	534	59	430
Servus, Ferdinand, Berlin, Germany. Plate-holder	473,359	Apr. 19	2131	534	59	430
Sessions, George W., New York, N. Y. Preparing and bottling wines	467,757	Jan. 26	2364	599	58	472
Sessions, Henry H., assignor to Pullman's Palace Car Company, Chicago, Ill. Top buffer for freight-cars	479,025	July 19	1478	{ 367 368 }	{ 60 60 }	{ 316 316 }
Sessions, Loren B. (See Winsor and Cummings, assignors.)						
Seth Thomas Clock Company. (See Ames, William T., assignor.)						
Settle, David W., Paducah, Ky. Sink	484,551	Oct. 11	1109	280	61	240
Settle, James M., South Jacksonville, Fla. Fruit conductor or conveyer	486,357	Nov. 15	1879	494	61	988
Settle, William F., Russellville, Ky. Broom-shoulder cutter	480,287	Aug. 9	867	221	60	760
Severio, Frank. (See Grisel and Severio.)						
Severy, Melvin L. (See Ohmart, Eli C., assignor.)						
Severy, Melvin L., assignor to C. F. Howe, Boston, and G. Kempton, Sharon, Mass., trustees. Type-writing machine	476,319	June 7	137	{ 33 34 35 }	{ 59 59 59 }	{ 1464 1464 1464 }
Sevey, Fanny F., Boston, Mass. Bread-cutting plato	471,198	Mar. 23	2422	616	58	1596
Sevier, Moses N., Vernon, Tex. Milk-stool	487,099	Nov. 29	3101	796	61	1261
Sevigne, Henry A., assignor to Sevigne Manufacturing Company, Boston, Mass. Thill-coupling	481,064	Aug. 16	2108	524	60	1014
Sevigne, Louis, <i>et al.</i> (See Phillips, Edward, assignor.)						
Sevigno Manufacturing Company. (See Sevigne, Henry A., assignor.)						
Sewall, James H., Chicago, Ill., assignor to Consolidated Car Heating Company, Albany, N. Y. Heating apparatus for cars	477,464	June 21	1968	488	59	1853
Sewall, James H., Portland, Me., assignor to Consolidated Car Heating Company, Wheeling, W. Va. Car-heating apparatus	483,813	Oct. 4	436	{ 107 108 }	{ 61 61 }	{ 90 90 }
Sewall, Nicholas H. (See Sewall, Robert H. F. and N. H.)						
Sewall, Robert H. F. and N. H., Bessemer, Ala. Harbor	479,309	July 19	1911	{ 477 478 }	{ 60 60 }	{ 399 399 }
Seward, Henry C., Budd's Lake, N. J. Mucilage bottle and brush	473,025	Apr. 19	1565	398	59	324
Seward, Simon E. V., and F. W. Leimberger, Petersburg, Va.; said Leimberger assignor to said Seward. Trunk	475,617	May 24	2758	699	59	1214
Seward, Williamson B., Bloomington, Ind. Clamp	478,822	July 12	1175	291	60	248
Sexton, Isaac, Somerville, Mass. Jacket for sheet-metal cans	483,750	Oct. 4	341	85	61	71
Sexton, Stephen H., Tucson, Ariz. Ter. Fifth-wheel	484,378	Oct. 11	1306	334	61	278
Seybold, Charles, Cincinnati, Ohio. Signature-press	471,303	Mar. 22	2577	654	58	1626
Seybold, Henry M. (See Ashby and Seybold.)						
Seymour, Albert P. (See Pass and Seymour.)						
Seymour, Albert P., Syracuse, N. Y. Wire-cleat	476,827	June 14	919	225	59	1633
Seymour, Albert P., Syracuse, N. Y. Circuit-breaking insulator	476,828	June 14	920	225	59	1634
Seymour, Albert P., Syracuse, N. Y. Electric switch	476,829	June 14	921	225	59	1634
Seymour, Albert P., Syracuse, N. Y. Insulating-tube for electric conductors	476,964	June 14	1149	277	59	1679
Seymour, Albert P., Syracuse, N. Y. Thermal cut-out	481,246	Aug. 23	2423	598	60	1088
Seymour, Albert P., Syracuse, N. Y. Insulator	483,771	Oct. 4	376	93	61	78
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Machine for boring hubs	467,206	Jan. 19	1480	379	58	298

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Seymour, Charles, assignor to Defiance Machine Works, Defiance, Ohio. Polishing-machine	487,785	Dec. 13	902	228	61	1518
Seymour, Charles E., Hurley, Wis. Process of and device for reducing volatilized metals.	487,160	Nov. 29	3102	796	61	1261
Seymour, Charles E., Lake Geneva, Wis. Device for operating ore-concentrators and allied machines	487,542	Dec. 6	505	132	61	1420
Seymour, Charles E., Lake Geneva, Wis., assignor to Seymour Concentrator Company, Chicago, Ill. Ore-concentrator	482,322	Sept. 6	670	160 161	60	1467
Seymour, Charles E., Lake Geneva, Wis., assignor to Seymour Concentrator Company, Chicago, Ill. Magnetic separator for ore-concentrators	482,323	Sept. 6	674	161	60	1468
Seymour, Charles J., Brookline, Mass. Railway-car	484,119	Oct. 11	879	224	61	195
Seymour Concentrator Company. (See Seymour, Charles E., assignor.)						
Seymour, Francis, Paterson, N. J. Apparatus for producing scenic effects	486,606	Nov. 22	2267	592	61	1077
Seymour, Frank C., Chicago, Ill. Cattle-guard	469,049	Feb. 16	1801	460	58	896
Seymour, George H., assignor to himself and W. H. Tersch, Stanton, Tex. Folding umbrella	479,310	July 19	1913	478	60	400
Seymour, George H., assignor of one-half to W. H. Fusch, Stanton, Tex. Memorandum-tablet	481,429	Aug. 23	2728	671	60	1143
Seymour, Henry J., Niagara, Canada. Pump-piston	475,812	May 31	3076	778	59	12-7
Seymour Manufacturing Company. (See Perrins, John B., assignor.)						
Seymour, Ralph C., Chicago, Ill. Folding attachment for printing-press	481,203	Aug. 23	2340	576 577	60	1072
Seyppels, Otto. (See Rollins, Joseph B., assignor.)						
Shaaber, Jacob, Reading, Pa. Brake-shoe	480,833	Aug. 16	1732	433	60	942
Shadbolt, Lawrence. (See Salyers and Shadbolt.)						
Shaddick, John P., Denver, Colo., assignor of one-third to R. H. Black, Braddock, Pa. Valve-protector	466,838	Jan. 12	860	220	58	173
Shafer, Daniel. (See Neimeyer, John, assignor.)						
Shafer, Henry. (See Steinbach and Shafer.)						
Shafer, William A. (See Gard, Dalzell, and Shafer.)						
Shafer, William B., Somerset, Pa. Stamp or label affixer	478,764	July 12	1070	266	60	228
Shaffer, Fred M., J. and S. T. Salada, Du Bois, Pa. Draft-equalizer	407,865	Jan. 26	2536	643	58	505
Shaffer, Henry E., Rochester, N. Y. Wick-raiser	474,488	May 10	971	250	59	835
Shaffer, Henry E., Rochester, N. Y. Lamp	486,510	Nov. 22	2111	558	61	1048
Shaffer, James R., deceased, Huntington, Ind.; J. Shaffer, administratrix. Picket-wiring machine	479,311	July 19	1915	478	60	400
Shaffer, Jane, administratrix. (See Shaffer, James R.)						
Shaffer, John D., Salt Lake City, Utah Terr., assignor of one-half to W. A. Kinney. Animal-trap	473,967	May 3	132	30	59	663
Shaffer, Katharine A., Harrisburg, Pa. Pad for bed-pans	482,388	Sept. 13	793	191	60	1505
Shaffer, William C., Milwaukee, Wis. Sprinkler system	480,747	Aug. 16	1598	401	60	915
Shaffer, William T., Evanston, Wyo. Elevated-railway car	468,699	Feb. 9	1242	316	58	777
Shafer, James C. (See Cokayne, William, assignor.)						
Shahan, Winfield S., Moline, Ill. Pump	466,375	Jan. 5	105	30	58	23
Shaller, William W., assignor to Comstock, Cheney & Company, Ivoryton, Conn. Flange for piano-actions	473,241	Apr. 19	1934	486	59	392
Shaller, William W., assignor to Comstock, Cheney & Company, Ivoryton, Conn. Flange for pianos	473,242	Apr. 19	1936	487	59	392
Shakespeare, James H., trustee. (See Bonta, James W., assignor.)						
Shakespeare, John, Dudley, England. Cash register and indicator	480,521	Aug. 9	1935	310	60	829
Shakespeare, William, Jr. (See Low and Shakespeare.)						
Shallenberger, Oliver B., Rochester, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Compensating alternating-current dynamo	476,830	June 14	922	226	59	1634
Shallenberger, Oliver B., Rochester, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. Meter for alternating electric currents	481,975	Sept. 6	82	21	60	1351
Shallenberger, Oliver B., Rochester, assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. System of electrical distribution	487,543	Dec. 6	508	132	61	1421
Shambaugh, Alexander H., assignor of one-half to I. Shambaugh, Avilla, Ind. Washing-machine	477,073	June 14	1326	321	59	1715
Shambaugh, Isaac. (See Shambaugh, Alexander H., assignor.)						
Shanafelt, John E., Lawrence, Kans. Revolving shield for cars	475,157	May 17	2030	512	59	1055
Shanahan, James, Port Gibson, Miss. Wood-sawing machine	476,831	June 14	924	226	59	1634
Shanahan, John J., assignor to National Worsted Mills, Providence, R. I. Stop-motion for looms	482,930	Sept. 20	1645	414	60	16-3
Shanbeck, Cornelius C., Pettit, Ind. Fender	481,065	Aug. 16	2109	524	60	1011
Shane, George P., et al. (See Lucas, Austin H., assignor.)						
Shanks, John, Burrehead, Scotland. Flushing device for urinals and closets	473,715	Apr. 26	2721	685	59	565
Shannon, Adam E., Findlay, Ohio. Writing-desk	475,813	May 31	3077	778	59	1288
Shannon, Alexander M., Galveston, Tex. Breakwater, &c	480,288	Aug. 9	869	221	60	761
Shannon, Jefferson C., Round Rock, Tex. Gate	472,080	Apr. 5	105	29	59	21
Shannon, John, et al. (See Casey, Peter, assignor.)						
Shannon, John, Pittsburg, Pa. Wood-graining machine	474,307	May 3	668	171 172	59	765
Shannon, John, assignor to himself and P. Casey, Pittsburg, Pa. Wood-graining machine	466,804	Jan. 12	802	207	58	162
Shannon, John, assignor to himself, P. Casey, Pittsburg, and W. W. Grier, Hulton, Pa. Grained soft wood	466,376	Jan. 5	107	39, 31	58	23
Shannon, John, assignor to himself, P. Casey, Pittsburg, and W. W. Grier, Hulton, Pa. Roller for graining wood	466,377	Jan. 5	108	31	58	23
Shannon, John, assignor to himself, P. Casey, Pittsburg, and W. W. Grier, Hulton, Pa. Method of and apparatus for graining wood surfaces	471,698	Mar. 29	3156	903	58	1743
Shantz, Dilman B., Berlin, Canada. Manufacture of buttons from vegetable ivory	467,563	Jan. 26	2066	522	58	416
Shantz, Dilman B., Berlin, Canada. Machine for polishing buttons	477,274	June 21	1664	406	59	1793
Shapley, James E., assignor to J. S. Wells, W. M. and J. E. Shapley, Binghamton, N. Y. Catch-basin	468,157	Feb. 2	376	93	58	597
Shapley, William M., et al. (See Shapley, James E., assignor.)						
Sharp, Abel B., assignor to himself and C. Naeglin, Durango, Colo. Boring and tenoning machine	475,158	May 17	2032	512	59	1056
Sharp, Charles S., Auburn, N. Y., assignor to D. M. Osborne & Company, of New York. Disk harrow	485,666	Nov. 8	788	210	61	750
Sharp, Christopher C., Chicago, Ill. Apparatus for generating ozone	481,676	Aug. 30	3120	762	60	1255
Sharp, Edward A., Rogers Park, Ill. Document-file	481,593	Aug. 30	2993	733	60	1211
Sharp, Edward J., Stockport, England. Hat-ventilating device	487,786	Dec. 13	903	228 229	61	1518

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Sharp, George H. (See Gates and Sharp.)						
Sharp, James L., New Rochelle, N. Y. Gas-stove	472,144	Apr. 5	241	56	59	39
Sharp, Kelly N., Mozelle, Ga. Plow	479,992	Aug. 2	362	59, 90	60	650
Sharp, Philip H., Philadelphia, Pa. Apparatus for forming sand molds for pipes, &c	475,349	May 24	2374	598 599	59	1133
Sharp, William, Allegheny, Pa. Vehicle-spring	476,931	June 14	1094	264	59	1668
Sharpe, John, Toronto, Canada. Cash indicator and register	482,760	Sept. 20	1388	314 345	60	1632
Sharpe, John W., Lowell, Mass. Chimney-holder	483,586	Oct. 4	108	26	61	23
Sharples, William E., Fall River, Mass. Belting	488,617	Dec. 27	2272	563	61	1823
Sharpneck, Eliel L., Chicago, Ill. Car-axle box	484,954	Oct. 11	798	201	61	178
Sharpneck, Eliel L., Denver, and W. G. Shedd, Leadville, Colo. Securing carbons	473,479	Apr. 26	2335	591	59	493
Sharpneck, William S., Evanston, assignor of one-half to North Western Toy and Manufacturing Company, Chicago, Ill. Cane	486,131	Nov. 15	1535	405	61	919
Sharpsteen, Stephen H., Honesdale, Pa. Device for removing armatures	481,833	Aug. 30	3395	834	60	1288
Shattuc, William B., Cincinnati, Ohio. Railway-ticket	473,592	Apr. 26	2534	640	59	531
Shattuck, Burt E., assignor to L. B. Gatecomb Company, Boston, Mass. Banjo	476,083	May 31	3502	882	59	1374
Shattuck, Charles A., Malden, assignor of one-half to H. L. Ayer, West Newton, Mass. Coin-controlled vending-machine	482,142	Sept. 6	353	84, 85	60	1405
Shattuck, Laforest A., Bloomsburg, Pa. Fountain-pen	482,592	Sept. 13	1123	271	60	1568
Shattuck, William P., Minneapolis, Minn. Toy	485,713	Nov. 8	863	231	61	767
Shant, Frederick E., assignor of one-half to J. E. Shant, Canisteo, N. Y. Belt-fastener	486,570	Nov. 22	2203	579	61	1065
Shaut, Joseph E. (See Shaut, Frederick E., assignor.)						
Shave, Laura. (See McArthur, Thomas J., assignor.)						
Shaver, George F. (See Sherman, Stephen F., assignor.)						
Shaver, George F., Yonkers, N. Y. Telephone	479,227	July 19	1792	449	60	375
Shaver, George F., Yonkers, assignor of one-half to S. F. Sherman, New York, N. Y. Telephone	479,226	July 19	1791	449	60	375
Shaw, Alton J., Muskegon, Mich. Rheostat	468,752	Feb. 9	1315	333	58	791
Shaw, Andrew M., Larkin, Kans. Stretcher for wire fences	471,063	May 3	295	72	59	694
Shaw, Arthur J., Spokane, Wash. Means for locking and unlocking mail-pouches	477,963	June 28	2775	695	59	2029
Shaw, Benjamin F., deceased; J. Butler, executor, and assignor to Shaw Stocking Company, Lowell, Mass. Knitting-machine	469,200	Feb. 16	2010	512 513 514 515	58	937
Shaw, Charles F., Attica, N. Y. Extension-cover	468,833	Feb. 16	1445	368	58	827
Shaw, Charles H., Brooklyn, N. Y. Numbering-machine	478,241	July 5	290	71	60	59
Shaw, Charles H., Brooklyn, assignor to R. H. Thompson, New York, and H. D. Norris, Brooklyn, N. Y. Satchel or other receptacle	480,675	Aug. 9	1486	370	60	878
Shaw, Clifford. (See Peters, George T., assignor.)						
Shaw, Edgar, Swampscott, Mass. Lasso	474,103	May 3	347	83	59	704
Shaw, Edgar, Swampscott, Mass. Hitching-strap	484,646	Oct. 18	1737	441	61	375
Shaw, Edward P., et al. (See Gilman, Willard H., assignor.)						
Shaw Electric Crane Company. (See Sawyer, Harry, assignor.)						
Shaw, Elmer F. (See Bowman and Shaw.)						
Shaw, Enoch J., Boston, Mass. Street-sign	477,873	June 28	2615	661	59	2002
Shaw, Florentine S. (See Clark and Shaw.)						
Shaw, Frank. (See Childs, William A., assignor.)						
Shaw, Frederick A., Boston, Mass. Translucent sculpture	478,765	July 12	1071	266	60	228
Shaw, Frederick C., Santa Fé, N. Mex. Ter. Nut-lock	469,602	Feb. 23	2642	678	58	1066
Shaw, George, assignor of one-half to S. H. Brooks, Manchester, England. Differential gearing	479,108	July 19	1608	401 402	60	341
Shaw, George and T., and J. P. Ditchfield, Ashton-under-Lyne, England. Machine for the manufacture of brushes	471,709	Mar. 29	3170	809 810	58	1746
Shaw, George E., Berlin, Wis. Commode	473,360	Apr. 19	2132	535	59	431
Shaw, Henry C., Joliet, Ill. Hydranlic crane	479,463	July 26	2305	553 554	60	472
Shaw, Henry F., Boston, Mass. Truck for street-cars	488,255	Dec. 20	1690	422	61	1692
Shaw, Henry R., assignor of two-thirds to E. Wright and J. Cunningham, St. Catharines, Ontario, Canada. Feed for roller-mills	483,983	Oct. 4	694	173	61	143
Shaw, Herbert S., Dudley, Mass. Wire-stretcher	473,527	Apr. 26	2413	612	59	506
Shaw, Irvin A., assignor to himself and H. F. Best, Kinsley, Kans. Sash-holder	487,131	Nov. 29	3149	807	61	1270
Shaw, James E., Council Grove, Kans. Railway-frog	469,098	Feb. 16	1867	477	58	909
Shaw, John H., Del Norte, Colo. Sack-fastener	471,623	Mar. 29	3041	774	58	1722
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock	469,950	Mar. 1	459	114	58	1188
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock	469,951	Mar. 1	461	115	58	1188
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Door-spring	478,370	July 5	481	116	60	96
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Door-check	478,371	July 5	485	117	60	96
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Door-check	478,372	July 5	487	117	60	96
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Meat-cutter	478,823	July 12	1176	291	60	248
Shaw, Joseph. (See Walker and Shaw.)						
Shaw, Lorenzo D. B., Coney Island, N. Y. Sliding hill or chute for carriages	468,553	Feb. 9	1024	261	58	733
Shaw, Philip B., et al. (See Jenks, Charles F., assignor.)						
Shaw, Riley W., Lapeer, Mich. Milk-stool	486,944	Nov. 29	2865	749	61	1213
Shaw, Robert B., Washington, N. C. Attachment for organ-pedals	470,709	Mar. 15	1668	431	58	1439
Shaw, Samuel, Newton, Mass., assignor to Murdock Parlor Grate Company, of Massachusetts. Ventilating-grate	471,575	Mar. 29	2968	756 757	58	1709
Shaw, Samuel J., assignor of two-thirds to E. H. Smith and M. E. Hunter, Boston, Mass. Furniture-beater	477,388	June 21	1849	455	59	1830
Shaw Stocking Company. (See Gordon, James F., assignor.)						
Shaw Stocking Company. (See Shaw, Benjamin F.)						
Shaw, T. W., et al. (See Taylor, Alfred, assignor.)						
Shaw, Thomas. (See Shaw and Ditchfield.)						
Shaw, Thomas, Newark, N. J. Die for cutlery	479,668	July 26	2519	627	60	530
Shaw, Thomas, Newark, N. J. Knife-holder	479,669	July 26	2520	627	60	531
Shaw, Thomas F. (See Corbett, Joseph, assignor.)						
Shaw, William C., Chicago, Ill. Cuff-holder	474,648	May 10	1226	314	59	884
Shaw, William T., London, England. Fountain-pen	466,950	Jan. 12	1047	266	58	208
Shawhan, Jabea F., assignor, by mesne assignments, to F. B. Dickerson, Detroit, Mich. Electric-railway motor	475,970	May 31	3333	841	59	1337
Shay, Ralph. (See Shay, Warren H., assignor.)						
Shay, Warren H., assignor of one-half to R. Shay, Toledo, Ohio. Can-opener	470,710	Mar. 15	1669	432	58	1439

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Shea, Christopher A., Boston, Mass. Plug spring-jack	481,204	Aug. 23	2342	577	60	1072
Shea, George E., Long Island City, N. Y. Combination tool or hook	466,628	Jan. 5	506	130	58	97
Shea, J. G. (See Crumlie, William, assignor.)						
Shea, Michael J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Shea, William J. (See Hurley, James H., assignor.)						
Sheafor, Jacob J. (See Scott and Sheafor.)						
Shealy, Fred, Jr., Bucyrus, Ohio. Sash-holder	472,276	Apr. 5	419	108	59	79
Shearer, Arthur B., Reno, Nev. Life-saving and pleasure craft	481,427	Aug. 23	2725	670	60	1143
Sheargren, John, Burlington, Iowa. Meat-chopping machine	478,647	July 12	891	221	60	192
Shedd, Charles F. (See Vanderveer and Shedd.)						
Shedd, William G. (See Sharpneck and Shedd.)						
Shedd, William J. (See Field and Shedd.)						
Shedlock, Alfred, Jersey City, N. J. Oil-spray lamp	468,065	Feb. 2	237	58	58	570
Sheedy, Dennis. (See Iles and Sheedy.)						
Sheedy, Dennis, Denver, Colo. Apparatus for separating matte from slag	475,522	May 24	2613	665	59	1185
Sheedy, Dennis, Denver, Colo. Bag for catching metallic fumes	480,834	Aug. 16	1733	433	60	942
Sheedy, Dennis, and M. W. Iles, Denver, Colo. Device for collecting metallic fumes	483,176	Sept. 27	2041	516	60	1775
Sheehan, George F., and D. A. Mullin, Manchester, N. H. Window-jack	484,467	Oct. 18	1452	370	61	318
Sheeley, Rebecca C., Lyons, Kans. Canning or preserving jar	476,690	June 7	695	170	59	1575
Sheer, Henry M., assignor to C. M. Ertel, Quincy, Ill. Incubator	483,953	Dec. 27	2305	691	61	1931
Sheesley, William. (See Wadsworth and Sheesley.)						
Sheets, Joshua S., Philadelphia, Pa. Cover for kettles, &c.	486,185	Nov. 15	1607	426	61	934
Sheffield, Elisha S. and K. T., Woodward, Iowa. Windmill	469,343	Feb. 23	2240	575	58	999
Sheffield, George V., New York, N. Y., assignor to American Rapid Motor Company. Powder-motor	485,989	Nov. 8	1279	340	61	851
Sheffield, Kirby T. (See Sheffield, Elisha S. and K. T.)						
Sheffield Velocipede Car Company. (See Ellis, Willard H., assignor.)						
Sheffield Velocipede Car Company. (See Henderson, James, assignor.)						
Sheffield, William B., Kansas City, Mo. Gage for paper-cutting machines	466,420	Jan. 5	191	50	58	37
Sheffield, William H., Brooklyn, N. Y. Letter-box	477,964	June 28	2776	695	59	2029
Shelby, Christopher C., Paterson, N. J., assignor to J. A. Traut, New Britain, Conn. Buckle	471,439	Mar. 22	2786	711	58	1666
Sheldon Axle Company. (See Hall, Orlando C., assignor.)						
Sheldon Axle Company. (See Hill, Leroy D., assignor.)						
Sheldon, Charles L. (See Hall, Orlando C., assignor.)						
Sheldon, Charles L., Auburn, N. Y. Axle	470,261	Mar. 8	942	234	58	1291
Sheldon, Eulius B., New Haven, Conn. Block for printers' use	483,814	Oct. 4	437	108	61	91
Sheldon, James B., assignor of one-half to H. H. Stiebel, St. Louis, Mo. Device for preventing shadows of electric or other forms of lamps	468,700	Feb. 9	1244	316	58	777
Sheldon, Park C. (See Brooks, Sidney E., assignor.)						
Sheldon, William H., Poughkeepsie, N. Y. King-bolt for vehicles	471,401	Mar. 22	2727	695	58	1656
Sheldon, William H., Poughkeepsie, N. Y. Dumping-wagon	471,402	Mar. 22	2727	696	58	1656
Shelley, George A., <i>et al.</i> (See Jennings, Charles C., assignor.)						
Shellenback Machine Tool Company. (See Shellenback, Peter and W., assignors.)						
Shellenback, Peter and W., assignors to Shellenback Machine Tool Company, Richmond, Ind. Engine-lathe	468,183	Feb. 2	417	103 104	58	606
Shellenback, William. (See Shellenback, Peter and W.)						
Shelley, Abram C., Blythebourne, N. Y. Velocipede	481,428	Aug. 23	2726	670	60	1143
Shelley, David B. M., Montgomery Station, Pa. Attachment for molding-machines	487,007	Nov. 29	2957	762	61	1231
Shelley, William E., <i>et al.</i> (See Jenkins, Wilton F., assignor.)						
Shelton, Charles N. (See Updegraff, Daniel, assignor.)						
Shelton, James A., assignor of one-half to J. H. Smalpage, London, England. Combined rug and cloak	471,903	Mar. 29	3473	887	58	1804
Shempp, William, Buffalo, N. Y. Sandpaper-holder	470,794	Mar. 15	1797	461	58	1464
Shemwell, Baxter. (See Freeman, Horace L., assignor.)						
Shepard, Alfred L., London, England. Electric-arc lamp	474,266	May 3	581	143 144 145	59	751
Shepard, Amos, Plantsville, Conn. Meat-cutter	473,166	Apr. 19	1796	453	59	366
Shepard, Charles G., <i>et al.</i> (See Condon, John W., assignor.)						
Shepard, Charles G. and P. Adams, Buffalo, N. Y.; said Adams assignor to W. J. Shepard. Ice-cream freezer	469,456	Feb. 23	2417	619	58	1023
Shepard, Charles H., Brooklyn, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine	480,269	Aug. 9	870	222	60	761
Shepard, Charles H., Brooklyn, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine	480,290	Aug. 9	873	222	60	761
Shepard, Charles H., Brooklyn, assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine	480,291	Aug. 9	875	222	60	762
Shepard, Edgar T., Fulton, N. Y. Pulley	487,454	Dec. 6	375	98	61	1395
Shepard, Edwin. (See Sweeney, Daniel, assignor.)						
Shepard, Frank P. (See Bears and Shepard.)						
Shepard, Herbert L., Cincinnati, Ohio. Gearing	475,901	May 31	3225	816	59	1317
Shepard, Henry W., assignor to United States Chemical Company, Camden, N. J., and Philadelphia, Pa. Apparatus for making alumina	488,580	Dec. 27	2219	550	61	1812
Shepard, Jason H., <i>et al.</i> (See Pattee, George W., assignor.)						
Shepard, Stephen A., and F. P. Lang, Allegheny, Pa.; said Lang assignor of one-fourth to said Shepard. Automatic trolley-catch	469,750	Mar. 1	128	34	58	1124
Shepard, Walter J. (See Shepard and Adams, assignors.)						
Shepard, Walter J., <i>et al.</i> (See Condon, John W., assignor.)						
Shepardson, Arioul A., Worcester, Mass. Grate	474,462	May 10	937	241	59	828
Shepardson, Samuel, La Grange, Ind. Car-coupling	487,297	Dec. 6	90	27	61	1339
Shephard, Henry W., Granville, New South Wales. Construction of movable fire-bars of boilers	471,440	Mar. 22	2787	711	58	1666
Shephard, John H., assignor of one-half to R. C. Blackall, Albany, N. Y. Rod-packing	468,730	Feb. 9	1283	326	58	786
Shephard, John H., assignor of two-thirds to R. C. Blackall, Albany, and J. C. Gilbert, Brooklyn, N. Y. Hand-torch for railway use	468,729	Feb. 9	1282	326	58	785
Shepherd, David C., and L. C. Ballard, Gardiner, Me. Apparatus for loading vessels	475,814	May 31	3078	779	59	1288
Shepherd, Francis H., assignor to J. S. Faris, Davenport, Iowa. Paste-making machine	476,320	June 7	145	35	59	1466
Shepherd, Thomas W., Peabody, Mass. Thermostat	479,849	Aug. 2	111	28	60	604
Shopley, Edward. (See Bainter and Shopley.)						
Sheppard, Charles S., Pittston, Pa. Coal-drill	473,788	Apr. 26	2832	711	59	587
Sheppard, Franklin L., Philadelphia, Pa. Heating-furnace	469,099	Feb. 16	1868	477	58	909
Sheppard, James W., Rochester, N. Y. Sash-balance	473,129	Apr. 19	1737	439	59	354

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Sheppard, Mary A., <i>et al.</i> (See Buhoup, John J., assignor.)						
Sheppard, Robert D. (See Hickley, Philip, assignor.)						
Sheppard, William J., <i>et al.</i> (See Buhoup, John J., assignor.)						
Shepperd, Sylvanus D., assignor to Backus Water Meter Company, Newark, N. J. Water-meter.	474,347	May 3	745	194	59	780
Shepperd, Sylvanus D., assignor to Backus Water Meter Company, Newark, N. J. Supporting-frame for rotary fans.	482,293	Dec. 20	1752	441	61	1703
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus.	481,594	Aug. 30	2994	734	60	1212
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus.	481,595	Aug. 30	2996	734	60	1212
Sherburne, Charles W., Boston, Mass. Track-sanding device.	486,646	Nov. 22	2332	610	61	1091
Sherburne, Charles W., Boston, Mass. Track-sanding apparatus.	487,406	Dec. 6	438	113	61	1408
Sherburne, Charles W., Boston, Mass. Track sanding apparatus.	487,497	Dec. 6	439	113	61	1408
Sherer, Charles M., Lawrence, Kans. Separable button.	478,174	July 5	163	42	60	34
Sheridan, James. (See Breden and Sheridan.)						
Sheridan, T. W. & C. B. (See Malm, Alexander, assignor.)						
Sheridan, Thomas F., Springfield, Ill. Stem winding and setting watch.	467,998	Feb. 2	139	33.34	58	550
Sherman, Charles H., Glens Falls, N. Y. Shaft attachment for vehicles.	468,936	Feb. 16	1608	407	58	858
Sherman, Gardner M., Springfield, Mass. Tobacco-moistening device.	469,001	Feb. 16	1735	441	58	883
Sherman, George H., assignor of one-half to P. C. Dalitz, Detroit, Mich. Hydraulic air-compressor.	475,251	May 17	2176	554	59	1085
Sherman, Henry A., Peabody, Ohio. Pocket-lamp and cigar-lighter.	485,990	Nov. 8	1283	341	61	852
Sherman, Jacob S., Cassopolis, Mich. Focal-center optometer.	484,055	Oct. 11	799	202	61	179
Sherman, Jacob S., Cassopolis, Mich. Optometer.	484,615	Oct. 18	1681	427	61	364
Sherman, John, assignor of one-half to L. Smith, Cleveland, Ohio. Means for fastening pulleys or gears.	469,350	Feb. 23	2252	578	58	991
Sherman, John J., assignor of one-half to R. W. Round, Traverse City, Mich. Foot-rest for row-boats.	468,211	Feb. 2	457	113	58	614
Sherman, Lewis P., Biddeford, Me. Machine for drawing in warp-threads.	487,938	Dec. 13	1153	288	61	1566
Sherman, Louie A., Peoria, Ill. Saddle for bicycles.	468,398	Feb. 9	774	192	58	684
Sherman, Louie A., Peoria, Ill. Fastener for rubbers.	485,302	Nov. 1	220	62	61	617
Sherman, Myron W., West Brookfield, Mass. Corset.	479,312	July 19	1916	479	60	400
Sherman, Stephen F. (See Shaver, George F., assignor.)						
Sherman, Stephen F., New York, assignor of one-half to G. F. Shaver, Yonkers, N. Y. Telephone.	476,026	May 31	3410	861	59	1354
Sherman, Thomas H., <i>et al.</i> (See Garland, Frank M., assignor.)						
Sherman, Willis M., <i>et al.</i> (See Tangenberg, Christiaan, assignor.)						
Shero, Christopher C., assignor of one-half to I. Shero, Sherman, Tex. Combined rake and portable baling-press.	483,515	Sept. 27	2568	644 645 646	60	1875
Shero, Isaac. (See Shero, Christopher C., assignor.)						
Sherrod, Albert T. (See Arnold, Oscar M., assignor.)						
Sherwin-Williams Company. (See Roberts, John W., assignor.)						
Sherwood, Frederick A. (See Wood, William H., assignor.)						
Sherwood, Lincoln B. (See Tarpenning and Sherwood.)						
Sherwood Manufacturing Company. (See Hart, Thomas J., assignor.)						
Sherwood, Marvin W., Meriden, Conn. Cash-carrier apparatus.	487,905	Dec. 13	1099	275	61	1556
Sherwood, Will., New York, N. Y. Chalk-holder for billiard-tables.	468,278	Feb. 2	566	139	58	634
Shettle, Julius E., Salt Lake City, Utah Ter. Rotary ore-reaster.	466,882	Jan. 12	943	241	58	189
Shettler, Reuben, Port Huron, Mich. Clutch.	481,205	Aug. 23	2344	577	60	1073
Shew, Matt, <i>et al.</i> (See Morgan, Joseph U., assignor.)						
Shields, Helen D. (See Hine, Charles M., assignor.)						
Shields, James H., Chicago, Ill. Cutter for gaskets, &c.	487,894	Dec. 13	1081	270	61	1553
Shields, William S., <i>et al.</i> (See Doyle, John H., assignor.)						
Shiels, Alexander, Glasgow, Scotland. Apparatus for automatically regulating temperature.	478,373	July 5	489	117 118	60	96
Shigley, Joseph L., Hart, Mich. Sap-bucket cover.	472,190	Apr. 5	268	70	59	50
Shiley, Richard G., Marietta, Ohio. Drawing-beard.	475,350	May 24	2336	509	59	1133
Shill, Richard E., London, England. Apparatus for separating precious metals by amalgamation from ores or materials containing them.	470,921	Mar. 15	1990	509	58	1501
Shilling, Albert C. (See Ehle, Homer F., assignor.)						
Shilling, Jesse, Jr., Troy, Ohio. Cistern or well cleaner.	479,228	July 19	1793	449	60	376
Shilling, Jesse, Jr., Troy, Ohio. Kettle-cover.	484,824	Oct. 25	2034	521	61	450
Shimer Bearing Company. (See Shimer, Samuel J., assignor.)						
Shimer, John M. R. (See Young and Willever, assignors.)						
Shimer, John N. M., Philadelphia, Pa. Spade and pick.	474,697	May 10	1307	334	59	900
Shimer, Porter W., Easton, Pa. Microscopic sediment-filter.	474,267	May 3	586	145	59	751
Shimer, Samuel J., Milton, Pa. Machine for making metal washers.	466,705	Jan. 5	619	160 161 162	58	120
Shimer, Samuel J., Milton, Pa. Cutter-head.	476,563	June 7	507	119 120	59	1537
Shimer, Samuel J., Milton, Pa. Cutter-head knife.	486,901	Nov. 29	2792	724	61	1200
Shimer, Samuel J., Milton, assignor to Shimer Bearing Company, South Bethlehem, Pa. Journal-bearing.	486,199	Nov. 15	1626	430	61	937
Shindle, Michael G., Mountville, Pa. Separating corn-sheller.	472,181	Apr. 5	269	70	59	51
Shiner, Joseph, <i>et al.</i> (See Lockwood, Morris C., assignor.)						
Shingleton, William, London, England. Riding-habit.	488,776	Dec. 27	2517	626	61	1871
Shinn, Joseph A., New York, N. Y., assignor, by mesne assignments, to Safety Car Heating and Lighting Company, of New Jersey. System of and apparatus for heating railway-cars or similar vehicles.	484,343	Oct. 11	1251	319 320	61	267
Shinn, William J. (See Ogborn, Harrison, assignor.)						
Shipe, Walter S., Minerva, Ohio. Construction of boilers.	473,167	Apr. 19	1798	454	59	366
Shipe, Walter S., assignor to J. Morrison, Toronto, Canada. Machine for heading water-boilers.	472,957	Apr. 12	1441	367 368	59	288
Shipe, Walter S., assignor to J. Morrison, Toronto, Canada. Sheet-metal-rolling machine.	480,440	Aug. 9	1112	278	60	804
Shipley, Henry T., Wooster, assignor of three-fourths to C. H. Truscott, Cleveland, and C. D. Barnes, Burton, Ohio. Turfing implement.	468,288	Feb. 2	586	146	58	637
Shipley, Milton K. (See Kruse and Shipley.)						
Shipley, Thomas, assignor of one-half to L. J. Dolle, Cincinnati, Ohio. Apparatus for making ice.	476,832	June 14	926	226	59	1634
Shippee, Aaron B., Providence, R. I. Reducing and swaging machine.	471,148	Mar. 22	2351	601	58	1583
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Machine for making twist-drills.	468,468	Feb. 9	873	222	58	703

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. et.	Vol.	Page.
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Die for swaging twist-drills	468,469	Feb. 9	874	222	58	703
Shippee, Aaron B., assignor to A. W. Chapman, Providence, R. I. Rotary die	470,215	Mar. 8	880	217	58	1279
Shirreff, Charles J., assignor to himself and J. M. Gill, Brockville, Canada. Window or door screen	481,066	Aug. 16	2111	525	60	1015
Shirreff, Charles J., assignor to himself and J. M. Gill, Brockville, Canada. Manufacture of screen-doors	481,067	Aug. 16	2112	525	60	1015
Shivell, David, Arlington, Ind. Buggy-top	488,459	Dec. 20	2018	504	61	1757
Shivlar, John H., Beloit, Kans. Water-heater	485,892	Nov. 8	1124	297	61	818
Shobe, Abraham A., and W. Embley, Jerseyville, Ill. Insulating-support for electric-railway wires	474,049	May 3	268	65	59	689
Shoecraft, Byron and J., St. Louis, Mo. Automatic signal device for railways	482,203	Sept. 6	459	111	60	1425
Shoecraft, Byron and J., St. Louis, Mo. Automatic block system for railways	483,479	Sept. 27	2504	631	60	1863
Shoecraft, Judson. (See Shoecraft, Byron and J.)						
Shoemaker, John, Putneyville, Pa. Lamp-chimney attachment	472,405	Apr. 5	623	159	59	117
Shoemaker, Joseph R., Denver, Colo. Compensation watch-balance	468,968	Feb. 16	1669	426	58	869
Shoemaker, Milton, assignor of two-thirds to J. W. Martin, Sioux City, Iowa, and J. Passmore, Duncannon, Pa. Electric-railway conduit	478,175	July 5	164	42	60	35
Sholes, Frederick, St. Louis, Mo. Type-writing machine	474,533	May 10	1043	267	59	848
Shone, Isaac, and E. Ault, London, England. Apparatus for raising and forcing water or other liquids	485,714	Nov. 8	864	232	61	767
Shook, John M., Parsons, Kans. Brake-beam	468,421	Feb. 9	804	200	58	690
Shoop, John F., Philadelphia, Pa. Scaffold-bracket for painters	471,762	Mar. 29	3263	833	58	1763
Shores, William M., Towanda, Pa. Stove or range grate	468,958	Feb. 16	1649	{ 420 421 }	58	865
Shorey, Charles R., Fargo, N. D. Bicycle	471,292	Mar. 22	2559	650	58	1623
Shorey, Samuel W., Boston, Mass. Bulton	474,150	May 3	405	99	59	717
Short Electric Railway Company. (See Short, Sidney H., assignor.)						
Short, Sidney H., Cleveland, Ohio. Contact-board for rheostats	467,613	Jan. 26	2135	542	58	429
Short, Sidney H., Cleveland, Ohio. Armature for dynamo-electric machines	473,363	Apr. 19	2135	536	59	431
Short, Sidney H., Cleveland, Ohio. Armature for dynamo-electric machines	473,364	Apr. 19	2138	536	59	432
Short, Sidney H., Cleveland, Ohio. Gearless motor for electric-railway cars	473,365	Apr. 19	2139	536	59	432
Short, Sidney H., Cleveland, Ohio. Armature for electric generators or motors	473,366	Apr. 19	2141	537	59	433
Short, Sidney H., Cleveland, Ohio. Dynamo-electric machine	473,367	Apr. 19	2142	537	59	433
Short, Sidney H., Cleveland, Ohio. Gearless propelling mechanism for electric-railway cars	473,368	Apr. 19	2144	537	59	433
Short, Sidney H., Cleveland, Ohio. Electric locomotive	473,674	Apr. 26	2661	670	59	554
Short, Sidney H., Cleveland, Ohio. Arresting electric locomotives	474,031	May 3	231	56	59	682
Short, Sidney H., Cleveland, Ohio. Electric locomotive	478,477	July 5	637	{ 155 156 }	60	127
Short, Sidney H., Cleveland, Ohio. Arc-extinguisher for electric switches	478,718	July 12	969	245	60	213
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Multiple-arc railway system	473,361	Apr. 19	2133	535	59	431
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Trolley-switch	473,362	Apr. 19	2134	535	59	431
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Armature for dynamo-electric machines	475,159	May 17	2034	513	59	1056
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Electric-railway motor	475,160	May 17	2035	513	59	1056
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Electric locomotive	478,242	July 5	293	71	60	59
Short, Sidney H., assignor to Short Electric Railway Company, Cleveland, Ohio. Motor-frame for electric locomotives	479,469	July 26	2267	554	60	473
Shorthill, Albert E. (See Travis, Owen J., assignor.)						
Shorthill, Albert E., Marshalltown, Iowa. Cattle-guard for railway-tracks	471,029	Mar. 15	2155	554	58	1533
Shortt, Edward G., Carthage, assignor of one-half to C. G. Emery, Brooklyn, N. Y. Air or gas compression pump	466,432	Jan. 5	196	50, 51	58	38
Shortt, Edward G., Carthage, assignor to C. G. Emery, trustee, Brooklyn, N. Y. Engineer's valve for automatic brake mechanism	466,433	Jan. 5	198	51	58	38
Shortt, Edward G., Carthage, assignor to C. G. Emery, trustee, Brooklyn, N. Y. Relief or exhaust valve for automatic air-brakes	466,434	Jan. 5	200	51, 52	58	38
Shortt, Edward G., Carthage, assignor to C. G. Emery, trustee, Brooklyn, N. Y. Air-brake	469,176	Feb. 16	1966	503	58	930
Shortt, Edward G., Carthage, assignor of one-half to C. G. Emery, Brooklyn, N. Y. Steam-boller	470,631	Mar. 8	1546	403	58	1406
Shortt, Edward G., Carthage, assignor to C. G. Emery, trustee, New York, N. Y. Relief-valve for automatic brake systems	471,441	Mar. 22	2788	712	58	1666
Shortt, Edward G., Carthage, assignor to C. G. Emery, trustee, New York, N. Y. Automatic brake mechanism	473,789	Apr. 26	2833	712	59	587
Shostak, Joseph, Milwaukee, assignor of one-half to J. Rubin, Whitewater, Wis. Cleaning boiler-flues	478,824	July 12	1178	{ 291 292 }	60	248
Shotwell, Nathan T. (See Burbank, John C., assignor.)						
Shoup, James T., Jr., Springfield, Ohio. Wind-machine	479,993	Aug. 2	363	90	60	650
Shoup, Samuel. (See Mason and Shoup.)						
Showman, Henry F., Newark, Ohio. Beehive	479,725	July 26	2627	652	60	550
Shrafl, Bernard, et al. (See Christy, James A., assignor.)						
Shrague, Gustavus A., et al. (See Lockwood, Charles L., assignor.)						
Shrague, John W., et al. (See Lockwood, Charles L., assignor.)						
Shrawder, John S., Norristown, assignor to Vacuum Door Check Company, Collegeville, Pa. Pneumatic door check and closer	476,932	June 14	1094	{ 264 265 }	59	1669
Shreeve, John, et al. (See Marshall, William M., assignor.)						
Shreffler, Samuel, Jr., Joliet, Ill. Door-hanger	492,530	Sept. 13	1029	249	60	1550
Shrier, Isaac, Wilmington, N. C. Hat-gage	478,291	July 5	364	88	60	73
Shrike, John J., et al. (See Ashworth, Granville H., assignor.)						
Shriver, William, Philadelphia, Pa. Slate-pencil sharpener	478,374	July 5	492	119	60	97
Shroyer, Alexander R. (See Kesling, Perry, assignor.)						
Shrum, Peter J. (See Brittain and Shrum.)						
Shrum, Peter J., and J. T. Howarth, Beaver Falls, Pa. Carpet or oil-cloth protector	471,763	Mar. 29	3263	833	58	1763
Shuart, Benjamin F., Billings, Mont. Scraper	476,691	June 7	697	171	59	1575
Shuler, Andrew F., Arcanum, Ohio. Tobacco-planter	471,624	Mar. 29	3043	775	58	1722
Shull, John H., and G. S. Dorney, Findlay, Ohio. Conveyor	480,939	Aug. 16	1887	472	60	973
Shults, Chaney C., Winterset, Iowa. Burial apparatus	470,767	Mar. 15	1750	451	58	1455
Shults, John W., Wichita, Kans. Galvanic electric plaster	469,796	Mar. 1	210	54	58	1142

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. E.	Vol.	Page.
Shults, John W., Wichita, Kans. Galvanic electric plaster	469,797	Mar. 1	212	55	58	1142
Shults, John W., Wichita, Kans. Galvanic body-battery	486,902	Nov. 29	2792	724	61	1200
Shults, Louis, Brownville, N. Y. Fish-hook	484,678	Oct. 18	1792	456	61	387
Shultz, Daniel J., Spruce Creek, Pa. Lock for buggy-tops	474,193	May 3	478	115	59	730
Shultz, Llewellyn B., St. Louis, Mo. Flue-brush	477,074	June 14	1327	321	59	1716
Shute, James L., assignor to St. Louis Steel Wire Brush Company, St. Louis, Mo. Boiler-flue cleaner	488,842	Dec. 27	2628	651	61	1893
Shuman, Charles, St. Louis, Mo. Letter-box	476,692	June 7	697	171	59	1575
Shuman, Frank, Philadelphia, Pa. Machine for embedding wire-netting in glass	483,030	Sept. 20	1799	454	60	1714
Shuman, Frank, Philadelphia, Pa. Embedding wire-netting in glass	483,021	Sept. 20	1801	451	60	1714
Shure, Arthur E., Shure's Landing, Md. Railway-car window	486,220	Nov. 15	1659	439	61	943
Shurmon, James D., Paint Rock, Tex. Rem-holder	478,375	July 5	493	119	60	97
Shute, James L., assignor of three-eighths to W. T. Merchant, Gloucester, Mass. Pressing and molding machine	470,513	Mar. 8	1383	361	58	1372
Shuttleworth, Tom L., C. H. Burt, Warren, Mass., and J. Burt, Philadelphia, Pa. Loom for weaving double pile fabrics	470,452	Mar. 8	1295	332	58	1355
Siar, William, and C. H. Dunn, Seneca, Pa. Bicycle-support	480,441	Aug. 9	1114	279	60	804
Sibley, Herbert J., Chicago, Ill. Dinner-bucket	482,761	Sept. 20	1399	345	60	1633
Sibley, R. L., et al. (See Jones and Ashley, assignors.)						
Sichel, Albert. (See Haines, John H. J., assignor.)						
Sichel, Albert, New York, N. Y. Zinc-foil and manufacturing the same	473,790	Apr. 26	2835	.....	59	588
Sichel, Albert, New York, N. Y. Zinc-foil and manufacturing the same (Reissue)	11,241	May 24	2956	.....	59	1250
Sickels, Frederick E., Kansas City, Mo. Method of and means for building and anchoring bridge-piers	472,277	Apr. 5	420	108	59	79
Sickner, Albert W., Wichita, Kans. Hand and arm guide for pianos or organs	469,276	Feb. 23	2140	550	58	969
Siddell, Job B. (See Wilson, Alexander, assignor.)						
Sidenstricker, William H., Moberly, Mo. Door-spring	474,268	May 3	588	146	59	751
Sidman, George D., Washington, D. C. House-door letter-box	475,473	May 24	2531	645	59	1169
Sidway, Henry T., Chicago, Ill. Biscuit-cutter	475,815	May 31	3080	779	59	1288
Siebens, George, assignor of one-third to Peck Manufacturing Company, Storm Lake, Iowa. Well-drilling machine	470,262	Mar. 8	943	234	58	1291
Siebert, Alfred, New York, N. Y. Hand-stamp	469,277	Feb. 23	2142	550	58	969
Siebert, Alfred, New York, N. Y. Can-filling device	469,278	Feb. 23	2143	550	58	969
Siebert, Alfred, New York, N. Y. Pump	482,416	Sept. 13	834	200	60	1512
Siebert, Alfred, New York, N. Y. Gas-compressor	483,268	Sept. 27	2215	556	60	1807
Siedler, Charles, et al. (See Morrell, Robert, assignor.)						
Siegel, Ferdinand. (See Miles, Samuel J., assignor.)						
Siegel, John, Montreal, Canada. Pencil-sharpener	474,418	May 10	866	226	59	815
Siegert, Hugo, Breslau, Germany. Combined inkstand and penholder	487,396	Dec. 6	256	70	61	1372
Siegrist, Henry A., and G. M. Bittman, St. Louis, Mo. Water-filter	486,413	Nov. 15	1970	523	61	1007
Siemens Brothers & Co. (See Nebel, John, assignor.)						
Siemens Brothers & Company. (See Williamson, Alfred D., assignor.)						
Siemens, Carl, St. Petersburg, Russia. Hydrocarbon-burner	470,711	Mar. 15	1670	432	58	1439
Siemens, Carl, St. Petersburg, Russia. Metallurgical furnace	470,712	Mar. 15	1672	433	58	1440
Siemens, Carl, St. Petersburg, Russia. Working open-hearth furnaces	470,713	Mar. 15	1674	434	58	1440
Siemens, Carl, St. Petersburg, Russia. Metallurgical furnace	475,351	May 24	2337	599	59	1134
Siemens, Frederick, Dresden, Germany. Regenerative gas furnace and producer	468,234	Feb. 10	1446	369	58	827
Siemens, Frederick, Dresden, Germany. Working regenerative gas-furnaces and gas-producers	468,235	Feb. 16	1448	369	58	827
Siemens, Frederick, Dresden, Germany. Gas-furnace	466,540	Nov. 22	2150	568	61	1055
Siemens & Halske. (See Du Bois-Reymond, Alard E., assignor.)						
Siemens & Halske. (See Frölich, Oscar, assignor.)						
Siemens & Halske. (See Göges, Johannes F. H., assignor.)						
Siemens & Halske. (See Henneberg, Hermann O., assignor.)						
Siemens & Halske. (See Hoffmann, Carl, assignor.)						
Siemens & Halske. (See Philipsborn and Reichel, assignors.)						
Siemens & Halske. (See Schwieger, Carl T. H., assignor.)						
Siemens & Halske. (See Wesslau, Bror H., assignor.)						
Siemens & Halske. (See Wörner, Adolf, assignor.)						
Siemens & Halske Electric Company of America. (See Wright, Augustine W., assignor.)						
Sievert, Henry H., assignor to L. Wolff Manufacturing Company, Chicago, Ill. Water-closet seat and cover	480,292	Aug. 9	876	223	60	762
Sifferlen, Ernest. (See Haberman and Sifferlen.)						
Sifuentes, Francisco, Mexico, Mexico. Breech-loading firearm	471,904	Mar. 29	3474	888	58	1804
Siggins, Thomas, South Bend, Ind. Thill-support	467,758	Jan. 26	2366	600	58	473
Siglin, Nelson, Aurelia, Iowa. Hame-tug	480,629	Aug. 9	1415	352	60	864
Sigourney, Albert M., et al. (See Abbott, George F., assignor.)						
Sigourney, Frank W., et al. (See Abbott, George F., assignor.)						
Sigsbee, Charles D., U. S. Navy, T. S. Hayward, and F. S. Anderson, Easton, Md. Electric-current regulator	477,708	June 28	2371	593	59	1951
Silberberg, Nathan, Jassy, Roumania. Winding mechanism for watches	473,675	Apr. 26	2662	670	59	554
Silberstein, Samuel, Pittsburg, Pa. Water-conductor	466,578	Jan. 5	430	111	58	83
Silberzahn, Charles and C. A., West Bend, Wis. Hay-tedder fork	473,243	Apr. 19	1937	487	59	392
Silberzahn, Charles A. (See Silberzahn, Charles and C. A.)						
Silcock, Aaron, Groby, England, assignor to C. G. Emery, New York, N. Y. Automatic air-brake	468,701	Feb. 9	1245	317	58	777
Silen, Eric, Kelso, Wash. Combined churn and butter-worker	472,830	Apr. 12	1247	319	59	249
Silkman, Edward J., assignor of two-thirds to G. D. Penniman and T. K. Worthington, Baltimore, Md. Printing-telegraph	470,768	Mar. 15	1750	451	58	1455
Siller, Frederick S., Milwaukee, Wis. Game apparatus	482,488	Sept. 13	949	231	60	1533
Silva, José Y da. (See Almeida and da Silva.)						
Silver & Company. (See Hollandt, Herman, assignor.)						
Silverberg, Isaac L. (See Troxler, Gustavus, Jr., assignor.)						
Silverberg, Isaac L., M. Reichman, and G. Troxler, Jr., Newark, N. J. Burglar-alarm	468,444	Feb. 9	835	211	58	696
Silverlock, William B., London, England. Brouzing-machine	467,957	Feb. 2	76	18, 19	58	540
Silvermail, Alpheus L., Ionia, Mich. Geographical clock	470,309	Mar. 8	1056	268	58	1311
Silverson, Nathan, New York, N. Y. Convertible carriage, chair, or rocker	485,991	Nov. 8	1284	341	61	852
Silvester, Clarence and W. Windom, Kans. Windmill-regulator	467,057	Jan. 12	1218	308	58	239
Silvester, Winifred. (See Silvester, Clarence and W.)						
Silvey, William L., Lima, Ohio. Incandescent-lamp socket	467,958	Feb. 2	79	19	58	540

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Silvey, William L., Lima, Ohio. Secondary battery	477,914	June 28	2707	678	59	2014
Silvey, William L., Lima, Ohio. Secondary battery	484,120	Oct. 11	882	224	61	195
Silvey, William L., Lima, assignor to Dayton Manufacturing Company, Dayton, Ohio. Pare-register						
Silvey, William O., Middleport, Ohio. Harrow attachment for plows	472,232	Apr. 5	351	91	59	66
Silvey, William O., Middleport, Ohio. Portable oven	474,269	May 3	5-9	146	59	752
Simcox, Thomas W., Fostoria, Ohio. Loose or idle pulley	475,161	May 17	2038	514	59	1057
Simeral, Clarence J., Macleay, Oreg. Gate	478,202	July 5	365	89	60	73
Simin, Nicholas, Moscow, Russia. Safety water-conduit against fires	487,336	Dec. 6	159	45	61	1352
Simis, Caesar, Brooklyn, N. Y. Hat polishing and cleaning machine	471,699	Mar. 29	3158	805	58	1744
Simmers, Charles S., Schuylkill, Pa. Cold-saw for metal	477,965	June 28	2777	696	59	2029
Simmonds, Francis N., San Francisco, Cal. Punch	473,480	Apr. 26	2336	591	59	493
Simmonds, William, and C. Linegar, Yonkers, N. Y. Hat-brim-stretching machine	473,791	Apr. 26	2837	712	59	588
Simmons, Abner. (See Gray and Simmons.)	469,489	Feb. 23	2475	635	58	1033
Simmons, Charles, Stockton, Ill. Tobacco-transplanter	469,506	Feb. 23	2499	641	58	1037
Simmons, Frank W., Blue Mound, Kans. Handle for wrenches or other tools	472,556	Apr. 12	855	219	59	177
Simmons, Frank W., Blue Mound, Kans. Wrench	476,693	June 7	700	171	59	1576
Simmons, George N., Santa Cruz, Cal. Ironing-table	466,378	Jan. 5	110	32	58	24
Simmons, Henry L., St. Day, England. Guard-shoe for railway-vehicles	481,068	Aug. 16	2112	525	60	1015
Simmons, James, Long Branch, N. J. Latch	469,068	Feb. 16	1827	467	58	901
Simmons, James A., Enonddale, Miss. Fertilizer-distributor	470,324	Mar. 8	1085	277	58	1316
Simmons, James D., Hagerstown, Md. Cultivator	476,834	June 14	930	227	59	1635
Simmons, James D., Hagerstown, Md. Fertilizing composition	484,679	Oct. 18	1793		61	387
Simmons, Leo, Washington, D. C. Safe	470,017	Mar. 1	558	138	58	1207
Simmons, Ross C., East Tawas, Mich. Refrigerator	475,816	May 31	3081	780	59	1289
Simmons, William A., Buffalo, N. Y. Hame	482,656	Sept. 13	1206	294	60	1584
Simms, Alonzo H., assignor of one-half to C. E. Eckerle, Birmingham, Ala. Pneumatic water-elevator	484,255	Oct. 11	1109	281	61	240
Simms, George W. M., De Soto, Mo. Car-mover	475,902	May 31	3223	816	59	1317
Simms, Henry W., Bay City, Mich. Shade-roller fixture	469,032	Feb. 16	1780	454	58	892
Simms, William, Minneapolis, Minn. Refrigerator	472,773	Apr. 12	1171	300	59	234
Simon, Ernst, Chicago, Ill. Wagon-cover	487,544	Dec. 6	510	132 133	61	1421
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,435	Jan. 5	203	52	58	39
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,436	Jan. 5	205	52	58	39
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,437	Jan. 5	206	52, 53	58	39
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,438	Jan. 5	208	54	58	40
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,439	Jan. 5	210	54	58	40
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,440	Jan. 5	212	51	58	40
Simonds, George F., Fitchburg, Mass. Apparatus for hardening steel	466,441	Jan. 5	213	55	58	41
Simonds, George F., Fitchburg, Mass. Hardening steel	466,442	Jan. 5	215	55	58	41
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,443	Jan. 5	216	55	58	41
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,444	Jan. 5	217	56	58	41
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,445	Jan. 5	218	56	58	42
Simonds, George F., Fitchburg, Mass. Ball-bearing	466,446	Jan. 5	219	56	58	42
Simonet, Maxime H., Quintin, France. Grinding-machine for paper-stock	484,056	Oct. 11	800	202	61	179
Simonin, Charles F. and I. M., Philadelphia, Pa. Process of and apparatus for treating garbage	466,579	Jan. 5	431	111	58	83
Simonin, Isaac M. (See Simonin, Charles F. and I. M.)						
Simons, Benjamin, Charleston, S. C. Dental separator	487,973	Dec. 13	1201	300	61	1576
Simons, Frederick W., assignor of one-half to C. Wilson, Philadelphia, Pa. Knitting and forming hose	468,212	Feb. 2	458	113	58	614
Simons, Frederick W., assignor of one-half to C. Wilson, Philadelphia, Pa. Knitting hose						
Simons, Julius, New York, N. Y. Safety-guard for cars	476,084	May 31	3503	883	59	1374
Simons, Levi A., and G. R. Roof, Omaha, Neb. Trolley-wheel for electric cars	485,598	Nov. 1	680	180	61	714
Simons, Mark. (See Stromberg, Alfred, assignor.)	467,583	Jan. 26	2092	530	58	422
Simons, Thomas A., Columbus, Ohio. Cooking utensil	478,243	July 5	295	72	60	59
Simonsen, James H., et al. (See Van Derzee, Cornelius, assignor.)						
Simonton, Thomas C., assignor of one-half to T. C. Simonton, Jr., Paterson, N. J. Machine for extracting gold from pulverized ores, &c	478,971	July 12	1384	341	60	288
Simpson, Alfred L., New York, N. Y. Acoustic telephone	479,726	July 26	2630	652	60	550
Simpson, Arthur C. (See Cook, Sidney, assignor.)						
Simpson, Charles E., assignor of one-half to W. Q. Adams, Portsmouth, Ohio. Interlocking block for building paving, &c	472,590	Apr. 12	902	231	59	185
Simpson & Co., James E. (See Simpson, Willie E., assignor.)						
Simpson, Frederick, Boston, Mass. Voltaic glove	478,293	July 5	366	89	60	74
Simpson, Harvey, Kenosha, Wis. Lightning-conductor	470,514	Mar. 8	1384	362	58	1372
Simpson, James, McKeesport, Pa. Skelp-tang	485,893	Nov. 8	1125	298	61	819
Simpson, Peter P., Henderson, assignor of one-half to W. J. Arnett, Mountain Home, Ark. Cotton-planter	482,277	Sept. 6	581	138	60	1448
Simpson, Washington, Argentine, Kans., and J. George, St. Joseph, Mo. Seal-lock	481,206	Aug. 23	2345	578	60	1073
Simpson, William B., Benton, La. Water-elevator	483,396	Sept. 27	2402	604	60	1842
Simpson, William L. (See Denton, Simpson, and Denton.)						
Simpson, William S., London, England. Vending apparatus	467,442	Jan. 19	1841	470	58	366
Simpson, Willie E., Brooklyn, assignor to J. E. Simpson & Co., New York, N. Y. Permanent dry-dock	471,805	Mar. 29	3343	851	58	1778
Sims, Frederick L. H., Toronto, Canada. Type-writing machine	476,833	June 14	929	227	59	1635
Sims, James, D. J. Wood, and J. W. Sims, Bentonville, Ark. Bed-spring	476,835	June 14	931	227	59	1635
Sims, John W. (See Sims, Wood, and Sims.)						
Sinclair, Louis, Stanberry, Mo. Brush	467,778	Jan. 26	2393	608	58	478
Sincennes, Charles H. D., Montreal, Canada. Step-ladder	469,751	Mar. 1	130	35	58	1125
Sincennes, Charles H. D., Montreal, Canada. Rolling step-ladder	476,564	June 7	509	120	59	1538
Sinclair, Edward J., Omaha, Neb. Check-valve	487,298	Dec. 6	91	27	61	1340
Sinclair, Finlay, Coventry, England, assignor to Pneumatic Tyre and Booth's Cycle Agency, Limited, Dublin, Ireland. Pneumatic tire	480,349	Aug. 9	965	244	60	777
Sinclair, James M., et al. (See Clow, William, assignor.)						
Sinclair, John E., Worcester, Mass. Ratchet-wrench	470,954	Mar. 15	2041	522	58	1511
Sinclair, William W., Phoenix, N. Y. Table or stool top or chair-bottom	472,911	Apr. 12	1366	350	59	274
Singer, Albert E. (See Kienardt, John A., assignor.)						
Singer, Benjamin F., and M. L. Davis, Lancaster, Pa. Permutation-lock	488,777	Dec. 27	2518	626	61	1871
Singer, Charles G. (See Koneman, William A., assignor.)						
Singer, George S., Cardington, Ohio. Drinking-trough	484,057	Oct. 11	802	203	61	179

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Singer, Ignatius. (See Critchley, Singer, and Dombraun.)						
Singer Manufacturing Company of New Jersey. (See Allen, Edward B., assignor.)						
Singer Manufacturing Company of New Jersey. (See Benson, Sivert, assignor.)						
Singer Manufacturing Company of New Jersey. (See Curtis, George H., assignor.)						
Singer Manufacturing Company of New Jersey. (See Diehl, Philip, assignor.)						
Singer Manufacturing Company of New Jersey. (See Douglas, John, assignor.)						
Singer Manufacturing Company of New Jersey. (See French, Charles A., assignor.)						
Singer Manufacturing Company of New Jersey. (See Greene, James G., assignor.)						
Singer Manufacturing Company of New Jersey. (See Müller, Friedrich, assignor.)						
Singer Manufacturing Company of New Jersey. (See Steward, Hiram P., assignor.)						
Singer Manufacturing Company of New Jersey. (See Vannette, Jasper, assignor.)						
Singer, Robert R., Pittsburg, Pa. Manufacture of metallic vehicle-tongues	469,952	Mar. 1	463	{ 115 116 }	58	1189
Singer, Samuel S., <i>et al.</i> (See Wein, John H., assignor.)						
Singer, William F., Carthage, N. Y. Chemical fire-extinguisher	467,142	Jan. 12	1382	353	58	272
Singletary, Charles A. (See Nelson and Singletary.)						
Singleton, Micajah T., Arcadia, Fla. Combined screen and conveyer	467,838	Jan. 26	2489	631	58	497
Singley, Joseph J., El Dorado, Kans. Corn-harvester	480,132	Nov. 15	1536	{ 405 406 }	61	919
Sinn, Augustus. (See Geschwindner, Charles, assignor.)						
Sinn, Remy, Paris, France. Envelope-card	478,825	July 12	1179	292	60	249
Sinning, Charles, assignor to Sinning Lasting Machine Company, St. Louis, Mo. Stop-motion for lasting-machines, &c	471,495	Mar. 22	2865	730	58	1681
Sinning, Charles, assignor to Sinning Lasting Machine Company, St. Louis, Mo. Tacking mechanism for lasting-machines	476,695	June 7	702	172	59	1576
Sinning, Charles, assignor to Sinning Lasting Machine Company, St. Louis, Mo. Lasting-machine	480,145	Aug. 2	615	156	60	700
Sinning Lasting Machine Company. (See Sinning, Charles, assignor.)						
Sinsabaugh, David A., Utica, Ohio. Folding chair	484,058	Oct. 11	803	203	61	179
Sintzenich, Edwin B., Rochester, N. Y. Balanced slide-valve	478,719	July 12	990	246	60	213
Sipe, Thalia E., Allegheny, Pa. Tracing-tool	481,721	Aug. 30	3205	753	60	1252
Sipos, Urban, Nagy Varad, Austria-Hungary. Stove	467,759	Jan. 26	2366	600	58	473
Sipp, Edward. (See Salick and Sipp.)						
Sir Joseph Whitworth & Company. (See Canet, Jean B. G. A., assignor.)						
Sir W. G. Armstrong, Mitchell & Company. (See Noble and Murray, assignors.)						
Sirrine, John, Trumansburg, N. Y. Ice-cream freezer	475,817	May 31	3083	780	59	1289
Sisson, Harry D., assignor of one-half to C. H. Robinson, Pittsfield, Mass. Adjustable suspension apparatus for electrical translating devices	470,080	Mar. 1	655	162	58	1226
Sisson, Harry W., Monmouth, Ill. Overcheck-bit	469,190	Feb. 16	1997	509	58	935
Sisson, Isaac H., Providence, R. I. Button-setting machine	482,700	Sept. 13	1283	315	60	1600
Sisson, Isaac H., Providence, R. I. Shoe-lace fastening	483,632	Oct. 4	159	39	61	33
Sisum, William H. H. (See Gold and Sisum.)						
Sisum, William H. H., Brooklyn, N. Y. Machine for making wire cords and cables	477,784	June 28	2488	{ 622 623 }	59	1973
Sisum, William H. H., Brooklyn, N. Y. Twisting or winding machine	488,227	Dec. 20	1649	412	61	1624
Sites, Frank B., assignor of one-half to H. D. Bokop, Dofiance, Ohio. Crate	484,059	Oct. 11	804	203	61	179
Sitlington, Thomas O. O., Independence, Mo. Earth-scraper	475,818	May 31	3084	{ 780 781 }	59	1289
Sittig, Alexander F., Houston, Tex. Calendar	467,283	Jan. 19	1604	409	58	321
Sittig, Lena, Brooklyn, N. Y. Skirt-protecting garment	476,761	June 7	799	196	59	1597
Sjöberg, Nils P., Boston, Mass. Shoe-fastening	471,304	Mar. 22	2580	655	58	1627
Skanks, George W., assignor of one-half to G. D. Emery, Chelsea, Mass. Clothes-holder	482,531	Sept. 13	1030	249	60	1550
Skeel, Frank D., New York, N. Y. Milling attachment for lathes	478,244	July 5	296	72	60	60
Skeels, Henry E., West Concord, Minn. Extension-ladder	470,515	Mar. 8	1385	362	58	1372
Skeer, Albert F., Jr. (See Galloway, Emmet I., assignor.)						
Skekel, Donald, Georgetown, British Guiana. Cane-mill	480,522	Aug. 9	1237	311	60	830
Skellenger, Daniel P. (See Skellenger, Theodore P., assignor.)						
Skellenger, Theodore P., Morristown, assignor to D. P. Skellenger, Somerville, N. J. Snow-ball protector for horses' hoofs	469,603	Feb. 23	2643	678	58	1067
Skelton, John C., <i>et al.</i> (See Kellogg, James F., assignor.)						
Skelton, John C., <i>et al.</i> (See Pyncheon, Edwin, assignor.)						
Skelton, John C., <i>et al.</i> (See Stuck, Levi, assignor.)						
Skelton, William M., Lebanon, Ind. Wire-tightener for fences	469,218	Feb. 16	2052	527	58	943
Skelton, William M., Lebanon, Ind. Stay for wire fences	469,604	Feb. 23	2644	678	58	1067
Skidmore, Frederick R., Milwaukee, Wis. Balanced slide-valve	484,060	Oct. 11	806	201	61	180
Skillman, George R., Baltimore, Md. Baker's oven	487,431	Dec. 6	330	{ 84 85 86 }	61	1387
Skillin, James L., New York, N. Y. Phonograph	472,684	Apr. 12	1035	{ 267 268 }	59	208
Skilton, John W. (See Burt and Skilton.)						
Skinkle, Jacob W., <i>et al.</i> (See Beck, Marshall, assignor.)						
Skinner, Charles C., Eau Claire, Wis. Sled-brake	470,263	Mar. 8	944	234	58	1291
Skinner, David. (See Gately and Skinner.)						
Skinner, Gardiner M., Clayton, N. Y. Spoon-bait	479,575	July 26	2375	592	60	503
Skinner, George C., Troy, Ohio. Brick or tile machine die	478,136	July 5	86	23	60	20
Skinner, John, Flint, Mich. Mixing-machine for concrete, mortar, &c	475,618	May 24	2759	699	59	1214
Skinner, Joseph W. (See Bunsen, William M., assignor.)						
Skinner, Joseph W. (See Terslose, Anders C., assignor.)						
Skobis, Frank. (See Skobis, Joseph and F.)						
Skobis, Joseph and F., Milwaukee, Wis. Ventilator	482,389	Sept. 13	794	191	60	1505
Skog, August W., Minneapolis, Minn. Inkstand	486,686	Nov. 22	2392	625	61	1103
Skoglund, Gust, Kersey, Pa. Pocket-knife	483,340	Dec. 20	1829	457	61	1718
Skoglund, Jean V., Stockholm, Sweden. Explosive powder	487,080	Nov. 29	3066	61	61	1254
Skorpi, Eduard, Nagy-Ugrocz, Austria-Hungary. Potato-planter	478,137	July 5	88	23	60	20
Skyrme, William, San Francisco, Cal. Safety-car	477,075	June 14	1328	322	59	1716
Slack, James M., deceased. (J. M. Slack, Bristol, administratrix.) (G. J. Graff and J. B. Paxton, Philadelphia, Pa.: said Paxton assignor to said J. M. Slack, administratrix, and G. J. Graff. Circular-knitting machine	474,330	May 3	708	{ 183 184 185 186 }	59	773
Slack, Julia M., administratrix. (See Slack, Graff, and Paxton.)						
Sladoslawek, Anton, Chicago, Ill. Artificial stone	488,682	Dec. 27	2384	61	61	1844
Slager, Albert L., assignor to G. S. Foos Company, Springfield, Ohio. Clutch	480,748	Aug. 16	1601	401	60	916
Slagle, Lemuel H., East Brady, Pa. Machine for wiring fence-pickets	443,792	Apr. 26	2837	713	59	588

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.-g.	Vol.	Page.
Slama, Oscar von, Jersey City, N. J. Composition for use as ornamental moldings, &c.	474,865	May 17	1581	—	59	967
Slangernip, August F., New Orleans, La. Apparatus for bleaching cane-juice.	483,022	Sept. 20	1802	455	60	1715
Slater, George L., Buchanan, Mich., assignor to L. G. Tong, South Bend, Ind. Coin-controlled vending-machine.	485,140	Oct. 25	2536	651	61	550
Slater, John G. (See Hill, Ezra N., assignor.)						
Slater, John G. (See Hill, Ezra N., assignor.) (Reissue.)						
Slater, John S., Calcutta, India. Armillary sphere.	482,278	Sept. 6	582	139	60	1448
Slater, Stanley R., assignor to S. M. Burroughs and H. S. Wellcome, London, England. Hypodermic syringe.	486,057	Nov. 8	1392	369	61	873
Slater, William W., and H. C. Barnes, Oakland, Cal. Pneumatic electric-circuit-controlling and interlocking apparatus.	481,430	Aug. 23	2729	671	60	1144
Slattery, Jeremiah J., Lansingburg, N. Y. Dust-beater.	480,389	Aug. 9	1033	259	60	790
Slaughter, Edmund S. (See Carr, William M., assignor.)						
Slaughter, John, Goldsborough, N. C. Hand attachment for sewing-machines.	486,358	Nov. 15	1879	495	61	958
Slaughter, Triplett L., and E. C. Drew, Arcadia, La. Detachable planer-bit for saws.	473,968	May 3	134	30	59	663
Slawson, John C., assignor of two-thirds to G. J. Macy and A. F. Weaver, Indianapolis, Ind. Street-sweeper.	468,458	Feb. 9	855	{216 217}	{58 58}	700
Slawson, Marcus D., Grayling, Mich. Animal-trap.	485,303	Nov. 1	221	63	61	618
Slawson, Randolph E., Davenport, Nebr. Automatic gate.	482,462	Sept. 13	906	220	60	1525
Slaymaker, Barry & Co. (See Troast, William F., assignor.)						
Slaymaker, Barry & Co. (See Troast and Slaymaker, assignors.)						
Slaymaker, Samuel R. (See Troast and Slaymaker.)						
Slaymaker, Samuel R., assignor to himself, J. F. Barry, and W. F. Troast, Lancaster, Pa. Padlock.	476,495	June 7	413	96	59	1518
Slayton, Charles A., (See Avery and Slayton.)						
Sleeper, Charles W., Island Pond, Vt., assignor to Sleeper Machine Company, of Maine. Machine for heading cans.	474,534	May 10	1045	{267 268}	{59 59}	848
Sleeper, Francis H., Waterville, assignor to A. O. Norton, Coaticook, Canada. Screw-jack.	479,850	Aug. 2	113	23	60	604
Sleeper, Frank S., Duluth, Minn. Curling or crimping iron.	482,510	Sept. 13	978	237	60	1540
Sleeper, George W., assignor to N. L. Millard, North Adams, Mass. Upper.	475,619	May 24	2760	699	59	1214
Sleeper Machine Company. (See Sleeper, Charles W., assignor.)						
Sleight, William E., assignor to United States Swing Treadle Company, Milwaukee, Wis. Swinging treadle for organs.	481,976	Sept. 6	83	21	60	1351
Slemmer, Frank G., Maryland, Md. Soldering-machine.	466,580	Jan. 5	435	111	58	84
Sieno, Leonard, West Bay City, assignor of two-thirds to J. H. Davis, W. Burnett, Bay City, and A. Forrest, West Bay City, Mich. Valve for safety-plugs for steam-boilers.	472,233	Apr. 5	353	91	59	66
Slick, Edwin E., assignor of one-half to J. P. Lewis, Braddock, Pa. Manufacture of axles.	470,354	Mar. 8	1132	290	58	1324
Slingland, Charles. (See Knett and Slingland.)						
Sloan, Frank B. (See Clarkson, Frank S., assignor.)						
Sloan, George B., Jr., Osvego, N. Y. Sash-fastener.	471,363	Mar. 22	2669	678	58	1644
Sloan, Joseph A., Toledo, Ohio. Puzzle.	483,772	Oct. 4	377	94	61	79
Sloan, Jules, Paris, France. Decorticating grain.	484,258	Oct. 11	1115	282	61	241
Sloan, Percy H. (See Higgins, Frank L., assignor.)						
Sloan, Sextus, Painesville, Ohio. Device for converting motion.	483,177	Sept. 27	2042	516	60	1775
Sloan, Wesley, Peoria, Ill. Furnace.	473,268	Apr. 19	1975	495	59	400
Sloane, George W., Brooklyn, N. Y. Steam-generator.	481,069	Aug. 16	2113	526	60	1015
Sloat, Oliver M., Brooklyn, N. Y. Bridle-bit.	479,070	July 26	2521	637	60	531
Slocum, Fitz M., Erie, Pa. Velocipede-saddle.	483,875	Oct. 4	526	132	61	109
Slocum, George A., New Haven, Mich. Two-wheeled vehicle.	466,581	Jan. 5	436	112	58	84
Slocum, James, Holly, Mich. Typograph attachment.	483,023	Sept. 20	1803	455	60	1715
Slocum, Martha E., Meadville, Pa. Velocipede.	481,070	Aug. 16	2114	526	60	1016
Sloper, Thomas B., Devizes, England. Electric telephonic switch and system.	488,666	Dec. 27	2354	{582 583}	{61 61}	1838
Slyker, Alfred S., Laflin, Pa. Valve.	483,228	Dec. 20	1652	412	61	1684
Snades, Myron W., and J. P. Ellstrom, Minneapolis, Minn. Claw-bar.	488,581	Dec. 27	2320	550	61	1812
Small, Chester C., Malden, assignor to F. F. Raymond, 2d, Newton, Mass. Heel-machine.	467,242	Jan. 19	1534	{391 392 393}	{58 58 58}	308
Small, Frank E., Sing Sing, N. Y. Squirt-oil-can.	477,581	June 21	2145	533	59	1889
Small, Henry J., Sacramento, Cal. Label-holder.	472,278	Apr. 5	422	109	59	79
Small, Frederick A., Blue Island, Ill. Rotary steam-engine.	483,736	Oct. 4	299	75	61	63
Smalley, E. R. (See Carrick, James C., assignor.)						
Smalley, Martin D., Chicago, Ill. Bicycle.	472,487	Apr. 5	749	191	59	142
Smalley, William W. (See Bache, William H., assignor.)						
Smalley, William W. (See Bache and Smalley.)						
Smallfield, Henry A., Kansas City, Mo., and H. Edwards, Kansas City, Kans. Sausage-twisting and linking machine.	480,293	Aug. 9	877	{223 224 224}	{60 60 60}	762
Smallwood, Charles, Birmingham, Ala. Spark-arrester for electric-arc lamps.	479,994	Aug. 2	366	91	60	650
Smallwood, George T., Washington, D. C., assignor of one-half to O. Cole, Rochester, N. Y. Toy or puzzle.	479,158	July 19	1683	421	60	355
Smallwood, George T., Washington, D. C., assignor of one-half to O. Cole, Rochester, N. Y. Bicycle.	479,470	July 26	2308	{554 555}	{60 60}	473
Smalpage, John H. (See Shelton, James A., assignor.)						
Smart, Albert J., et al. (See Kilbourn, Washington H., assignor.)						
Smart, Charles, San Francisco, Cal. Sanitary seal for covers of toilet vessels.	483,948	Oct. 4	634	159	61	136
Smart, Charles E. (See Williston, Benjamin F., assignor.)						
Smart, Charles W., Carbondale, Ill. Swinging sewing-machine treadle.	470,843	Mar. 15	1884	483	58	1465
Smart, John W., and T. C. Cheatham, Burnet, Tex. Device for cooling milk, meat, vegetables, &c.	478,720	July 12	992	246	60	213
Smead, Edwin B., Hartford, Conn. Detachable fender for vehicle-wheels.	473,971	May 3	138	31	59	664
Smead, Isaac D., Toledo, Ohio. Urinal.	478,648	July 12	892	221	60	192
Smeal, George W., Osceola Mills, Pa. Stump-extractor.	485,508	Nov. 1	544	145	61	683
Smeal, Wilson R., Grafton, Pa. Snap-hook.	479,026	July 19	1479	368	60	317
Smедley, Edwin Dubuque, Iowa. Steam-actuated air-pump.	482,814	Sept. 20	1461	{362 363}	{60 60}	1647
Smelser, James M., Richmond, Ind. Sash-balance.	488,294	Dec. 20	1753	441	61	1704
Smidt & Pupke Manufacturing Company. (See Egge, Frederick, assignor.)						
Snidth, Gustav C. F., Fredericksberg, assignor to Jensen & Glad, Copenhagen, Denmark. Save-all for paper-machines.	467,775	Jan. 26	2388	607	58	477
Smigel, Isaac, New York, N. Y. Writing-pad.	471,293	Mar. 22	2561	650	58	1623
Smiley, John G., Hampton, Nebr. Cattle-washing device.	488,778	Dec. 27	2322	627	61	1871
Smillie Coupler and Manufacturing Company. (See Meeker, Stephen J., assignor.)						
Smiser, James W., Cynthiana, Ky. Bier.	476,423	June 7	305	71	59	1497

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Cr.	Vol.	Page.
Smith, Aaron W., Worcester, Mass. Horseshoe	469,335	Feb. 23	2232	572	54	987
Smith, Abia B., Pittsburg, Pa. Fruit-tree protector	481,311	Aug. 23	2547	625	60	1109
Smith, Adon, Jr. (See Tevis, Edwin L., assignor.)						
Smith, Albert, New York, N. Y. Can for the manufacture of ice	472,407	Apr. 5	625	160	59	117
Smith, Albert, New York, N. Y. Saw	482,844	Dec. 27	2630	652	61	1894
Smith, Albert, Colorado Springs Colo. Apparatus for cooling water in the manufacture of ice	483,397	Sept. 27	2403	604	60	1842
Smith, Albert D., <i>et al.</i> (See Smith, Frank W., assignor.)						
Smith, Albert D. and F. W., assignors of part to C. W. Crutsinger, St. Louis, Mo. Automatic release for cable-grips. (Reissue)	11,275	Oct. 4	699	175	61	144
Smith, Albert H., <i>et al.</i> (See Dow, Herbert H., assignor.)						
Smith, Albert M., Meadville, Pa. Machine for applying hose connections	482,593	Sept. 13	1125	271 272	60	1568
Smith, Albert U., Seymour, Conn. Machine for shaping anger-heads	486,239	Nov. 15	1689	447	61	950
Smith, Albert W., San Francisco, Cal. Electric motor or dynamo	484,724	Oct. 18	1851	470	61	399
Smith, Albion, Richmond, Ind. Game counter	475,162	May 17	2040	514	59	1057
Smith, Alfred E., Bronxville, N. Y. Journal-bearing	475,990	May 31	3364	848	59	1343
Smith, Amelia K. (See Smith, Ezra B., assignor.)						
Smith, Andrew, Salem, Ohio. Folding stool	477,200	Nov. 29	3256	833	61	1290
Smith, Andrew J., assignor of one-half to C. Kroemke, St. Louis, Mo. Automatic release for cable-grippers	481,431	Aug. 23	2732	671	60	1144
Smith, Andrew J., assignor of one-half to T. H. Wurmb, St. Louis, Mo. Automatic gipsy for cable railways	482,279	Sept. 6	581	139	60	1149
Smith, Anthony P., Newark, N. J. Apparatus for tapping water-mains	485,715	Nov. 8	866	232	61	767
Smith, Anthony P., Newark, N. J. Tapping apparatus	485,716	Nov. 8	867	232	61	748
Smith, Anthony P., Newark, N. J. Tapping apparatus	485,717	Nov. 8	868	233	61	778
Smith, August P., <i>et al.</i> (See Lawing, Samuel N., assignor.)						
Smith, Austin J., Coal City, Ill. Bridge-gate	474,420	May 10	869	227	59	816
Smith, Austin J., Coal City, Ill. Bridge-gate	484,470	Oct. 18	1455	371	61	318
Smith, Benjamin C., Brooklyn, N. Y. Water-closet	484,617	Oct. 18	1684	427 428	61	265
Smith, Benjamin F., assignor of one-half to C. G. Smith, Somerville, Mass. Sand-trap for Artesian wells	485,064	Oct. 25	2436	623	61	527
Smith, Burton. (See Snell and Smith.)						
Smith, Caleb, Sannemin, Ill. Bridle-bit	468,309	Feb. 2	627	157	58	645
Smith, Carlos H., Elgin, assignor to Elgin National Watch Company, Chicago, Ill. Watch-movement box	488,097	Dec. 13	1421	355	61	1623
Smith, Celia M., Ithaca, N. Y. Toy animal figure	483,727	Oct. 4	303	75	61	63
Smith, Charles, Mount Carmel, Ill. Watchmaker's tool	484,640	Oct. 18	1793	456	61	387
Smith, Charles, assignor of one-half to W. R. Mills, Chicago, Ill. Smoke-preventer	480,630	Aug. 9	1416	353	60	865
Smith, Charles A. (See Mayhew, George S., assignor.)						
Smith, Charles A., Lynn, Mass. Fire-escape	476,965	June 14	1151	277 278	59	1679
Smith, Charles A., Jackson, and M. W. Clark, Parma, Mich. Flour-bolt	469,752	Mar. 1	131	35	58	1125
Smith, Charles A., assignor of one-half to G. Worts, Toledo, Ohio. Receptacle for feeding grain to live stock	472,316	Apr. 5	484	125	59	91
Smith, Charles E., <i>et al.</i> (See Egge, Frederick, assignor.)						
Smith, Charles G. (See Smith, Benjamin F., assignor.)						
Smith, Charles G., Detroit, Mich. Excelsior-cutting machine	474,866	May 17	1581	402	59	967
Smith, Charles G., Detroit, Mich. Bolt and nut lock	484,616	Oct. 18	1683	427	61	365
Smith, Charles H., Lansingburg, N. Y. Signal for street-cars	475,474	May 24	2533	645	59	1169
Smith, Charles W., Norwalk, Ohio. Curtain-fixture	477,232	June 21	1595	391	59	1780
Smith, Charles W., Woburn, Mass. Coin-controlled vending-machine	487,008	Nov. 29	2959	762 763	61	1232
Smith, Christopher A., Philadelphia, Pa. Hame-fastener	486,903	Nov. 29	2794	725	61	1200
Smith, Crowson. (See Ryan, Frank M., assignor.)						
Smith, Daniel A., and E. W. Harding, Dorchester, Mass. Holder for brooms, &c.	470,880	Mar. 15	1935	495	58	1490
Smith, Daniel A., and C. E. Grapevine, Kokomo, Ind. Watch-charm	483,949	Oct. 4	634	159	61	130
Smith, Daniel E., Mobile, Ala. Trace-fastener	482,762	Sept. 20	1400	345	60	1633
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	469,440	Feb. 23	2390	613	58	1018
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	476,565	June 7	510	121	59	1538
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	476,566	June 7	512	121	59	1539
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	476,567	June 7	514	121	59	1539
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	477,021	June 14	1235	299	59	1697
Smith, Dwight L., assignor of one-half to E. A. Smith, Waterbury, Conn. Buckle	478,826	July 12	1179	292	60	249
Smith, Earl A. (See Smith, Dwight L., assignor.)						
Smith, Earle H., New York, N. Y. Sewing-machine	473,894	Apr. 26	3009	759	59	621
Smith, Edgar W., and C. Sax, Morris, Minn. Spark-arrester	480,390	Aug. 9	1034	259	60	790
Smith, Edward. (See Lawson, William, assignor.)						
Smith, Edward C., and J. Brady, Brooklyn, N. Y., assignors to Smith Portable Rail Saw Company, of New Jersey. Rail-sawing machine	481,874	Aug. 30	3456	848	60	1301
Smith, Edward F., Cincinnati, Ohio. Electric-arc lamp	476,425	June 7	307	71	59	1497
Smith, Edward S., Waterbury, Conn., assignor to G. Frost, G. H. Phelps, and G. A. Frost, Newton, Mass. Making garment-catches	488,135	Dec. 13	1482	373	61	1635
Smith, Elias, Peoria, Ill. Velocipede-saddle	477,277	June 21	1668	407	59	1704
Smith, Elijah W. (See Jones, Wiley M., assignor.)						
Smith, Elizabeth L. (See Smith, Hiram M., assignor.)						
Smith, Elmer E., Bloomington, Ill. Gate	470,264	Mar. 8	946	234 235	58	1291
Smith, Emory E., Palo Alto, Cal. Label-holder	484,902	Oct. 25	2168	558	61	477
Smith, Eroest B., South Amherst, Mass. Trolley-wire cleaner	484,344	Oct. 11	1253	326	61	267
Smith, Eugene. (See Eccleston, Noyes B., assignor.)						
Smith, Eugene C., New York, N. Y. Structural blank	481,207	Aug. 23	2349	578 579	60	1074
Smith, Eugene C., assignor to Universal Lock Company, New York, N. Y. Lock	473,857	Apr. 26	2942	742	59	609
Smith, Eugene C., assignor to Universal Lock Company, New York, N. Y. Cylinder-lock	474,348	May 3	747	194 195	59	740
Smith, Eugene C., assignor to Universal Lock Company, New York, N. Y. Lock	476,086	May 31	3505	884	59	1374
Smith, Eugene F., Stockton, Cal. Kitchen-cabinet	485,718	Nov. 8	870	233	61	768
Smith, Eugene H., <i>et al.</i> (See Shaw, Samuel J., assignor.)						
Smith, Evelyn L., and G. C. H. Foster, assignors to Crown Electric Manufacturing Company, Bridgeport, Conn. Socket for incandescent lamps	477,786	June 28	2492	624	59	1974
Smith Exhaust Pipe Company. (See Smith, John Y., assignor.)						
Smith, Ezra B., assignor to A. K. Smith, Cincinnati, Ohio. Fifth-wheel	474,151	May 3	407	99	59	717

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Smith, Ezra H., <i>et al.</i> (See Koontz, John P.)						
Smith, Ferdinand C. (See Frigon, Louis A., assignor.)						
Smith, Francis N. (See Howland, George B., assignor.)						
Smith, Frank E., Toledo, Iowa. Absorbent pad.	467,624	Jan. 26	2148	546	58	432
Smith, Frank H., assignor to Ideal Toy Company, Chicago, Ill. Game apparatus and sample-exhibitor.	472,408	Apr. 5	636	160	59	117
Smith, Frank H., assignor to Keane Novelty Company, Chicago, Ill. Cigar-cutter.	485,234	Nov. 1	119	36	61	598
Smith, Frank L., <i>et al.</i> (See Drew, Joseph N., assignor.)						
Smith, Frank L. M., and W. J. Bryan, Chicago, Ill. Apparatus for producing variegated lights.	479,673	July 26	2525	{ 628 629 }	{ 60 61 }	531
Smith, Frank S., Pittsburg, Pa. Manufacture of incandescent electric lamps.	471,576	Mar. 29	2971	757	58	1710
Smith, Frank S., Pittsburg, Pa. Incandescent lamp.	484,825	Oct. 25	2035	521	61	450
Smith, Frank W. (See Smith, Albert D. and F. W.) (Reissue.)						
Smith, Frank W., assignor of five-eighths to C. W. Crantsinger and A. D. Smith, St. Louis, Mo. Automatic release for cable-crossings.	484,346	Oct. 11	1257	321	61	268
Smith, Fred E., Boston, Mass. Valve-gear.	481,072	Aug. 16	2117	527	60	1016
Smith, Fred P., Worcester, assignor to Smith Heating and Ventilating Company, Boston, Mass. System of house ventilation.	485,141	Oct. 25	2538	651	61	551
Smith, Frederick I., Charleston, S. C., assignor of three-fourths to G. S. Valentine, New York, N. Y. Railway-rail.	487,133	Nov. 29	3151	{ 807 808 }	{ 61 62 }	1270
Smith, George. (See Garbutt, Hiram J., assignor.)						
Smith, George, London, England. Curtain supporter and fittings.	473,131	Apr. 19	1739	439	59	354
Smith, George A., Paulding, Ohio. Grain cleaner and scourer.	473,794	Apr. 26	2841	{ 713 714 }	{ 59 60 }	588
Smith, George B., assignor of one-half to R. Ashworth, St. Cloud, Minn. Fusible fire-alarm.	484,469	Oct. 13	1454	370	61	318
Smith, George E. (See Blake, Smith, and Doig.)						
Smith, George E., Glastonbury, Conn. Apparatus for hardening cutlery.	477,785	June 28	2491	624	59	1974
Smith, George E., Glastonbury, Conn. Hardening cutlery.	487,337	Dec. 6	161	46	61	1352
Smith, George H. (See Hubbell, Thomas J., assignor.)						
Smith, George H., <i>et al.</i> (See Fisher, Thomas N., assignor.)						
Smith, George H., London, England. Treatment of gum.	468,366	Feb. 9	720	178	58	673
Smith, George H., Skippack, Pa. Horseshoe-groover.	468,702	Feb. 9	1247	317	58	778
Smith, George H., Chicago, Ill. Pulverizer.	481,532	Aug. 23	2899	712	60	1178
Smith, George H., Rhodes, R. K. Hartley, Chadderton, and I. S. McDougall, High Broughton, England. Adjustable seat-support for bicycles.	484,681	Oct. 18	1794	456	61	387
Smith, George K., Chipman, Tenn. Car-coupling.	480,631	Aug. 9	1417	353	60	875
Smith, George W., Montpelier, Ind. Swing.	473,168	Apr. 19	1800	454	59	366
Smith, George W., assignor of one-half to E. C. King, Darlington, Wis. Vehicle axle and box.	488,486	Dec. 20	2064	513	61	1766
Smith, Georgia V., Princeton, Ill. Skirt-supporter.	480,523	Aug. 9	1239	311	60	239
Smith, Goodwin D., Rome, W. Va. Wagon-brake.	471,030	Mar. 15	2157	554	58	1533
Smith, Hamilton E., New York, N. Y. Ironing-machine.	468,266	Feb. 2	552	135	58	631
Smith, Hamilton E., New York, N. Y. Ironing-machine.	468,267	Feb. 2	553	136	58	631
Smith, Hampton K., Union, S. C. Car-coupling.	481,071	Aug. 16	2115	527	60	1016
Smith, Harper F., assignor to W. F. McCully, Philadelphia, Pa. Gas-burner.	476,694	June 7	701	191	59	1576
Smith, Harris K., Brooklyn, N. Y. Safety-catch for dumb-waiters.	485,569	Nov. 1	639	170	61	704
Smith, Harry L., <i>et al.</i> (See Dow, Charles H., assignor.)						
Smith Heating and Ventilating Company. (See Smith, Fred P., assignor.)						
Smith, Herman P., Brooklyn, N. Y., assignor to B. H. Toquet, Westport, Conn. Black-board-compasses.	473,241	Apr. 19	1938	487	59	393
Smith, Henry. (See Giesler and Smith.)						
Smith, Henry, London, England. Catamenial sack.	475,820	May 31	3090	782	59	1290
Smith, Henry A., Detroit, Mich. Cast-iron sectional boiler.	482,637	Sept. 13	1207	{ 294 295 }	{ 60 61 }	1584
Smith, Henry A., and W. A. Towle, Orleans, Mich. Wall-paper display-rack.	467,058	Jan. 12	1921	308	58	240
Smith, Henry A. W., Minneola, Va. Agricultural implement.	467,207	Jan. 19	1481	379	58	299
Smith, Henry C., Roanoke, Va. Spark-arrester.	478,207	July 5	215	54	60	44
Smith, Henry F., Neenah, Wis. Fish-net.	483,400	Sept. 27	2406	605	60	1843
Smith, Henry G. A., Buffalo, N. Y. Pick for stringed instruments.	479,672	July 26	2522	628	60	531
Smith, Henry J. (See Krotz, Alvaro S., assignor.)						
Smith, Henry T., Pawtucket, R. I. Pen or pencil holder and making the same.	481,534	Aug. 23	2901	712	60	1179
Smith, Henry V., South Yarra, near Melbourne, Victoria. Magnetic lock.	478,245	July 5	298	72	60	60
Smith, Herbert M., assignor to H. B. Northrop, Somerville, Mass. Adjustable nut.	466,582	Jan. 5	437	112	58	84
Smith, Hiram. (See Tuller, Willis E., assignor.)						
Smith, Hiram B., Atlanta, Ga., assignor to Millers Falls Company, Erving, Mass. Saw-set.	483,793	Oct. 4	408	101	61	85
Smith, Hiram M., assignor to E. L. Smith, Richmond, Va. Straw or feed cutter.	477,339	June 21	1766	{ 432 433 }	{ 59 60 }	1814
Smith, Homer H. and W. L., Gloversville, N. Y. Glove.	480,478	Aug. 9	1179	296	60	817
Smith, Hugh L. (See Cope, George W., assignor.)						
Smith, Hugh L., Jackson, Mich. Wick-raising device.	484,981	Oct. 25	2396	593	61	501
Smith, Ira T., Mount Carmel, Conn. Machine for swaging needles.	483,815	Oct. 4	439	109	61	91
Smith, Irving C., New York, N. Y. Steam-boiler.	468,367	Feb. 9	722	{ 178 179 }	{ 58 59 }	673
Smith, Isaac E., St. Johnsville, N. Y. Sleeping and parlor car coupon-ticket.	475,424	May 24	2453	625	59	1154
Smith, Isaac L., Setauket, N. Y. Machine for attaching knobs to shanks.	473,091	Apr. 19	1663	423	59	341
Smith, Isaiah, Nashville, Tenn. Scaffold.	472,406	Apr. 5	624	159	59	117
Smith, Israel C. (See Herrinton and Smith.)						
Smith, Israel C., and E. E. Herrinton, Grand Rapids, Mich. Wardrobe-bed.	479,471	July 26	2243	556	60	474
Smith, James, Dresden, N. Y. Engine.	487,132	Nov. 29	3150	807	61	1270
Smith, James B., Falls City, Nebr. Wrench.	473,026	Apr. 19	1567	399	59	325
Smith, James B., Brooklyn, assignor to E. Todd & Co., New York, N. Y. Pencil-case.	480,479	Aug. 9	1180	296	60	818
Smith, James C., and C. Lardner, Topeka, Kans. Self-acting dumping apparatus.	482,390	Sept. 13	796	191	60	1505
Smith, James G., New York, N. Y. Telegraphy.	481,247	Aug. 23	2424	{ 598 599 600 }	{ 60 61 62 }	1088
Smith, James H. (See Mann and Smith.)						
Smith, James H. (See Walton and Smith.)						
Smith, James H., Little Rock, Ark. Peach cutter and stoner.	474,927	May 17	1668	426	59	986
Smith, James H., Eccles, assignor to Fustian Cutting Machine Company, Limited, Salford, England. Knife for cutting the pile of velvets, &c.	487,974	Dec. 13	1202	300	61	1576
Smith, James H., Longsight, A. Goddard, Stockport, L. Higginbottom and T. Mannock, Longsight, assignors to Fustian Cutting Machine Company, Limited, Salford, England. Apparatus for cutting pile fabrics.	475,620	May 24	2761	700	59	1214

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Smith, James H., Longsight, A. Goddard, Stockport, L. Higginbottom and T. Mannock, Longsight, assignors to Fustian Cutting Machine Company, Limited, Salford, England. Knife for cutting pile fabrics	475,709	May 24	2891	731	59	1239
Smith, James I. (See Clements and Smith.)						
Smith, James J. (See Philes, Charles E., assignor.)						
Smith, James L., et al. (See Schaeffer, Henry, assignor.)						
Smith, James P., Pittsburg, Pa. Ventilator for fruit-receptacles	469,983	Mar. 1	517	139	58	1198
Smith, James E. (See Smith, William B. and J. R.)						
Smith, James T., Oroville, Cal. Safety-harness	486,238	Nov. 15	1688	447	61	949
Smith, James T., and O. T. Lucas, Shaw, Kans. Wire-splicer	487,646	Dec. 6	659	170	61	1452
Smith, Jay H., Rochester, N. Y. Sticky fly-paper	469,021	Feb. 16	1766	450	58	889
Smith, Jay H., Rochester, N. Y. Sticky fly-paper	476,087	May 31	3508	824	59	1375
Smith, Jero B. P. (See Scarce, Edward M., assignor.)						
Smith, Jeremiah W., Athens, Ga. Gin-saw gummer	475,621	May 24	2763	700	59	1215
Smith, Job. (See Martin, Charles R., assignor.)						
Smith, Job, et al. (See House, John T., assignor.)						
Smith, John. (See Harrison, William T., assignor.)						
Smith, John, Pooler, Ga. Car-door	468,703	Feb. 9	1248	317	58	778
Smith, John C. (See Spreng and Smith.)						
Smith, John E., Shiloh, Ohio. Grain-separator	486,414	Nov. 15	1971	523	61	1007
Smith, John F., et al. (See Smith, Thomas, assignor.)						
Smith, John J., Winfield, Iowa. Calf-muzzle	488,719	Dec. 27	2437	605	61	1854
Smith, John J. C. and V. E., Passaic, N. J.; said John J. C. Smith assignor to said V. E. Smith. Apparatus for casting metals	477,231	June 21	1592	390	59	1760
Smith, John M., assignor of one-half to P. H. Gunckel, Minneapolis, Minn. Flax-puller	472,234	Apr. 5	355	91, 92	59	66
Smith, John M., assignor of one-half to P. H. Gunckel, Minneapolis, Minn. Flax thrasher	473,542	July 5	716	182	60	118
Smith, John P., and F. M. Stevens, Boston, Mass. Tacking-machine	467,65	Jan. 26	2209	562	58	443
Smith, John R., Neosho, Mo. Machine for painting barbed-wire fences	483,503	Sept. 27	2513	639	60	1871
Smith, John S., London, England. Elastic tire	476,085	May 31	3505	823	59	1374
Smith, John T., Sabula, Iowa. Snap-hook	473,718	Apr. 12	1095	281	59	220
Smith, John T., Heron Lake, Minn. Flax and hemp brake	475,819	May 31	3087	781 } 782 }	59	1290
Smith, John T., San Francisco, Cal. Railway-rail	478,766	July 12	1072	266	60	229
Smith, John T., San Francisco, Cal. Oil-cup	481,312	Aug. 23	2548	625	60	1109
Smith, John T., New York, N. Y. Treating cork	484,345	Oct. 11	1255	320	61	268
Smith, John W. (See Decker, Herman L., assignor.)						
Smith, John W., Boston, Mass. Hair-clipper	481,977	Sept. 6	85	22	60	1351
Smith, John Y., assignor to Smith Exhaust Pipe Company, Doylestown, Pa. Triple-exhaust nozzle	487,299	Dec. 6	92	28	61	1340
Smith, Joshua, Casco, Mich. Floating tea or coffee extractor	476,568	June 7	515	121	59	1539
Smith, Julius, Tom's River, N. J. Ring-holder	483,399	Sept. 27	2465	605	60	1812
Smith, Kirk A., et al. (See Wead, Andrew M., assignor.)						
Smith, Kirk A., and A. M. Wead, assignors to Smith & Pomeroy, Kalamazoo, Mich. Tower for windmills	487,787	Dec. 13	904	229	61	1518
Smith, Levi F., Philadelphia, Pa. Furnace-damper regulator	477,375	June 21	1665	407	59	1794
Smith, Levi F., Philadelphia, Pa. Pipe-damper regulator	477,276	June 21	1667	407	59	1794
Smith, Lewis H. (See Brown and Smith.)						
Smith, Louis. (See Sherman, John, assignor.)						
Smith, Mark A. (See Ridgely and Smith.)						
Smith, Melvin L., Columbus, Ohio. Wheel-hub	470,216	Mar. 8	881	218	58	1279
Smith, Melvin L., assignor of one-half to S. B. Smith, Muncie, Ind. Wheel-hub casting	490,044	Aug. 2	464	117	60	670
Smith, Menzo A., Cooperstown, N. Y. Hoe	488,582	Dec. 27	2321	550	61	1813
Smith, Millage M., Stockdale, Tex. Pump	483,637	Oct. 4	178	45	61	37
Smith, Milo E., Brady Island, Nebr. Chain-power	467,059	Jan. 12	1221	308 } 309 } 130 } 131 }	58	240
Smith, Murray L., Smyrna, Ohio. Burial apparatus	466,029	Jan. 5	507	130 } 131 }	58	97
Smith, Nathan J., Pontiac, Mich. Semaphore signaling apparatus	470,310	Mar. 8	1057	268	58	1312
Smith, Nathan R., Baltimore, Md. Slatted structure for floors, stairs, &c.	488,371	Dec. 20	1883	471	61	1729
Smith, Nathaniel E., assignor of one-half to P. E. Martin, Jersey City, N. J. Reamer	466,724	Jan. 5	672	173	58	127
Smith, Noah B., and C. F. Ludwig, Birmingham, Ala. Producing paint-pigment from ores	483,063	Oct. 25	2425	623	61	527
Smith, Oliver C., et al. (See Eggo, Frederick, assignor.)						
Smith, Orson J. (See Johnson and Smith.)						
Smith, Orson W., Charlevoix, Mich. Cheese-cutter	468,902	Feb. 16	1547	394	58	816
Smith, Peter, Detroit, Mich. Feed-water heater for fire-engines	473,593	Apr. 26	2540	641	59	531
Smith, Peter, Mount Pleasant, Iowa. Fence	484,468	Oct. 18	1454	370	61	318
Smith, Peter D., Springfield, Ohio. Grain-binder	469,279	Feb. 23	2145	550 } 551 } 552 }	58	969
Smith, Peter V., New York, N. Y. Umbrella-stand	479,671	July 26	2522	628	60	531
Smith & Phillips Manufacturing Company. (See Phillips, Francis V., assignor.)						
Smith & Pomeroy. (See Smith and Wead, assignors.)						
Smith Portable Rail Saw Company. (See Smith and Brady, assignors.)						
Smith, Richard. (See Palmer, John H., assignor.)						
Smith, Richard, Sherbrooke, Canada. Agitator	473,530	Apr. 26	2415	613	59	507
Smith, Robert D. O. (See Dodge and Smith.)						
Smith, Robert D. O., Mishawaka, Ind. Lubricating journal-box	488,800	Dec. 27	2561	636	61	1880
Smith, Robert H., Lampasas, Tex. Washing-machine	469,846	Mar. 1	289	75, 76	58	1157
Smith, Robert T. (See Monroe, David M., assignor.)						
Smith, Roger H., Lexington, Ky. Joint for electric wires	471,625	Mar. 29	3046	775	58	1723
Smith, Roswell T., Nashua, N. H. Butt-hinge	477,465	June 21	1969	438	59	1853
Smith, Roswell T., Nashua, N. H. Street-railway switch	479,028	July 19	1482	369	60	317
Smith, Roswell T., Nashua, N. H. Making butt hinges	487,939	Dec. 13	1154	288	61	1567
Smith, Rudolph C. (See Otis and Smith.)						
Smith, Rudolph C., Yonkers, assignor to Otis Brothers & Company, New York, N. Y. Device for electric elevators	466,447	Jan. 5	221	56, 57	58	42
Smith, Rudolph C., Yonkers, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Electric elevator	468,903	Feb. 16	1550	394 } 395 }	58	846
Smith, Rudolph C., Yonkers, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Electric elevator	471,063	Mar. 15	2201	566 } 567 }	58	1542
Smith, Rudolph C., Yonkers, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Electric elevator	471,064	Mar. 15	2205	567	58	1543
Smith, Rudolph C., Yonkers, N. Y., assignor, by mesne assignments, to National Company, Chicago, Ill. Compound engine	485,568	Nov. 1	637	170	61	704

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Smith, S. L. (See Rush, William, assignor.)						
Smith, Samuel, assignor to J. B. Jackson and G. Bentley, Bury, England. Molding-machine	478,377	July 5	494	119 120	60	97
Smith, Samuel, assignor of two-thirds to J. T. McKone and C. E. Hill, Lawrence, Mass. Railway time-signal	481,533	Aug. 23	2900	712	60	1178
Smith, Sarah, Toledo, Ohio. Cooking utensil	474,376	July 5	494	119	60	97
Smith, Sarah A., Philadelphia, Pa. Bed-pan	1-1,375	Aug. 23	2632	647	60	1125
Smith, Sarah B. (See Smith, Melvin L., assignor.)						
Smith, Sheffield. (See Hancock, George, assignor.)						
Smith, Sherman L., Plymouth, Pa. Cooling apparatus	473,793	Apr. 26	2839	713	59	588
Smith, Stephen D., Spotswood, N. J. Car-coupling	472,958	Apr. 12	1442	368	59	984
Smith, Stephen D., Milwaukee, Wis. Electric appliance for canes	484,618	Oct. 18	1685	428	61	365
Smith, Stephen R., assignor of one-half to E. F. Hilgard, Belleville, Ill. Parcel-carrier	473,433	Apr. 19	2248	566	59	453
Smith, Susan. (See Hoffman, Rutledge T., assignor.)						
Smith, Theophilus O., Oxford, England. Attachment for brace-bits	488,701	Dec. 27	2411	598	61	1819
Smith, Thomas. (See Chambers and Smith.)						
Smith, Thomas, Allegheny, Pa. Movable rig or derrick	474,463	May 10	937	211	58	823
Smith, Thomas, Philadelphia, Pa. Railway-crossing	479,027	July 19	1481	368	60	317
Smith, Thomas, Breckinridge, Mo., assignor of two-thirds to J. F. Smith and J. B. Bennett. Earth-auger	469,307	Feb. 23	2192	561	58	978
Smith, Thomas B., Bridgeport, Ohio. Safety-plate for railways	486,741	Nov. 22	2141	617	61	1121
Smith, Thomas G., Malmesbury, and F. W. Mayhew, London, England. Sidesaddle	481,073	Aug. 16	2118	527	60	1017
Smith, Thomas H., Owosso, Mich. Adjustable brace for slat and wire and picket fences	478,027	June 28	2-81	720	59	2048
Smith, Thomas J., Providence, R. I. Trace-fastener	486,571	Nov. 22	2204	579	61	1065
Smith, Thomas L. (See Kempsmith and Smith.)						
Smith, Thomas M., Baltimore, Md. Making fertilizers	474,419	May 10	868	226	59	816
Smith, Thomas M., Bend, Tex. Gate	483,398	Sept. 27	2404	604	60	1842
Smith, Victor E. (See Smith, John J. C. and V. E.)						
Smith, Wallace L., Richburg, N. Y. Tool-handle	471,031	Mar. 15	2158	555	58	1534
Smith, Walter M., Newcastle-upon-Tyne, England. Piston-valve	488,096	Dec. 13	1422	354 355	61	1623
Smith, Walter W., London, England. Axle-lubricator	469,100	Feb. 16	1-69	478	58	910
Smith, Walton D., Prophetstown, Ill. Bag fastener and support	473,969	May 3	135	91	59	663
Smith, Walton D., assignor of one-half to J. S. Hunter, Prophetstown, Ill. Box-supporter	483,751	Oct. 4	342	86	61	71
Smith, Walton D., assignor of one-half to J. S. Hunter, Prophetstown, Ill. Box-support	488,485	Dec. 20	2064	513	61	1766
Smith, Wesley, Toledo, Ohio. Railway-gate	485,891	Nov. 8	1126	298	61	819
Smith, Wesley, Toledo, Ohio, assignor to C. W. Morris, Jr., trustee, and C. W. Morris, Boston, Mass. Smoke-consuming apparatus for boiler and other furnaces	479,767	July 26	2698	672	60	563
Smith, Wilbur F. (See Homan and Thompson, assignors.)						
Smith, Will E., Chicago, Ill. Coasting-railway	474,351	May 3	760	198	59	782
Smith, William. (See Johnson and Smith.)						
Smith, William, et al. (See Dunn, Claudius A., assignor.)						
Smith, William, Hanley, England. Bicycle	469,753	Mar. 1	134	36	58	1125
Smith, William, assignor of one-half to J. B. Levy, Bastrop, La. Cotton-chopper	483,794	Oct. 4	409	102	61	86
Smith, William, and J. Claydon, London, England. Machine for cutting or slicing vegetables	485,590	Nov. 1	667	177	61	711
Smith, William, D. Marks, and R. Watson, Keighley, England. Tool for cutting keyways in wheel-hubs	475,352	May 24	2339	600	59	1134
Smith, William A., Butte City, Mont. Tuning-pin	488,843	Dec. 27	2629	652	61	1894
Smith, William B., Savannah, Tenn. Metaphone or transposition-indicator	475,253	May 17	2179	555	59	1085
Smith, William B. and J. R., assignors of one-half to A. Eubank, Birmingham, Ala. Boiler-tube cleaner	486,133	Nov. 15	1538	406	61	919
Smith, William C. (See O'Donnell, Smith, and Bound.)						
Smith, William C., et al. (See Larson, Gust., assignor.)						
Smith, William C., Goshen, Ind. Handle for bicycles	476,424	June 7	306	71	59	1497
Smith, William C., Goshen, Ind. Spring-tire	479,851	Aug. 2	114	28	60	605
Smith, William D. (See Higgins and Smith.)						
Smith, William D. C., Sulphur City, assignor to Z. Le Boeuf and T. Mayo, Calcasieu Parish, La. Letter-box	476,321	June 7	147	36	59	1466
Smith, William E., Watkins, N. Y. Spring-tooth harrow	486,796	Nov. 22	2572	671	61	1139
Smith, William F. (See Wherry and Smith.)						
Smith, William H., Bolivar, Mo. Combined latch and lock	485,667	Nov. 8	790	210	61	750
Smith, William H. M., Brooklyn, N. Y. Planer for ice-elevators	482,206	Sept. 6	467	112	60	1426
Smith, William J. (See Housman, Ernest, assignor.)						
Smith, William J., assignor to C. S. Larabee, trustee, Boston, Mass. Machine for boring and shaping	473,027	Apr. 19	1569	399	59	325
Smith, William J., assignor to C. S. Larabee, trustee, Boston, Mass. Machine for boring non-circular holes	485,233	Nov. 1	118	36	61	598
Smith, William J., assignor to C. S. Larabee, trustee, Boston, Mass. Caster	488,954	Dec. 27	2807	692	61	1931
Smith, William L. (See Smith, Homer H. and W. L.)						
Smith, William S., Berkeley, Cal. Electric railway	469,280	Feb. 23	2150	552	58	970
Smith, William T., Philadelphia, Pa. Chenille-cutting machine	485,777	Nov. 8	949	255	61	784
Smith, William W., and G. R. Hayes, York, Pa.; said Smith assignor to said Hayes. Tobacco granulating, grading, and separating machine	483,292	Sept. 27	2251	567	60	1813
Smith, Wilson R., Beloit, Wis. Friction-clutch	487,545	Dec. 6	511	133	61	1422
Smith, Wright D., assignor to Huyette & Smith Manufacturing Company, Detroit, Mich. Steam-generator	487,300	Dec. 6	95	28, 29	61	1341
Smithson, Noble. (See Alford, Allen, assignor.)						
Smitten, Thomas W. F., Brooklyn, N. Y. Sleeve-link	486,904	Nov. 29	2795	725	61	1200
Smock, Calvin E. (See Chase and Smock.)						
Smolley, Aaron E., Brookville, Ind. Game apparatus	467,124	Jan. 12	1349	344	58	265
Smolley, Silvanus L., and W. H. Bonwell, Jr., Brookville, Ind. Wind-wheel	474,308	May 3	670	172 173	59	766
Smouse, William M., Gettysburg, S. D. Signal-whistle	488,845	Dec. 27	2631	652	61	1804
Smurthwaite, Thomas. (See Davis, Orin C., assignor.)						
Smyser, Henry E., Philadelphia, Pa., assignor to Arbuckle Brothers, New York, N. Y. Feed mechanism for weighing-machines	470,146	Mar. 1	746	185 186	58	1244
Smyser, Louis B., Chicago, assignor to Buda Foundry and Manufacturing Company, Harvey, Ill. Car-wheel	474,421	May 10	870	227	59	816
Smyth, Clement B. (See Kidder, Wellington P., assignor.)						
Smyth, David M., Northwood, N. H., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	468,117	Feb. 2	313	76	58	584
Smyth, David M., Northwood, N. H., assignor to Smyth Manufacturing Company, Hartford, Conn. Book-sewing machine	468,118	Feb. 2	315	76, 77	58	585

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Smyth Manufacturing Company. (See Smyth, David M., assignor.)						
Smythe, Samuel R., Pittsburg, Pa. Furnace	478,767	July 12	1074	{ 266 267 }	60	229
Snaith, Thomas, South Stockton, England. Punching, shearing, &c., machine	486,387	Nov. 15	1922	510	61	9: 8
Snaman, George W., Jr., Allegheny, Pa. Combined trunk and bed	468,704	Feb. 9	1251	318	58	778
Snaman, George W., Jr., Allegheny, Pa. Toy	479,534	July 26	2315	579	60	493
Snavely, Samuel H., assignor of one-fourth to F. W. Ritter, Jr., Washington, D. C. Curtain-fixture	481,978	Sept. 6	85	22	60	1351
Snead, Charles S., assignor to Snead & Co. Iron Works, Louisville, Ky. Sand-molding machine	475,523	May 24	2614	665	59	1185
Snead & Co. Iron Works. (See Snead, Charles S., assignor.)						
Sneckner, William, New York, N. Y. Sleeping-car	477,157	June 14	1444	354	59	1739
Sneddon, William, assignor of one-half to J. H. Rothwell and J. R. Cade, Houston, Tex. Journal-box	488,720	Dec. 27	2438	605	61	1855
Snedeker, Charles W., assignor of one-half to E. W. Ostrander, Marblatown, N. Y. Draft-yoke	479,535	July 26	2317	579	60	493
Suedekor, Charles T., assignor to Washburn & Moen Manufacturing Company, Worcester, Mass. Electric conductor	477,787	June 28	2493	624	59	1074
Sueer, George S., Marengo, Iowa. Wagon end-gate	482,835	Sept. 20	1493	371	60	1653
Snell, Arthur T., assignor to Snell & Weldon, Ventura, Cal. Safety-pin	481,834	Aug. 30	3397	834	60	12: 9
Snell, Charles S., London, England. Type-writing machine	467,267	Jan. 19	1580	403	58	317
Snell, George I., and L. Gillette, Little Falls, N. Y. Horse-collar	476,267	June 7	516	122	59	1539
Snell, Jacob A., Barrington, R. I. Brick-cutting machine	477,915	June 28	2709	678	59	2014
Snell, Levi W., assignor of one-half to F. W. Fix, Jr., Utica, N. Y. Cake-cutter	468,836	Feb. 16	1450	370	58	827
Snell, Levi W., assignor of one-half to F. W. Fix, Jr., Utica, N. Y. Cake-cutter	477,278	June 21	1669	407	59	1795
Snell, Robert B., and B. Smith, Monument, Kans., assignors, by mesne assignments, to said Smith. Seed-planting machine	488,846	Dec. 27	2634	{ 652 653 }	61	1995
Snell, Thomas W., Chicago, Ill. Center support or hanger	468,705	Feb. 9	1253	318	58	779
Snell & Weldon. (See Snell, Arthur T., assignor.)						
Snellenberger, Cora B. and J., Paulding, Ohio. Feed-trough	474,867	May 17	1582	403	59	967
Snellenberger, Jonathan. (See Snellenberger, Cora B. and J.)						
Snelling, Jeffrey, East Greenwich, England. Rotary engine	479,080	July 19	1557	{ 389 390 }	60	331
Snider, Columbus A., Greencastle, Ind. Railway-gate	484,256	Oct. 11	1111	281	61	240
Snider, Gabriel F., Abingdon, Iowa. Burglar-alarm and door-closing device	475,903	May 31	3230	817	59	1317
Sniffin, Charles A. (See Waller and Sniffin.)						
Snitzner, Drikus, and M. Kuehn, St. Louis, Mo. Take-up for sewing-machines	485,019	Oct. 25	2366	608	61	515
Suively, Russell H., Louisville, Ky. Switch for street-railways	475,475	May 21	2534	645	59	1170
Snorf, John, Fairland, Mich. Measuring-vessel	485,992	Nov. 8	1290	343	61	853
Snow, Charles A., Brick Haven, Va. Brick-kiln	483,638	Oct. 4	180	45	61	38
Snow, Elwin A., Jacksonville, N. Y. Picture-hanger	480,632	Aug. 9	1418	353	60	865
Snow, Eugene A., assignor to Electric Engineering and Supply Company, Syracuse, N. Y. Electric switch	477,612	June 21	2201	546	59	1899
Snow, Fred. W., Hillburn, N. Y. Switch-stand	466,379	Jan. 5	112	32	58	21
Snow, Fred. W., Hillburn, assignor to Standard Equipment Company, New York, N. Y. Switch-stand	480,676	Aug. 9	1487	310	60	878
Snow, Frederick, Lynn, Mass., assignor to National Carving Company, Kittery, Me. Carving-machine	467,596	Jan. 26	2111	{ 535 536 }	58	425
Snow, Frederick, Lynn, Mass., assignor to National Carving Company, Kittery, Me. Carving-machine	467,597	Jan. 26	2113	{ 536 537 }	58	425
Snow, George B., Buffalo, N. Y. Dental vulcanizer	487,647	Dec. 6	660	170	61	1452
Snow, Henry E., assignor of one-half to C. F. Mende, Albany, N. Y. Cuff-holder. (Re-issue)	11,253	July 12	1397	345	60	290
Snow, Henry H., New York, N. Y. Tumbler cooler and cleaner	469,874	Mar. 1	336	86	58	1166
Snow, James C., assignor of one-half to W. J. Barrickman, Butler, Pa. Folding table	452,701	Sept. 13	1286	315	60	1600
Snow, Levi T. (See Woodruff and Snow.)						
Snow, Thomas, Batavia, Ill. Windmill	472,557	Apr. 12	857	220	59	177
Snow, Walter B., Watertown, assignor to B. F. Sturtevant Company, Boston, Mass. Lubricator	467,879	Jan. 26	2560	648	58	509
Snow, William, Waverly, Ill. Swinging gate	467,443	Jan. 19	1842	{ 470 471 }	58	367
Snow, William H., Campbell County, Va. Car-coupling	487,353	Dec. 6	189	52	61	1358
Snowden, Thomas J. (See Snowden, William D. and T. J.)						
Snowden, William D. and T. J., Lerna, Ill. Fence	473,092	Apr. 19	1665	423	59	342
Snyder, Charles A., assignor of one-hundred-and-seven two-hundred-and-fortieths to W. W. Brown and R. T. Bass, Danville, Va. Machine for treating leaf-tobacco	483,401	Sept. 27	2406	{ 605 606 }	60	1843
Snyder, Charles M., Philadelphia, Pa. Advertising device	466,583	Jan. 5	438	112	58	84
Snyder, Daniel U. (See Vanzell, Ezekiel, assignor.)						
Snyder, Harrison, trustee. (See Clay, Henry, assignor.)						
Snyder, Homer P., and M. J. Fisher, Little Falls, N. Y. Stop mechanism for circular-knit-ting machines	488,039	Dec. 13	1334	{ 330 331 }	61	1604
Snyder, Jennie, and F. Lockwood, Miami, Conn. Culinary vessel	485,993	Nov. 8	1292	343	61	854
Snyder, John H., Fruitport, Mich. Hame-fastener	480,633	Aug. 9	1419	354	60	866
Snyder, John H., Des Moines, Iowa. Car-coupling	486,905	Nov. 29	2796	725	61	1200
Snyder, John W., and J. C. McMahon, Pittsburg, Pa. Trap-door for railway-cars	482,003	Mar. 29	3611	923	58	1831
Snyder, Oswill P., assignor of two-thirds to O. W. Houck and F. Rasner, Bangor, Pa. Hose-coupling	475,254	May 17	2180	555	59	1086
Snyder, Plus S., Jacobus, Pa. Hedge-fence trainer	488,955	Dec. 27	2807	692	61	1931
Snyder, Waldo V., Canton, Ohio. Toy	473,970	May 3	137	31	59	664
Snyder, Waldo V., Canton, Ohio. Tricycle	475,622	May 24	2764	700	59	1215
Snyder, William D., Chicago, Ill. Wardrobe-bedstead	468,368	Feb. 9	724	179	58	674
Snyder, William D., Chicago, Ill. Folding bedstead	472,558	Apr. 12	858	220	59	177
Snyder, William D., Chicago, Ill. Folding bedstead	474,868	May 17	1584	403	59	967
Snyder, William D., Chicago, Ill. Wardrobe-bedstead	474,869	May 17	1584	403	59	968
Snyder, William D., Wetzell, Mich. Machine for turning handles	481,875	Aug. 30	3457	{ 848 849 }	60	1301
Snyder, William D., Chicago, assignor to R. W. Emerson and W. F. Woodruff, Rockford, Ill. Folding bed	487,685	Dec. 6	729	186	61	1464
Snyder, William R., Royer's Ford, Pa. Wood-carving machine	480,524	Aug. 9	1239	{ 311 312 }	60	830
Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Harrow	471,032	Mar. 15	2160	555	58	1534
Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Cultivator	474,309	May 3	671	173	59	766
Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Cultivator	481,208	Aug. 23	2351	579	60	1074
Sobey, William, assignor to J. I. Case Plow Works, Racine, Wis. Harrow	485,020	Oct. 25	2368	609	61	515

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Sobinski, Charles O., assignor to A. C. Storck and W. Pfeifer, St. Louis, Mo. Combined car step and gate	468,310	Feb. 2	627	157	58	645
Sobotka, Gustav, assignor to Fleischmann & Co., New York, N. Y. Separating and assorting yeast	471,688	Mar. 29	3140	800	58	1740
Sobotka, Gustave, assignor to Fleischmann & Co., New York, N. Y. Apparatus for and method of separating and assorting yeast	471,689	Mar. 29	3142	801	58	1741
Sobotka, Gustave, and A. Kliemetschek, assignors to Fleischmann & Co., New York, N. Y. Method of and apparatus for producing clear wort	470,902	Mar. 15	1963	502	58	1496
Sobotka, Gustave, and A. Kliemetschek, assignors to Fleischmann & Co., New York, N. Y. Method of and apparatus for purifying and regulating the temperature of air	471,294	Mar. 22	2562	650	58	1624
Sobotka, Gustav, New York, and W. Ahrens, Long Island City, N. Y. Apparatus for separating solid matter from liquids	488,583	Dec. 27	2222	550	61	1813
Sobotka, Gustave, New York, and W. Ahrens, Long Island City, N. Y. Apparatus for separating solid matter from liquids	488,956	Dec. 27	2808	692	61	1931
Soby, Charles. (See Gray, William, assignor.)						
Socci, Joseph, Baltimore, Md. Device for unloading vessels, cars, &c.	482,565	Sept. 13	1085	263	60	1560
Société Anonyme des Parfums Naturels de Cannes. (See Massignon, Jules, assignor.)						
Société Anonyme la Levure. (See Guignard, Gaston, assignor.)						
Société Générale de Maltose. (See Effront, Jean, assignor.)						
Society Edoux et Cie. (See Holder, Alfredo R., assignor.)						
Society Fabriques de Produits Chimiques de Thann et de Mulhouse. (See Baur, Albert, assignor.)						
Society of Chemical Industry. (See Gnehm and Schmid, assignors.)						
Sockman, Bryant R., assignor of one-half to W. L. McIntire, Mount Vernon, Ohio. Self-locking pulley	473,093	Apr. 19	1666	423	59	342
Soden, Francis H., Chicago, Ill. Electric switch	473,132	Apr. 19	1739	439 440	59	354
Soden, Francis H., Chicago, Ill. Electro-therapeutic heating-pad	473,133	Apr. 19	1742	440	59	355
Soden, Francis H., Chicago, Ill. Electric switch	473,134	Apr. 19	1743	440	59	355
Söderin, Jonas S., assignor to C. W. Stuart, New York, N. Y. Ruling-pen	485,358	Nov. 1	325	87	61	638
Sodestrom, Ole, Sac City, Iowa. Adjustable reel for harvesters	467,625	Jan. 26	2149	546	58	432
Sohlman, Johannes, Frederikshamn, Finland, Russia. Dynamo electric machine	469,281	Feb. 23	2152	553	58	970
Soistmann, Adolph G., and J. W. Pepper, Philadelphia, Pa.; said Soistmann assignor to said Pepper. Drum	478,378	July 5	495	120	60	98
Sokoloff, Alexis. (See Rauser, Wieber, and Sokoloff.)						
Solar Refining Company. (See Frasch, Herman, assignor.)						
Solari, George, St. Louis, Mo. Automatic sash-fastener	482,280	Sept. 6	5-6	139 140	60	1449
Solcer, Newton R., Maryland, Ill. Car-coupling	467,903	Jan. 26	2000	657	58	517
Soldenhoff, Richard de, Cardiff, England. Coke-oven	471,033	Mar. 15	2161	555 556	58	1534
Soler, Justo, deceased, Yanco, Porto Rico, West Indies; P. B. Turpin, administrator. Self-recording planograph	481,432	Aug. 23	2734	672 673	60	1145
Soley, William H., et al. (See Carlinet, John G., assignor.)						
Soley, William H., and W. W. Perkins, assignors of three-fifths to J. Wolstencroft, W. O'Neil, and W. H. Yelland, Philadelphia, Pa. Electric locomotive	482,594	Sept. 13	1137	272	60	1569
Sollanberger, George, Mechanicsburg, Pa. Fly-net	482,417	Sept. 13	837	201	60	1512
Solliday, Wilson B. (See Guiley, Augustus H. R., assignor.)						
Solt, Jacob B. and J. E., Northbrook, Pa. Slat-and-wire-fencing machine	480,391	Aug. 9	1035	260 261	60	790
Solt, James E. (See Solt, Jacob B. and J. E.)						
Soltmann, Edward G. (See Grabau, Hans E., assignor.)						
Sombart, Charles A., et al. (See Williams, William E., assignor.)						
Sombart, William A., et al. (See Williams, William E., assignor.)						
Somborn, Julius, et al. (See Goldkind, Isaac, assignor.)						
Somers, Daniel M. (See Atkinson and Somers.)						
Somers, Daniel M., assignor to himself, J. L. and G. A. Somers, W. H. Atkinson, and E. E. Somers, Brooklyn, N. Y. Spring-cover	467,647	Jan. 26	2183	555	58	438
Somers, Daniel M., and W. H. Atkinson, Brooklyn, N. Y. Apparatus for pickling metal plates	482,489	Sept. 13	950	231 232	60	1533
Somers, E. E., et al. (See Somers, Daniel M., assignor.)						
Somers, G. A., et al. (See Somers, Daniel M., assignor.)						
Somers, J. L., et al. (See Somers, Daniel M., assignor.)						
Somerset and Johnsonburg Manufacturing Company. (See Johnson, William, assignor.)						
Sommer, Adolph, Berkeley, Cal. Viscid fatty compound	468,937	Feb. 16	1609		58	858
Sommer, Adolph, Berkeley, Cal. Solution of lactic acid in oils and fats	470,714	Mar. 15	1675		58	1440
Sommer, Adolph, Berkeley, Cal. Dissolving lactic acid in oils and fats	470,715	Mar. 15	1676		58	1441
Sommer, Frank M., and R. A. McGirr, Clayton, Ill. Automatic grain-measurer	467,691	Jan. 26	2251	573	58	451
Sommer, Henry B., Philadelphia, Pa. Tray for jewelers	480,045	Aug. 2	465	118	60	670
Sommer, Jacques, assignor of one-tenth to D. Rohlf and H. Schoder, Seattle, Wash. Vehicle	474,535	May 10	1049	268	59	849
Sommerfeld, Heinrich, Canton, Kans. assignor of one-half to H. C. Lewis, Kansas City, Mo. Car-coupling	468,311	Feb. 2	630	157	58	646
Sommerfeld, Heinrich, Canton, assignor of one-half to S. F. Sacket, Marion, Kans. Combined plow and seeder	487,871	Dec. 13	1046	262	61	1546
Sommers, P. T. (See Cox, Marion W., assignor.)						
Sondag, Nicolas. (See Rich and Sondag.)						
Sondheim, Lewis H., New York, N. Y. Pencil	469,754	Mar. 1	135	36	58	1126
Sondheim, Lewis H., New York, N. Y. Lead-pencil	470,081	Mar. 1	656	162	58	1226
Songer, Gordon T., assignor of one-half to W. E. Carter, Elizabethton, Tenn. Harrow	478,649	July 12	894	221	60	193
Sonnet, Eugen C. (See Gombault and Sonnet.)						
Soosby, Joseph M., assignor to S. Lehman, Philadelphia, Pa. Device for dressing the hair	469,191	Feb. 16	1998	510	58	935
Sooy, Ephraim C. (See Livengood, Winfield S., assignor.)						
Sooy, Ephraim C. (See Puntenev and Sooy.)						
Sooy, Ephraim C., Kansas City, Mo. Furnace-grate	481,596	Aug. 30	2998	734 735	60	1212
Soper, J. R., et al. (See Starks, John, assignor.)						
Sörensen, Niels G., Stockholm, Sweden. Lock	481,597	Aug. 30	3003	735	60	1213
Sorg, Albert A., assignor of one-half to G. M. Clarken, Ann Arbor, Mich. Extension-ladder	487,301	Dec. 6	98	29	61	1341
Sorkness, Henry O., Ashby, Minn. Draft-equalizer	470,716	Mar. 15	1677	433	58	1441
Souder, Jacob J., Washington, D. C. Dumping-car	466,468	Jan. 5	253	64	58	48
Souder, Jacob J., Washington, D. C. Dumping-car	466,469	Jan. 5	254	64, 65	58	48
Souder, Jacob J., Washington, D. C. Dumping-car	466,470	Jan. 5	257	65	58	49
Souder, Leamon G., Philadelphia, Pa. Measuring-can	480,146	Aug. 2	616	156	60	700

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Soukup, Albert H., Kansas City, Mo. Miter-machine	477,233	June 21	1596	391	59	1780
Soule, Charles E., <i>et al.</i> (See Cogswell, Willfred G., assignor.)						
Soule, Edward C., Somerset, Ky. Stave-machine	466,630	Jan. 5	508	131	58	98
Soule, Frank C., <i>et al.</i> (See Merrell, Gaius L., assignor.)						
Soule, Henry, <i>et al.</i> (See Demaurez, Charles, assignor.)						
Soule, Henry, <i>et al.</i> (See Demaurez, Charles, assignor.) (Reissue.)						
Soule, Henry M. (See Johnson, Charles F., assignor.)						
Soule, Oscar F., <i>et al.</i> (See Merrell, Gaius L., assignor.)						
Soule, William C., Savannah, N. Y. Safety surf-boat	478,650	July 12	891	221	60	193
Soulerin, Léon, Paris, France. Pneumatic railway-brake	467,060	Jan. 12	1222	{ 309 310 }	{ 58 241 }	
Sours, Charles D., assignor of one-half to N. R. Morris and J. H. Spencer, Martinsville, Va. Plug-tobacco shaper	486,302	Nov. 15	1792	471	61	971
South Bend Iron Works. (See Anderson, Charles, assignor.)						
South Bend Iron Works. (See Oliver, James, assignor.)						
South Bend Pulley Company. (See Long, Eber A., assignor.)						
Southard, Abraham M., Denver, Colo., assignor to National Sheet Metal Screw Pipe Company, of Colorado. Screw-beaded sheet-metal pipe	467,999	Feb. 2	141	34	58	551
Southard, Charles H., Preston, N. Y. Can-washer	482,763	Sept. 20	1401	346	60	1633
Southard, William D., Peekskill, N. Y. Stove-grate	486,797	Nov. 22	2573	671	61	1139
Souther, Charles H., Boston, Mass. Dredging-machine	477,827	June 28	2558	{ 641 642 }	{ 59 1985 }	
Southerton, Richard, assignor to G. E. Keey and R. Southerton, Jr., Birmingham, England. Treating iron	470,606	Mar. 8	1506		58	1399
Southgate, Louis W., Worcester, Mass., assignor to Campbell Printing Press and Manufacturing Company, of New York. Printing-press	471,403	Mar. 22	2729	{ 696 697 }	{ 58 1656 }	
Southgate, Louis W., Worcester, Mass., assignor to Campbell Printing Press and Manufacturing Company, of New York. Printing-press	474,032	May 3	234	56	59	683
Southwark Foundry and Machine Company. (See Good, William E., assignor.)						
Southwestern Supply Company. (See Stowe, William J., assignor.)						
Southwick, Albert N., Boston, Mass. Lock-stab for sale-checks	472,235	Apr. 5	357	92	59	67
Southwick, Frank B., Grand Rapids, Mich. Dump wagon-box	478,379	July 5	496	120	60	98
Southwick, Plin C., Newark, Ill. Baling-press power	473,645	Apr. 26	2619	660	59	546
Southworth, Benjamin F. (See Harris, William T., assignor.)						
Southworth, H. S. (See Heberling, John, assignor.)						
Southworth, Horatio W., New York, N. Y. Magnetic extractor	468,706	Feb. 9	1253	318	58	779
Souter, Robert, Chicago, Ill. Axle-box lid	484,471	Oct. 18	1457	371	61	319
Sowler, George, Nottingham, England. Fashioning apparatus for straight-knitting machines	478,527	July 5	717	173	60	142
Soverhill, Charles W., assignor of one-half to C. H. Perkins and S. S. Pierson, Newark, N. J. Fruit-evaporator	468,731	Feb. 9	1285	327	58	786
Spain, James A. (See Pro, James P., assignor.)						
Spalding, Charles W. (See Frink, Urban W., assignor.)						
Spalding, Edward M., and G. E. Willis, Fremont, Nebr. Oil-burner	488,744	Dec. 27	2471	611	61	1862
Spalding, J. A. (See Kilbourn, Washington H., assignor.)						
Spalding, Samuel J. (See Dow, Alonzo, assignor.)						
Spang, George A., Butler, Pa. Pressure-blower	466,805	Jan. 12	805	208	58	163
Spangler, George N. (See Do Vault, William N., assignor.)						
Spangler, Jacob W., assignor of one-half to M. E. Hartzler, York, Pa. Washing-machine	480,214	Aug. 2	736	{ 186 187 }	{ 60 721 }	
Sparenburg, John, Chicago, Ill. Speculum	469,351	Feb. 23	2253	578	58	991
Sparks, Charles, Sacramento, Cal. Hoop or band fastener and tightener	469,899	Mar. 1	359	91	58	1170
Sparks, Charles H. (See Hale, Perley, assignor.)						
Sparks, Charles H. (See Hale and Sparks.)						
Sparks, Charles H., St. Louis, Mo. Mechanism for operating and locking jail-doors	483,178	Sept. 27	2043	516	60	1775
Sparks, George E., Vernon, Conn. Fertilizer-distributor	468,837	Feb. 16	1451	{ 370 371 }	{ 58 828 }	
Sparks, Phineas M., Zanesville, Ind. Stock-fence	474,464	May 10	939	211	59	828
Sparks, Thomas H., Steele City, Nebr. Animal-poke	471,149	Mar. 22	2353	601	58	1583
Sparks, William E., assignor to Sargent & Company, New Haven, Conn. Knob attachment	469,953	Mar. 1	465	116	58	1189
Sparks, William E., assignor to Sargent & Company, New Haven, Conn. Lock	480,973	Aug. 16	1953	{ 488 489 }	{ 60 985 }	
Sparks, William H., Camden, N. J. Carriage	487,788	Dec. 13	906	229	61	1518
Sparr, Benjamin F. and M. F., Brooklyn, N. Y. Metallic railway-tie	483,773	Oct. 4	378	94	61	79
Sparr, Millard F. (See Sparr, Benjamin F. and M. F.)						
Sparr, Samuel F., Bozeman, Mont. Bob-sled	481,643	Aug. 30	3069	749	60	1226
Sparrow, Seth E., Norwalk, Ohio. Safety attachment for trunks	475,950	May 31	3303	833	59	1332
Spaulding, Alfred F., Northfield, Vt. Drilling-machine	466,806	Jan. 12	806	208	58	163
Spaulding, Alpheus M., North Belgrade, Me. Combined napkin ring and holder	483,331	Sep. 27	2310	580	60	1821
Spaulding, Charles C. and W. C., Whiting, Iowa. Combined cultivator and weed-cutter	488,779	Dec. 27	2523	627	61	1872
Spaulding, Frank M., assignor to E. S. Mayfield, Kalamazoo, Mich. Aligner for type-writing machines	481,513	Aug. 23	2859	702	60	1170
Spaulding, George H., Chicago, Ill. Pitman connection for mowing-machines	474,767	May 10	1410	358	59	921
Spaulding, George H., and F. L. Moore, Norwich, Conn. Cord-machine	473,369	Apr. 19	2146	{ 537 538 }	{ 59 434 }	
Spaulding, James G. (See Bailey and Wolch, assignors.)						
Spaulding, William C. (See Spaulding, Charles C. and W. C.)						
Spannhorst, Henry E., St. Louis, Mo. Drawer stop and guide	480,861	Aug. 16	1773	444	60	950
Speakman, John, New Castle, Ind. Wire-and-picket fence	471,831	Mar. 29	3379	861	58	1785
Speakman, William M., Philadelphia, Pa. Handpiece for dental engines	476,496	June 7	414	96	59	1518
Spear, Ephraim W., Boston, Mass. Weighing-machine	479,552	Aug. 2	114	23	60	605
Spear, Ephraim W., Boston, Mass. Weighing-machine	479,553	Aug. 2	116	29	60	605
Spear, James, Philadelphia, Pa. Letter-box	479,576	July 26	2376	592	60	503
Spear, James, Philadelphia, Pa. Letter-box	481,772	Aug. 30	3295	802	60	1270
Spear, Wickham B., Philadelphia, Pa. Producing definite patterns on zinc-coated plates	484,472	Oct. 18	1459	371	61	319
Spears, John E., New York, N. Y. Book	471,905	Mar. 29	3475	888	58	1805
Spears, Ralph R., Wheeling, W. Va., assignor to F. W. Beers, Bridgeport, Conn. Lathe for turning axles	475,163	May 17	2011	514	59	1057
Speck, Conrad, Jr., Detroit, Mich. Tag-holder	484,682	Oct. 18	1795	456	61	387
Speer, Abram C., Woodville, Oreg. Portable band sawing-machine	482,103	Sept. 6	297	70	60	1393
Speed, Anna G. (See Speed, Joshua, assignor.)						
Speed, Anna G., Grand Rapids, Mich. Envelopment for clothing	485,509	Nov. 1	545	145	61	684
Speed, Fred H., Rockland, Me., assignor to E. N. Wilcox, Meriden, Conn. Device for stretching wire	473,528	Apr. 26	2414	612	59	506

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Speed, Joshua, Grand Rapids, Mich., assignor to A. G. Speed. Envelope for merchandise	468,523	Feb. 9	992	251	58	725
Speer, William W., Pittsburg, Pa. Letter-box	472,182	Apr. 5	271	71	59	51
Speer, William W., Pittsburg, Pa. Letter-box	473,676	Apr. 26	2664	671	59	555
Speer, William W., Pittsburg, Pa. Letter-box and post therefor	473,972	May 3	139	32	59	664
Speir, Stuart G., Albany, N. Y., assignor of one-third to J. C. Pennie, Washington, D. C. Pocket-lamp	471,985	Mar. 29	3588	916	58	1826
Spence, Anna M., executrix. (See Hall, George T., assignor.)						
Spence, John A. (See Horner, Elwood T., assignor.)						
Spence, Thomas G., Brooklyn, N. Y. Inking attachment for printing-presses	479,674	July 26	2527	629 630	60	532
Spence, William F., Pass Christian, Miss. Oar-lock	474,191	May 3	479	116	59	730
Spencer, Alvah C., Boston, Mass., assignor to Goodyear Shoe Machinery Company, Hartford, Conn. Tension device for sewing machines	488,508	Dec. 20	2099	521	61	1774
Spencer, Carl M., St. Johnsbury, Vt. Sleigh-truck	469,507	Feb. 23	2502	641	58	1038
Spencer, Charles, Grand Rapids, Mich. Hose-nozzle	476,966	June 14	1151	278	59	1679
Spencer, Charles F., assignor to W. Horcheler, Rochester, N. Y. Stovepipe-holding device	479,313	July 19	1917	479	60	400
Spencer, Christopher M., Windsor, Conn. Nail-puller	480,971	Aug. 16	1954	489	60	985
Spencer, Gaston N., assignor to himself and W. E. Hopkins, Ouachita City, La. Plow-fender	482,595	Sept. 13	1128	272	60	1569
Spencer, George, Buffalo, N. Y. Stocking-supporter	468,369	Feb. 9	725	179	58	674
Spencer, Henry B., assignor to Edward Best Car Axle Box and Lubricator Company, Ottawa, Canada. Car-axle box	473,529	Apr. 26	2415	612	59	506
Spencer, Henry E., Spencer, Miss. Dental-engine attachment	477,076	June 14	1310	322	53	1716
Spencer, Ira H., Hartford, Conn. Water-motor	479,097	July 19	1587	397	60	337
Spencer, James E., et al. (See Moews, Paul, assignor.)						
Spencer, James E. and J. L., Des Moines, Iowa. Hot-air furnace	486,134	Nov. 15	1539	496 497	61	920
Spencer, James H., et al. (See Sours, Charles D., assignor.)						
Spencer, Jervis, assignor to Jervis Spencer Company, Baltimore, Md. Curtain for carriage-tops	467,385	Jan. 19	1753	447	58	349
Spencer, John E., Salem, Mass. Damper-regulator	479,854	Aug. 2	118	29	60	605
Spencer, John S. (See Moews, Paul, assignor.)						
Spencer, Joseph L. (See Spencer, James E. and J. L.)						
Spencer, Luman N. (See Massey, Arthur C., assignor.)						
Spencer, Newell H., Elmira, N. Y. Plumb and level	466,380	Jan. 5	113	32	58	24
Spencer, Thomas. (See Andrews and Spencer.) (Reissue.)						
Spencer, Walter M., Chicago, Ill. Spark-arrester for electric lamps	476,933	June 14	1097	265	59	1669
Spencer, Warren W. C., Boston, Mass. Certificate representing value	479,098	July 19	1589	398	60	338
Spencer, William B., Chicago, Ill. Vaginal syringe	471,506	May 10	996	257	59	810
Spencer, William G., Dahlonega, Ga. Water-wheel	481,071	Aug. 16	2118 527 528	60	1017	
Spencer, William H., St. Leonard's-on-Sea, England. Vaporizer	472,645	Apr. 12	941	254	59	199
Spengler, Reinhart, New York, N. Y. Needle-threader	471,150	Mar. 22	2354	602	58	1583
Sperle, Valentine. (See Pearson and Sperle.)						
Sperry, Andrew F., Washington, D. C. Fountain-pen	470,082	Mar. 1	658	162	58	1227
Sperry Electric Company. (See Sperry, Elmer A., assignor.)						
Sperry, Elmer A., Chicago, Ill. Electric trolley	466,807	Jan. 12	807	208	58	163
Sperry, Elmer A., Chicago, Ill. Truck for vehicles	466,808	Jan. 12	808	209	58	164
Sperry, Elmer A., Chicago, Ill. Dynamo-electric machine	469,725	Mar. 1	92	24, 25	58	1116
Sperry, Elmer A., Chicago, Ill. Electric locomotive	470,516	Mar. 8	1386	362	58	1773
Sperry, Elmer A., Chicago, Ill. Trolley-wire support	471,151	Mar. 22	2455	602	58	1584
Sperry, Elmer A., Chicago, Ill. Electric generator or motor	476,426	June 7	310	71, 72	59	1498
Sperry, Elmer A., Chicago, Ill. Fuse-block for electric circuits	476,570	June 7	516	122	59	1539
Sperry, Elmer A., Chicago, Ill. Electric mine-car	478,138	July 5	89	23, 94	60	20
Sperry, Elmer A., Chicago, Ill. Electric locomotive	478,139	July 5	93	24	60	21
Sperry, Elmer A., Chicago, Ill. Trolley-wire splice	478,140	July 5	95	24	60	21
Sperry, Elmer A., Chicago, Ill., assignor to Thomson-Houston Electric Company, Boston, Mass. Mining-machine	478,141	July 5	95	24, 25	60	21
Sperry, Elmer A., Chicago, Ill., assignor to Thomson-Houston Electric Company, Boston, Mass. Dynamo-electric machine or motor	478,142	July 5	101	26	60	22
Sperry, Elmer A., Chicago, Ill., assignor to Thomson-Houston Electric Company, Boston, Mass. Armature for electric machines	479,030	July 19	1485	369	60	318
Sperry, Elmer A., assignor to Sperry Electric Company, Chicago, Ill. Electric-arc lamp	479,029	July 19	1484	360	60	318
Sperry, Elmer A., assignor to Sperry Electric Company, Chicago, Ill. Electric-arc lamp	480,525	Aug. 9	1243	312	60	831
Sperry, John, assignor to K. A. Sperry, New York, N. Y. Band sawing-machine	469,177	Feb. 16	1970	504	58	930
Sperry, John E., Elbridge, N. Y. Stove-fixture	466,938	Jan. 12	1026	261	58	204
Sperry, Kate A. (See Sperry, John, assignor.)						
Sperry, William W. (See Wheeler and Sperry.)						
Sphere Manufacturing Company. (See Ball, Robert R., assignor.)						
Spidel, George W., assignor of one-half to H. L. Corvode, Baker's Corners, Ind. Gate	481,876	Aug. 30	3459	849	60	1301
Spiegel, William G., assignor to A. Le Mout, New York, N. Y. Magic-lantern advertising apparatus	472,912	Apr. 12	1368	351	59	275
Spiegel, William G., assignor to L. W. Baldwin, New York, N. Y. Time-lock for savings-banks	474,870	May 17	1585	403	59	968
Spiegel, William G., assignor to L. W. Baldwin, New York, N. Y. Time-lock	474,871	May 17	1587	404	59	968
Spiegelberg, Frederick. (See Lascar, Ferdinand, assignor.)						
Spielman, William, Camden, N. J., assignor to A. Dailey, W. K. Butterworth, and J. L. Dailey, Philadelphia, Pa. Automatic railway-switch	481,248	Aug. 23	2435	600	60	1090
Spillane, Frank J. (See Muhlfeld and Spillane.)						
Spiller, Harry A., Boston, Mass., assignor to Pneumatic Gun Carriage and Power Company, Wheeling, W. Va. Rotating ammunition-car	470,955	Mar. 15	2042	522	58	1511
Spiller, Harry A., Boston, Mass., assignor to Pneumatic Gun Carriage and Power Company, Wheeling, W. Va. Mortar-carriage	480,515	Aug. 2	740	187	60	722
Spillinger, Joseph, Philadelphia, Pa. Wire-stretcher	484,061	Oct. 11	807	204	61	180
Spillinger, Joseph, Philadelphia, Pa. Fence	485,304	Nov. 1	222	63	61	618
Spillsbury, Edmund G., assignor to Trenton Iron Company, Trenton, N. J. Conveying and hoisting device	482,443	Sept. 13	881	212	60	1520
Spillsbury, Edmund G., and S. S. Webber, Trenton, N. J. Hoisting and conveying device	475,710	May 24	2892	731 732 733	59	1239
Spiro, Charles, New York, N. Y. Type-writing machine	475,623	May 24	2765	700 701	59	1215
Spiro, Charles, New York, N. Y. Type-writing machine	476,903	June 14	1044	253	59	1658

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Spiro, Charles, New York, N. Y. Type-writing machine	481,376	Aug. 23	2633	{ 647 } { 648 }	{ 60 } { 60 }	1125 1126
Spiro, Charles, New York, N. Y. Type-writing machine	481,377	Aug. 23	2638	648	60	1126
Spho, Emanuel, Krumau, Austria-Hungary. Fluid-meter	476,934	June 14	1098	365	59	1669
Spittle, George W., Campos, Brazil. Lightning-arrester	467,023	Jan. 12	1161	{ 294 } { 295 }	{ 58 } { 58 }	229 229
Spitzer, Leopold, New York, N. Y. Shade-holder	487,858	Dec. 13	1037	257	61	1542
Spivey, Thomas S., Cincinnati, Ohio. Protecting bank-checks, &c., from being raised	478,294	July 5	367	89	60	74
Spofford, Charles, New York, N. Y. Machine for sawing metal	486,169	Nov. 15	1588	421	61	930
Spofford, Charles, assignor to W. J. Hiss and W. P. Sandford, New York, N. Y. Cutting plates, dishes, or bowls from wood	474,765	May 10	1407	357	59	920
Spofford, Charles, assignor to W. J. Hiss and W. P. Sandford, New York, N. Y. Machine for cutting plates or dishes from wood	474,766	May 10	1408	{ 357 } { 358 }	{ 59 } { 59 }	920 920
Spofford, Jason, Jr., assignor of one-half to P. W. Nichols, Amesbury, Mass. Vehicle	480,442	Aug. 9	1116	279	60	801
Sponenburg, Hiram H., Mikado, assignor of one-half to N. B. Sponenburg, East Tawas, Mich. Means for securing guard-rails to main-line rails	471,906	Mar. 29	3476	888	58	1805
Sponenburg, Norman B. (See Sponenburg, Hiram H., assignor.)						
Sponsel, Charles W., Hartford, Conn. Magazine for firearms	487,432	Dec. 6	333	86, 87	61	1387
Spoore, Ransom R., Clifton Springs, N. Y. Fence-post	469,322	Feb. 23	2210	567	58	982
Sprague, Charles D., Blairstown, Mo. Grain-meter	471,034	Mar. 15	2163	556	58	1534
Sprague, Charles H., <i>et al.</i> (See Henry, Archie J., assignor.)						
Sprague, Charles L. (See Worthen, Arthur E., assignor.)						
Sprague, Edwin L. (See Peare, George R., assignor.)						
Sprague Electric Elevator Company. (See Pratt, Charles R., assignor.)						
Sprague Electric Railway and Motor Company. (See Johnson, Edward H., assignor.)						
Sprague Electric Railway and Motor Company. (See Mason, David, assignor.)						
Sprague Electric Railway and Motor Company. (See Sprague, Frank J., assignor.)						
Sprague Electric Railway and Motor Company. (See Sprague and O'Shaughnessy, assignors.)						
Sprague, Francis S., Federal Point, Fla. Ladder	475,164	May 17	2042	514	59	1058
Sprague, Frank J., New York, N. Y. assignor to Edison General Electric Company, of New York. Commutator brush and holder for dynamo-electric machines and motors	466,448	Jan. 5	223	57	58	42
Sprague, Frank J., assignor to Sprague Electric Railway and Motor Company, New York, N. Y. Electric motor and regulating device therefor	481,739	Aug. 30	3237	788	60	1258
Sprague, Frank J., and P. F. O'Shaughnessy, assignors to Sprague Electric Railway and Motor Company, New York, N. Y. Electric railway	468,959	Feb. 16	1650	{ 421 } { 422 }	{ 58 } { 58 }	865 865
Sprague, James H., Norwalk, Ohio. Umbrella-stick	485,719	Nov. 8	870	233	61	768
Sprague, James H., Norwalk, Ohio. Umbrella-stick	488,638	Dec. 27	2308	571	61	1829
Spreng, George C., and J. C. Smith, Akron, Ohio. Car-coupling	477,466	June 21	1970	489	59	1853
Sprenger, Jean, assignor to Ateliers de Constructions Mécaniques, Yevay, Switzerland. Rock-drill	474,069	May 3	297	72	59	695
Sprewitz, Charles, New York, N. Y. Veneering-machine	477,158	June 14	1417	{ 355 } { 356 }	{ 59 } { 59 }	1740 1740
Spring, William A., assignor to Gates Iron Works, Chicago, Ill. Chill-ring	479,958	Aug. 2	289	72	60	637
Springborn, Amiel J., <i>et al.</i> (See Muckenhirn, Charles H., assignor.)						
Springer, Anton, Kasten, Austria-Hungary. Rotating motor	485,235	Nov. 1	130	37	61	598
Springer, Clifton F., Des Moines, Iowa. Car-coupling	476,322	June 7	148	36	59	1466
Springer, William A., assignor to Diamond Suspender Company, Des Moines, Iowa. Suspender-buckle	473,409	Apr. 19	2218	557	59	443
Springfield Specialty Manufacturing Company. (See Dickinson, Henry C., assignor.)						
Springman, Edmund R. (See Donohoe, William F., assignor.)						
Springmeier, George A. (See Tndor, Robert L., assignor.)						
Springsteen, Brainerd C. (See L'imbert, Stout, and Springsteen.)						
Sprinkle, David A., Pennsborough, W. Va. Wood split pulley	484,167	Oct. 11	965	248	61	211
Sprinkle, John, Walton, Ind. Grain-weighing machine	476,427	June 7	314	72	59	1498
Sproat, Josephus C., Grand Rapids, Mich. Daily sheet and record-book for delivery systems	473,973	May 3	140	32	59	664
Spruce, Charles, Paterson, N. J. Apparatus for whetting and sharpening the cutting-edges of edge-tools, &c.	485,021	Oct. 25	2370	609	61	516
Spruce, Charles, Paterson, N. J. Apparatus for whetting and sharpening the edges of edged tools	471,679	Mar. 29	3129	797	58	1738
Sprurgeon, William A., Muncie, Ind. Thermometer-case	480,634	Aug. 9	1421	354	60	866
Spurr, George W., New Britain, Conn., assignor of one-half to R. C. Mitchell, New York, N. Y., and F. B. Mitchell, New Britain, Conn. Cash register and indicator	476,571	June 7	518	122	59	1539
Spurrier, Thomas H., Philadelphia, Pa. Stair-carpet fastener	477,340	June 21	1768	433	59	1814
Squier, Horace S., Newark, N. J. Bridle-bit	478,028	June 28	2882	720	59	2049
Squire, C. B., <i>et al.</i> (See Cook, Herbert F., assignor.)	472,145	Apr. 5	212	56	59	40
Squire, Charles A., Bradford, Mass. Check-hook	474,612	May 10	1168	297	59	872
Squire, Edwin, Montclair, N. J., G. H. Cobb, Elmira, and F. M. Towl, Brooklyn, N. Y. Liquid-fuel burner	478,295	July 5	368	89	60	74
Squire, Willis C. (See Frost and Squire.)						
Squires, Harry S., New York, N. Y. Automatic mileage-recorder for car-seats	480,526	Aug. 9	1245	313	60	831
Squires, John, and C. Petrie, St. John's, Newfoundland. Device for cutting ships' cables	488,847	Dec. 27	2636	653	61	1895
St. Anby, Frank. (See Blake and Sackett, assignors.)						
St. Clair, Stuart, assignor to York Manufacturing Company, Limited, York, Pa. Compound compressing-engine	480,527	Aug. 9	1247	{ 313 } { 314 }	{ 60 } { 60 }	831 831
St. Croix Manufacturing Company. (See Hall, Eva J., assignor.)						
St. John, Elmer F., Colorado Springs, Colo. Catch-basin	478,654	July 12	900	223	60	194
St. John, Garland B., Kalamazoo, Mich. Carriage-top	480,295	Aug. 9	85	224	60	763
St. John, George F., Highland Station, Mich. Fence construction	477,916	June 28	2710	678	59	2015
St. John, James A., St. Louis, Mo. Cover for melting-pots	482,880	Sept. 20	1569	392	60	1668
St. John, James E., Hopewell, assignor of two-thirds to J. M. Jackson and E. F. Freeman, Tingley, Iowa. Machine for gathering and baling hay	483,678	Oct. 4	223	58, 59	61	48
St. John, King O., Toledo, Ohio. Manifold-copying book	471,794	Mar. 29	3206	817	58	1752
St. John, Moses W., Cedar Falls, Iowa. Wire gate	469,923	Mar. 1	409	103	58	1180
St. John, Moses W., Cedar Falls, Iowa. Wire fence	487,354	Dec. 6	191	52	61	1358
St. John, Roswell H., assignor to Standard Sewing Machine Company, Cleveland, Ohio. Shuttle-actuating mechanism for sewing-machines	485,897	Nov. 8	1132	300	61	820
St. John, William H., Long Island City, assignor of one-half to E. W. Morrow, New York, N. Y. Antifriction-pulley	468,843	Feb. 16	1460	373	58	829

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
St. Joseph Folding Bed Company. (See Parker, Jones, and Coffey, assignors.)						
St. Louis Carriage Manufacturing Company. (See Huber, William J., assignor.)						
St. Louis Improved Shear and Tool Manufacturing Company. (See Kieser, Charles, assignor.)						
St. Louis Improved Shear and Tool Manufacturing Company. (See Rohan, Philip, assignor.)						
St. Louis Polar Plush Lined Sock Company. (See Whitelaw, James, assignor.)						
St. Louis Steel Wire Brush Company. (See Shultz, Llewellyn B., assignor.)						
Saab, Mary K., Milwaukee, Wis. Dress	484,257	Oct. 11	1114	232	61	241
Staats, William H., Chicago, Ill. Till with money-changer inclosed	470,083	Mar. 1	660	163	58	1227
Staats, William H., assignor of one-half to J. F. Griffin, Chicago, Ill. Money-changer	472,719	Apr. 12	1096	232	59	220
Stacey, Henry, assignor of one-half to M. H. Cain, Indianapolis, Ind. Coal-oil burner	473,858	Apr. 26	2944	742	59	609
Stacey, Henry, and J. G. Lightford, Indianapolis, Ind. Refrigerating apparatus	483,876	Oct. 4	526	132	61	109
Stackhouse, George, Pittsburg, Pa. Game-board	475,624	May 24	2769	701	59	1217
Stackhouse, Thomas H., Philadelphia, Pa. Attachment for type-writing machines	471,832	Mar. 29	3379	861	58	1784
Stackhouse, Thomas H., Philadelphia, Pa. Type-cleaning device for type-writing machines	472,720	Apr. 12	1098	232	59	220
Stacy, Edward E., Whiting, Iowa. Shoe-fastening	479,995	Aug. 2	367	91	60	651
Stacy, George G., New York, N. Y. Rail-joint	469,178	Feb. 16	1973	504	58	930
Stacy, George G., New York, N. Y. Rail-joint	481,433	Aug. 23	2737	673	60	1145
Stacy, William. (See Lydon and Stacy.)						
Stader, Lambert. (See Mueller and Stader.)						
Staedeli, Felix, New York, N. Y. Window-chair	487,859	Dec. 13	1028	257	61	1542
Stafford, George A., Montague, Tex. Pneumatic conveyer for unloading cotton	481,434	Aug. 23	2738	673	60	1145
Stafford, George W., et al. (See Lee, George B., assignor.)						
Stafford, George W., Providence, R. I. Loom stopping mechanism	466,872	Jan. 12	919	235	58	184
Stafford, George W., Providence, R. I. Pattern mechanism for looms	466,875	Jan. 12	930	238	58	186
Stafford, George W., Providence, R. I. Shedding mechanism for looms	466,876	Jan. 12	933	239	58	186
Stafford, George W., Providence, R. I. Shedding mechanism for looms	475,625	May 24	2770	701	59	1216
Stafford, George W., Providence, R. I. Jacquard mechanism	475,711	May 24	2896	733	59	1240
Stafford, George W., Providence, R. I. Shedding mechanism for looms	475,712	May 24	2898	733	59	1240
Stafford, George W., Providence, R. I. Jacquard mechanism for looms	476,428	June 7	315	72	59	1493
Stafford, George W., Providence, R. I. Shedding mechanism for looms	444,922	Oct. 25	2209	568	61	484
Stafford, George W., and W. Evans, Providence, R. I. Pattern mechanism for looms	466,873	Jan. 12	923	236	58	185
Stafford, George W., and W. Evans, Providence, R. I. Pattern mechanism for looms	466,874	Jan. 12	927	237	58	185
Stafford, Marshall B., and R. W. Morgan, New York, N. Y. Antifriction journal-box	473,974	May 3	141	32	59	664
Stafford, William E., Shedden, Canada. Plow riding attachment	488,248	Dec. 27	2637	653	61	1896
Stafford, William H., et al. (See Wolfe, George C., assignor.)						
Stager, Henry E., assignor of one-half to J. E. Woodworth, Milwaukee, Wis. Steam-radiator attachment	484,619	Oct. 18	1656	428	61	365
Stagg, John L., C. W. Fenn, Chicago, Ill., and C. T. Schoen, Allegheny, Pa. Ventilated car-door	487,163	Nov. 29	3202	820	61	1280
Staggers, Edward B., Jr. (See Cook, William H., assignor.)						
Stagren, Anders E., et al. (See Greer, John, assignor.)						
Stahl, George H., Quincy, Ill. Water-heater	469,101	Feb. 16	1570	478	58	910
Stahl, Harlow C., Bellevue, Ohio, and W. P. Johnston, Monroe, La. Fertilizer-distributor	481,209	Aug. 23	2352	580	60	1074
Stahl, Herman, and A. F. Dickey, Friedens, Pa. Wire-stretcher	487,101	Nov. 29	3104	796	61	1262
Stahlberg, Charles, New York, N. Y., assignor to Accurate Time Stamp Company, of West Virginia. Time-stamp	487,433	Dec. 6	336	87, 88	61	1388
Stahley, Harry O., Pittsburg, Pa. Trace connection	473,094	Apr. 19	1667	424	59	342
Stahley, Harry O., Pittsburg, Pa. Hame-tug	475,951	May 31	3304	833	59	1332
Stair, Emanuel. (See Ruch and Stair.)						
Staley, George, assignor of one-half to C. H. Mason, Versailles, Mo. Corn-popper	468,102	Feb. 2	292	71	58	580
Stalker, Neil, Hartford, Conn. Bridle-bit	471,833	Mar. 29	3380	861	58	1786
Stalman, Otto, Anaconda, Mont. Electrolytical plant	467,350	Jan. 19	1705	436	58	340
Stalman, Otto, assignor to M. Daly, Anaconda, Mont. Electrolytical process and apparatus for carrying out said process	467,484	Jan. 19	1907	488	58	380
Stammler, Fred. W. (See Leiberger, George, assignor.)						
Stamp, John G., Buffalo, N. Y. Hydraulic supply system	471,278	Mar. 22	2539	645	58	1618
Stanbrough, Rufus G., New York, N. Y. Dental burring-tool	481,740	Aug. 30	3241	789	60	1259
Stanbrough, Rufus G., assignor to R. Seaman, New York, N. Y. Artificial tooth	468,922	Feb. 16	1584	401	58	853
Stanbrough, Rufus G., assignor to R. Seaman, New York, N. Y. Dental tool	468,923	Feb. 16	1586	402	58	853
Stanchfield, John B., et al. (See Sweet, William F., assignor.)						
Standcliff, Edwin, New York, N. Y. Stage-scenery holder	469,726	Mar. 1	92	25	58	1116
Standard Car Heating and Ventilating Company. (See Westinghouse, George, Jr., assignor.)						
Standard Cartridge Company. (See Hisey, Charles S., assignor.)						
Standard Electric Company. (See Chase, Frank B., assignor.)						
Standard Electric Company. (See Dorman, George E., assignor.)						
Standard Electric Company. (See Pfinger, Charles A., assignor.)						
Standard Electric Heat, Light, and Power Company. (See O'Neill, Henry G., assignor.)						
Standard Electric Signal Company. (See Denio, William L., assignor.)						
Standard Equipment Company. (See Snow, Fred. W., assignor.)						
Standard Fiber-Ware Company. (See Hubbard, Eber, assignor.)						
Standard Horse Nail Company. (See Pierce, Erastus E., assignor.)						
Standard Horse Shoe Company. (See Wike, John, assignor.)						
Standard Machine Company. (See Houseman, Harry A., assignor.)						
Standard Manufacturing Company. (See Loveland, Walter S., assignor.)						
Standard Nut Lock Company. (See Ward, Daniel O., assignor.)						
Standard Register Company. (See O'Neill, Henry G., assignor.)						
Standard Screw Elevator Company. (See Fowler and Coyle, assignors.)						
Standard Sewing Machine Company. (See St. John, Roswell H., assignor.)						
Standard Sewing Machine Company. (See Whitney, Ruel W., assignor.)						
Standard Syndicate. (See Hoffman, Austin D., assignor.)						
Standard Underground Cable Company. (See Barrott, John A., assignor.)						
Standard Underground Cable Company. (See Fisher, Henry W., assignor.)						
Standard Underground Cable Company. (See Marsh, Joseph W., assignor.)						
Standard Underground Cable Company. (See O'Connor, Thomas F., assignor.)						
Standard Underground Cable Company. (See O'Connor and Marsh, assignors.)						
Standard Whip Company. (See Avery, George H., assignor.)						
Standing, Herbert F., Bournemouth, England. Apparatus for producing stencils	475,165	May 17	2043	515	59	1058
Stanfield, Edwin L., Belden, Nebr. End-gate for wagons	488,584	Dec. 27	2234	551	61	1813

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr.	Vol.	Page.
Stanford, Charles D. (See Hanford and Stanford.)						
Stanford, Charles D., Boston, Mass., assignor to Hanford-Stanford Company, Portland, Me. Cooling-room for breweries	472,936	Apr. 12	1404	359	59	281
Stanford, Charles P., San Francisco, Cal. Elevator-hatch	478,029	June 28	2883	720 721	59	2049
Staniford, Frank C., Gilroy, assignor of one-half to D. C. Riddell, Santa Cruz, Cal. Fruit-pitting machine	475,048	May 17	1865	473	59	1023
Stange, Sebastian A., Brooklyn, N. Y., assignor of one-half to C. L. T. Markward, Dedham, Mass. Book or case cover	468,732	Feb. 9	1287	327	58	786
Stanhope, Philip R., Dumont, Colo., and F. Wood, Brooklyn, N. Y. Ore-concentrator	480,860	Aug. 16	1770	443	60	950
Stanhope, Philip W., Jr., Peoria, Ill. Wheel-plow	485,994	Nov. 8	1293	343	61	854
Stanley, Colon M., Montezuma, Ga. Railway-signal	475,166	May 17	2046	515	59	1058
Stanley, Frank F., et al., trustees. (See Goddu, Louis, assignor.)						
Stanley, Harry C., New York, N. Y. Folding step for car-berths	482,391	Sept. 13	797	191	60	1506
Stanley Laboratory Company. (See Stanley, William, Jr., assignor.)						
Stanley, Lucius T., Brooklyn, N. Y. Standard	480,749	Aug. 16	1602	401	60	916
Stanley, Lucius T., Brooklyn, N. Y., assignor to Cutter Electric and Manufacturing Company, Philadelphia, Pa. Electric switch	472,610	Apr. 12	935	241	59	191
Stanley, Lucius T., Brooklyn, N. Y., assignor to Cutter Electric and Manufacturing Company, Philadelphia, Pa. Flexible supporting-arm for electric lamps	472,611	Apr. 12	936	241	59	192
Stanley, Lucius T., Brooklyn, N. Y., assignor to Cutter Electrical and Manufacturing Company, Philadelphia, Pa. Reflecting-shade for incandescent electric lamps	481,288	Aug. 23	2308	617	60	1102
Stanley, Lucius T., Brooklyn, N. Y., assignor to Cutter Electrical and Manufacturing Company, Philadelphia, Pa. Reflecting-shade for incandescent lamps	481,378	Aug. 23	2645	648	60	1127
Stanley, Lucius T., Brooklyn, N. Y., assignor, by mesne assignments, to Cutter Electrical and Manufacturing Company, Philadelphia, Pa. Apparatus for electrically purifying water	481,979	Sept. 6	87	22, 23	60	1351
Stanley, Reginald, Nuneaton, England. Tunneling or mining machine	476,836	June 14	932	228	59	1636
Stanley, Robert L., Somerville, assignor of one-half to F. E. Whitney, Melrose, Mass. Lathed-dog	488,927	Dec. 27	2758	681	61	1921
Stanley Rule and Level Company. (See Schade, Edmund A., assignor.)						
Stanley Rule and Level Company. (See Traut, Justus A., assignor.)						
Stanley, Sara E., Portland, Me. Dress-pad	487,164	Nov. 29	3203	821	61	1280
Stanley, William, Jr. (See Kelly and Stanley.)						
Stanley, William, Jr., Great Barrington, Mass., assignor, by mesne assignments, to Westinghouse Electric and Manufacturing Company, Pittsburg, Pa. System of electrical distribution	469,809	Mar. 1	231	58	58	1146
Stanley, William, Jr., assignor to Stanley Laboratory Company, Pittsfield, Mass. Self-induction device	485,336	Nov. 1	283	77	61	630
Stanley, William, Jr., Pittsfield, Mass., and J. F. Kelly, New York, N. Y. Alternating-current motor	479,675	July 26	2528	630	60	532
Stanley, William, Jr., and J. F. Kelly, Pittsfield, Mass. Alternating-current motor	479,676	July 26	2530	630	60	532
Stanley, William, Jr., and J. F. Kelly, Pittsfield, Mass. Alternating-current motor	479,727	July 26	2630	653	60	550
Stanley, William, Jr., and J. F. Kelly, Pittsfield, Mass. Alternating-current motor	483,816	Oct. 4	442	110	61	91
Stanley, William, Jr., and J. H. Kelman, Pittsfield, Mass. Electric-fuse box	484,545	Oct. 18	1575	400	61	343
Stanley, William F., South Norwood, England. Pen-extractor	479,959	Aug. 2	290	72	60	637
Stanley Works. (See Corscaden, Thomas, assignor.)						
Stanley Works. (See Hart, Charles E., assignor.)						
Stanley Works. (See Hart, William H., assignor.)						
Stanley Works. (See Hart, William H. and C. E., assignors.)						
Stanley Works. (See Hart and Taplin, assignors.)						
Stanley Works. (See Reynolds, Arthur J., assignor.)						
Stansel, Alonzo, Yorkville, Ill. Broadcast seeder	484,683	Oct. 18	1796	457	61	388
Stanton, Henry. (See Jones, Dawson, and Stanton.)						
Stanton, William H., Anderson, Ind. Tool for extracting bungs	480,835	Aug. 16	1733	433	60	942
Stanton, William J., Jr., Lyndon, Vt. Combined ruler, paper-cutter, and blotter	469,915	Mar. 1	398	100	58	1177
Stanwood, Frank H., Chicago, Ill. Car-step	476,323	June 7	149	36	59	1466
Stanwood, James B., Cincinnati, Ohio. Cross-head	487,895	Dec. 13	1082	271	61	1553
Stapler, William T., Harmony Grove, Ga. Plow standard and attachment	482,510	Sept. 13	989	239	60	1542
Staples, Eliel M., Elizabeth, N. J. Support for bicycle-saddles	487,081	Nov. 29	3067	787	61	1254
Staples, John A., Newburg, N. Y. Support for chair-seat springs	474,536	May 10	1050	269	59	849
Staples, John A., Newburg, N. Y. Spring-support for upholstery	482,908	Sept. 20	1619	405	60	1676
Staples, Roswell H. (See Fallis, Richard, assignor.)						
Star Brass Manufacturing Company. (See Winther, Charles A. G., assignor.)						
Star Cornice and Furnace Company. (See Thuener and Herchenbach, assignors.)						
Starbuck, Theodore, et al. (See Beal, William C., assignor.)						
Staren, Joseph, Chicago, Ill. Spoon-holding attachment	485,510	Nov. 1	546	145	61	624
Starin, John H., Fultonville, N. Y. Apparatus for steaming clams, oysters, &c	475,353	May 24	2340	600	59	1134
Stark, Andrew, Chicago, Ill. Grain-binder	470,453	Mar. 8	1209	334	58	1355
Stark, Andrew, Chicago, Ill. Cord-knotter for grain-binders	470,454	Mar. 8	1302	334 335	58	1356
Stark, Andrew, Chicago, Ill. Bundle-carrier for grain-binders	479,677	July 26	2531	630 631	60	532
Stark, Andrew, Chicago, Ill. Corn-harvester	480,975	Aug. 16	1955	489 490	60	986
Stark, Andrew, Chicago, Ill., assignor of one-half to Warder, Bushnell & Glessner Company, Springfield, Ohio. Cord-knotter for grain-binders	475,821	May 31	3091	782 783	59	1290
Stark, Andrew, Chicago, Ill., assignor of one-half to Warder, Bushnell & Glessner Company, Springfield, Ohio. Cord-knotter for grain-binders	475,822	May 31	3094	783 784	59	1291
Stark, Andrew, Chicago, Ill., assignor of one-half to Warder, Bushnell & Glessner Company, Springfield, Ohio. Harvester-gearing	477,077	June 14	1331	322 323	59	1717
Stark, David, San Francisco, Cal. Car-coupling	467,614	Jan. 26	2137	543	58	429
Stark, Frederick G., Manchester, N. H. Nail-puller	474,698	May 10	1307	334	59	900
Stark, John. (See Gill, Thomas, assignor.)						
Stark, John, Droylsden, assignor to A. Lees & Co., Limited, Oldham, England. Self-acting spinning-mule	486,945	Nov. 29	2866	740	61	1214
Stark, John D., New York, N. Y. Slide-valve for engines	484,903	Oct. 25	2169	558	61	477
Stark, Paul, and K. A. Gitter, Markneukirchen, Germany. Attachment to zithers	480,750	Aug. 16	1603	402	60	917
Starks, John, Fairview, assignor to A. W. Hay, J. R. Soper, and H. F. Keeler, Jones county, Iowa. Grubbing-machine	472,279	Apr. 5	423	109	59	79
Starks, Nils O., Madison, Wis. Sickle-head and pitman	469,605	Feb. 23	2645	679	58	1067
Starks, Nils O., Madison, Wis. Metal wheel	469,606	Feb. 23	2646	679	58	1067
Starks, Nils O., Madison, Wis. Device for teaching drawing	471,442	Mar. 22	2796	712	58	1667
Starks, Nils O., Madison, Wis. Game-board	476,324	June 7	150	37	59	1466

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. et.	Vol.	Page.
Starks, Nils O. and A. G. Felland, assignors to Fuller & Johnson Manufacturing Company, Madison, Wis. Transplanter.....	486,200	Nov. 15	1627	431	61	937
Starks, William H., Bellevue, Wash. Strawberry-vine cutter.....	479,996	Aug. 2	368	91	60	651
Starr, Eben T., New York, N. Y. Lock.....	471,344	Mar. 22	2631	669	58	1637
Starr, Joseph, New London, Conn. Cash-carrier apparatus.....	469,282	Feb. 23	2153	553	58	971
Starr, Stephen, Weston, Ohio. Ditching-machine.....	471,834	Mar. 29	3381	862	58	1786
Starr, William H. (See Cole, Edward D., assignor.)						
Starr, William S. (See Holt, Charles F., assignor.)						
Starrett, Larey S. (See Sawyer, Burnside E., assignor.)						
Starrett, Larey S., Athol, Mass. Bevel-protector.....	474,699	May 10	1309	334	59	901
Starrett, Stephen E. (See Livingston and Starrett.)						
States, Robert I. (See Kastonhuber, Wagnoux, and States.)						
Stauber, Adolph and C., Clinton, Iowa. Portable window-scaffold.....	480,046	Aug. 2	466	118	60	671
Stauber, Benjamin T., Concordia, Kans. Windmill.....	484,826	Oct. 25	2036	522	61	450
Stauber, Carl. (See Stauber, Adolph and C.)						
Stauber, Edwin B., Stoddard, Neb. Combined cattle-dehorner and plant-pruner.....	473,146	Apr. 5	213	57	59	40
Stanch, Philip, Jr., Chicago, Ill. Screw-propeller.....	471,907	Mar. 29	3477	889	58	1806
Stanifer, John F. (See Reiffer and Stauffer.)						
Stave Joister and Planer Company. (See Wright, William J., assignor.)						
Steady, William H., Ogden, Utah Ter. Convertible car-seat.....	486,742	Nov. 22	2482	647	61	1121
Steady, Fredric W., Carthage, Mo. Spectacle-case fastening.....	467,346	Jan. 19	1754	448	58	349
Steam Gauge and Lantern Company <i>et al.</i> (See Gall, John S., assignor.)						
Steam Gauge and Lantern Company <i>et al.</i> (See McArthur, Warren, assignor.)						
Steam Gauge and Lantern Company <i>et al.</i> (See Wright, Frederick K., assignor.)						
Stearns & Co., E. C. (See Darling, Robert F., assignor.)						
Stearns, Collins M., assignor to himself, E. J. and T. Field, Milwaukee, Wis. Elevator.....	479,314	July 19	1918	479	60	401
Stearns, William F. (See Brown, Frederick T., assignor.)						
Stebbins, Ambrose S., Newark, N. J. Cake-tin.....	468,073	Feb. 2	249	61	58	572
Steber, Bernard T., Utica, N. Y. Burner-fastening.....	487,455	Dec. 6	376	98	61	1395
Stedman, John H., Rochester, N. Y. Time-limit ticket.....	481,210	Aug. 23	2354	580	60	1075
Stedman, John J., La Porte, Ind. Artificial denture.....	474,104	May 3	348	83	59	704
Stedman, William F., Boston, Mass. Brick-grinding machine.....	469,643	Feb. 23	2690	692	58	1077
Stegg, Frederick W., St. Paul, Minn. Electrical annunciator.....	473,975	May 3	142	33	59	665
Steel and Iron Improvement Company. (See Blair, Thomas S., Jr., assignor.)						
Steel Edge Stamping and Retinfin Company. (See Monte, Joseph, assignor.)						
Steel, George P., Philadelphia, Pa. Sectional steam-boiler.....	478,208	July 5	216	54	60	44
Steel, Robert, assignor of one-half to L. G. Schmucker, Philadelphia, Pa. Snow and ice melting machine.....	472,831	Apr. 12	1249	320	59	249
Steele, Benjamin M., assignor of one-half to W. H. Miller, Peoria, Ill. Vise-stand for sustaining bicycles.....	486,511	Nov. 22	2112	558	61	1049
Steele, Elbridge J., assignor of one-half to G. A. Lewis, Nantucket, Conn. Clasp.....	474,537	May 10	1052	269	59	850
Steele, Elijah F., Wallingford, Conn., assignor of one-half to W. H. Edsall, Brooklyn, N. Y. Jointed axle for vehicles.....	487,059	Nov. 29	3033	779	61	1246
Steele, John, Denver, Colo. Eye-protector for horses.....	481,152	Aug. 16	2260	557	60	1042
Steele, Martin E., Argentine, Kans. Horse-hitching device.....	474,928	May 17	1670	426	59	986
Steele, William H., Newark, N. J. Printing-plate and making the same.....	486,572	Nov. 22	2205	61	1065	
Stelow, Frederick H., Los Angeles, Cal. Riveting-machine.....	484,473	Oct. 18	1460	372 } 373 }	61	319
Steen, Edward T., San Francisco, Cal. Pipe-coupling.....	487,434	Dec. 6	344	88	61	1389
Steen, George W. (See Moore and Steen.)						
Steen, Samuel, Jr., assignor of one-half to C. H. Elliott, Philadelphia, Pa. Plate-printing press.....	471,723	Mar. 29	3205	817	58	1751
Steere, Oscar A., Pawtucket, R. I. Tension device for loom-shuttles.....	466,631	Jan. 5	509	131	58	98
Steers, James R., New York, N. Y. Electric arc lamp.....	485,895	Nov. 8	1128	299	61	820
Steers, William, Boston, Mass. Flower-pot tray.....	469,400	Feb. 23	2476	635	58	1033
Steers, William, and H. Hunt, Boston, Mass. Bicycle-seat.....	471,908	Mar. 29	3478	889	58	1806
Steels, Clarence, and G. Graupensperger, Altoona, Pa. Water-heater.....	481,211	Aug. 23	2356	580 } 581 }	60	1075
Steevenson, John E. (See Darby and Steevenson.)						
Steffen, Carl, Vienna, Austria-Hungary. Apparatus for refining sugar in loaf form.....	466,632	Jan. 5	510	131 } 132 }	58	98
Steffen, Fred, Burlington, Wis. Corn-harvester.....	473,095	Apr. 19	1668	424	59	342
Steffey, Luther H., San Diego, Cal. Adjustable head-section for beds.....	471,764	Mar. 29	3264	833	58	1763
Stehling, George T., and J. Bloomer, Milwaukee, Wis. Wagon-rack.....	482,490	Sept. 13	952	232	60	1534
Steiger, Alphons, London, England, assignor to Edward P. Allis Company, Milwaukee, Wis. Apparatus for separating and purifying middlings.....	471,318	Mar. 22	2596	659	58	1630
Steiger, Louis A., San José, Cal. Building-brick.....	468,838	Feb. 16	1453	371	58	828
Steiger, Louis A., San José, Cal. Paving-block.....	468,839	Feb. 16	1454	371	58	828
Steiger, Louis A., San José, Cal. Interlocking brick.....	468,840	Feb. 16	1455	372	58	828
Stein, Bernhard, assignor to Berliner Maschinenbau Actien-Gesellschaft, vormals L. Schwartzkopf, Berlin, Germany. Gas and petroleum motor.....	478,651	July 12	895	222	60	193
Stein, Charles, Meadville, Pa. Cushion felly and tire.....	482,392	Sept. 13	798	192	60	1506
Stein, Charles, Meadville, Pa. Bicycle-saddle.....	485,434	Nov. 1	438	117	61	662
Stein, John, New York, N. Y. Cabinet.....	484,121	Oct. 11	884	225	61	196
Stein, Joseph H. (See Jacobson and Stein.)						
Stein, Lottie E. (See Dunham, Curtis, assignor.)						
Stein, Max. (See Buckner, Charles, assignor.)						
Steinbach, George, and H. Shafer, Bethel, Mo. Harness-machine.....	485,065	Oct. 25	2427	624	61	527
Steinbach, George P., Baltimore, Md. Child's carriage.....	466,584	Jan. 5	438	112	58	85
Steiner, Bela. (See Lahola, Vinzenz, assignor.)						
Steiner, Diethelm, and J. Schiele, Philadelphia, Pa. Permutation-lock.....	476,904	June 14	1047	253 } 254 }	59	1659
Steiner, Henry J., Jersey City, N. J. Animal-trap.....	477,966	June 28	2778	696	59	2029
Steiner, John, Norwich, Conn. Car-coupling.....	483,658	Oct. 4	207	51	61	42
Steinert, Robert A., Washburn, Wis. Gun.....	487,586	Dec. 6	564	144 } 145 }	61	1433
Steinhausner, Alois, assignor of one-half to D. Fuller, Fall River, Mass. Sizing compound.....	469,954	Mar. 1	467	58	1189	
Steinhilber, Edward R., Galesburg, Ill. Combined freight and stock car.....	480,635	Aug. 9	1422	354	60	866
Steinkamp, Charles F., Gelconda, Ill. Wire-stretcher.....	479,901	Aug. 2	190	47	60	619
Steinle, Rudolf, Philadelphia, Pa. Scalpel.....	485,236	Nov. 1	121	37	61	598
Steinle, William M., assignor to B. Gradle and N. Strotz, Chicago, Ill. Cigar-bunch machine.....	479,472	July 26	2214	556 } 557 }	60	474
Steinmetz, Cyrus W., Harrisburg, Pa. Measuring-faucet.....	482,815	Sept. 20	1462	363	60	1647

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	De'g.	Vol.	Page.
Steinwald, Franz J., Dresden, Germany. Dust and ash receptacle.....	473,561	Apr. 26	2475	{ 625 626 }	{ 59 60 }	519 671
Steitz, Jacob R., St. Francis, Wis. Sprinkler.....	480,047	Aug. 2	467	118	60	671
Steitz, Jacob R., St. Francis, Wis. Sprinkler.....	480,048	Aug. 2	468	119	60	671
Stemm, John W. (See Wallace and Stemm.)						
Stempel, Edward, Alameda, Cal. Batter-cake mixer and depositor.....	488,721	Dec. 27	2439	605	61	1855
Stempel, Omar A., St. Louis, Mo. Concrete post, door-step, table-top, &c.....	468,268	Feb. 2	554	136	58	631
Stempel, Omar A., St. Louis, Mo. Metal-brace-framed concrete pipe.....	468,269	Feb. 2	555	136	58	631
Stenback, Gustaf A., and J. Erickson, Sioux City, Iowa. Dumping-wagon.....	467,959	Feb. 2	80	19	58	540
Stenberg, John A., La Vergne, Ill. Bicycle-saddle.....	487,789	Dec. 13	907	230	61	1518
Stenersen, Erik. (See Thurston and Stenersen.)						
Stenger, Joseph, and N. Münster, Sheboygan, Wis. Snow-shoe for vehicle-wheels.....	486,988	Nov. 29	2927	755	61	1226
Stengle, Gustave, et al. (See Ward, William H., assignor.)						
Stenwall, John, Jr. (See Cummins and Stenwall.)						
Stenwall, John, assignor to B. F. Cummins Company, Chicago, Ill. Perforating canceling-stamp.....	486,906	Nov. 23	2798	725	61	1201
Stephani, John, Manitowoc, Wis. Mower.....	475,823	May 31	3097	784	59	1291
Stephans, Christopher, Washington, Pa. Oil-well counterbalance.....	468,983	Feb. 16	1705	434	58	877
Stephens, Daniel M., Thrall, Iowa. Hay-stacker.....	474,432	May 10	873	{ 227 228 }	{ 59 60 }	817 817
Stephens, Edward A., Jonesville, Mich. Harness-pad.....	485,305	Nov. 1	223	63	61	618
Stephens, George, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Connection for armature-conductors.....	470,217	Mar. 8	882	218	58	1279
Stephens, George H., London, England. Boot-tree.....	468,006	Feb. 2	152	36, 37	58	553
Stephens, James G., and H. W. Holmes, Pittsburg, Pa., assignors to Welsbach Incandescent Gas Light Company, Gloucester City, N. J. Gas-mixer.....	474,781	May 10	1435	364	59	926
Stephens, Jesse D., Jasper, Ala. Liquid-agitator.....	485,753	Nov. 8	920	246	61	778
Stephens, Thomas B., Sedalia, Mo. Device for feeding salt to animals.....	485,142	Oct. 25	2539	652	61	551
Stephens, W. Speed, et al. (See Williams, William E., assignor.)						
Stephenson, George A., assignor of one-half to J. F. Butler, Los Angeles, Cal. Elevated-railway structure.....	468,841	Feb. 16	1456	372	58	829
Stephenson, George A., assignor of one-half to J. F. Butler, Los Angeles, Cal. Double-traction motor for elevated railways.....	468,842	Feb. 16	1458	{ 372 373 }	{ 58 59 }	829 829
Stephenson, George A., assignor of one-half to J. F. Butler, Los Angeles, Cal. Suspension truss-bridge.....	479,031	July 19	1560	391	60	332
Stephenson, Harvey A., Allegheny, Pa. Index.....	472,629	Apr. 12	962	249	59	196
Stephenson, Harvey A., Craifton, Pa. Index.....	472,630	Apr. 12	963	250	59	197
Stephenson, John, New York, N. Y. Tram-car door.....	488,722	Dec. 27	2110	{ 605 606 }	{ 61 62 }	1855 1855
Stephenson, Richard, et al. (See Robinson, Thomas C., assignor.)						
Stephenson, Robert E., Indianapolis, Ind. Valve-operating mechanism.....	488,780	Dec. 27	2525	{ 627 628 }	{ 61 62 }	1872 1872
Sterick, Sylvester T. F., Gaithersburg, Md. Game apparatus.....	474,310	May 3	671	174	59	767
Sterling, Charles A., Orange, N. J. Barrel-elevator.....	477,871	June 28	2646	{ 661 662 }	{ 59 60 }	2002 2002
Sterling, Isaac F., Texarkana, Tex. Churn-dasher.....	472,081	Apr. 5	106	29	59	22
Sterling, Walter A., assignor of one-half to G. H. Campbell, Denver, Colo. Rheostat.....	475,255	May 17	2181	555	59	1086
Stern, David H., Philadelphia, Pa. Means for keeping stock-record of certain merchandise in retail establishments.....	483,659	Oct. 4	208	52	61	43
Stern, Emil, Vienna, Austria-Hungary. Apparatus for impregnating liquors in bottles.....	478,652	July 12	896	222	60	193
Stern, Eugene, Helmstedt, Germany. Brick-cutting machine.....	479,159	July 19	1684	421	60	356
Stern, Harris W., La Salle, Ill. Combined easy, rocking, and invalid chair.....	485,435	Nov. 1	439	{ 117 118 }	{ 61 62 }	662 662
Stern, Marcus, New York, N. Y. Ear-ring.....	477,025	June 14	1237	299	59	1698
Sternan, Sigmund, et al. (See Wojcikow, Louis, assignor.)						
Sternberg, Isaac, Savannah, Ga. Watchcase-pendant.....	468,707	Feb. 9	1254	319	58	779
Sternberg, Lothar, assignor to American Sugar Refining Company, Jersey City, N. J. Obtaining ammonia or other salts from molasses.....	486,647	Nov. 22	2333	.....	61	1091
Sterne, George M. (See Bosmann, Nicolas, assignor.)						
Sterne, George W. (See Bosmann, Nicolas, assignor.)						
Sterne, Henry G., et al. (See Carrington, Harry T., assignor.)						
Sterne, Samuel, Albuquerque, N. Mex. Ter., assignor of one-half to P. C. Brannen, Flagstaff, Ariz. Ter. Puzzle.....	470,717	Mar. 15	1678	433	58	1441
Sterne, Emanuel, and W. B. Amsperger, Glenville, Pa. Elevated kettle-carrier.....	475,167	May 17	2048	515	59	1059
Sterne, Frank L. (See Peck and Sterne.)						
Sternoff-Beyer, Otto, Carlstadt, N. J., assignor to Böhm Brothers, New York, N. Y. Drilling-machine.....	479,086	July 19	1570	394	60	334
Sterrit, William B., Pittsburg, Pa. Machine for making green-sand cores.....	470,517	Mar. 8	1388	363	58	1373
Sterrit, William B., Pittsburg, Pa. Machine for forming green-sand cores for journal-boxes.....	470,518	Mar. 8	1390	363	58	1374
Sterry, George E., Jr., assignor to E. Van Schaick, New York, N. Y. Boxer's ring.....	485,896	Nov. 8	1131	299	61	820
Stetler, Daniel D., Minneapolis, Kans. Compound wire-fencing tool.....	481,684	Oct. 18	1797	457	61	388
Stetson, Alva M., assignor of one-half to T. R. Hayes, Oakland, Cal. Amalgamator.....	476,497	June 7	416	97	59	1518
Stetson, Peleg. (See Brown and Stetson.)						
Stetson, Warren. (See Brandy, James, assignor.)						
Stendle, John, Chicago, Ill. Household press.....	472,559	Apr. 12	859	220	59	178
Steuert, Samuel, assignor, by mesne assignments, of one-half to W. Biedermann, Fennimore, Wis. Clothes-drier.....	469,308	Feb. 23	2193	562	58	978
Stenth, Wilhelm, and J. W. Körber, Dusseldorf, Germany. Regenerating gas-lamp.....	477,314	June 21	1733	424	59	1807
Stevens, Andrew H., Farmington, Wis. Bread-pan, &c.....	479,997	Aug. 2	369	92	60	651
Stevens, Arthur L., Philadelphia, Pa., assignor to Diamond Paper Bag Company, Wilmington, Del. Paper-bag machine.....	467,776	Jan. 26	2390	607	58	477
Stevens, Asher B., deceased, Brooklyn, N. Y.; M. N. Baker, administrator, and assignor to G. Waite, Baldwinville, Mass. Convertible chair.....	480,636	Aug. 9	1424	355	60	866
Stevens, Calvin A. (See Collins, Caleb G., assignor.)						
Stevens, Calvin G., Watertown, N. Y. Boomerang.....	482,852	Sept. 20	1518	377	60	1659
Stevens, Daniel E., Corning, N. Y. Brake for baby-carriages.....	476,325	June 7	151	37	59	1467
Stevens, Darius, Center Square, Ind. Hand-sprinkler.....	466,633	Jan. 5	511	132	58	99
Stevens, Frank M. (See Smith and Stevens.)						
Stevens, Fred A., Brooklyn, N. Y. Trip-fastener.....	485,511	Nov. 1	546	145	61	684
Stevens, Fred T., Bryant's Pond, Me. Steam-boiler.....	480,880	Aug. 16	1798	450	60	956
Stevens, George W., San Francisco, Cal. Fruit-carrier.....	474,105	May 3	349	83	59	704
Stevens, Henry A., Norristown, assignor of one-half to J. W. Douglass, Philadelphia, Pa. Mail-catcher.....	468,607	Feb. 9	1094	279	58	746

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Stevens, J. L., <i>et al.</i> (See Brown, Charles D., assignor.)						
Stevens, John C., Hartford, Conn. Ice-velocipede	473,434	Apr. 19	2249	566	59	451
Stevens, John H., Newark, N. J., assignor, by mesne assignments, to Celluloid Company, of New Jersey. Manufacture of compounds of pyroxyline	478,543	July 5	748		60	149
Stevens, Joseph A., Springfield, Mass. Hose-pipe	473,716	Apr. 26	2723	{ 685 686 }	59	506
Stevens, Josiah. (See Barber and Stevens.)						
Stevens, Judson T., <i>et al.</i> (See Scofield, Charles H., assignor.)						
Stevens, Lucious O., assignor to Stevens Manufacturing Company, Peoria, Ill. Oat-clipping machine	487,686	Dec. 6	730	187	61	1465
Stevens Manufacturing Company. (See Stevens, Lucious O., assignor.)						
Stevens, Milton H. (See Logan and Stevens.)						
Stevens, Nathan P., Concord, N. H. Uniting broken pieces of arc-light carbons	488,256	Dec. 20	1631	422	61	1692
Stevens, Oscar, Clear Lake, Iowa. Incinerating-furnace	486,512	Nov. 22	2114	558	61	1649
Stevens, Paul R., Portland, Me. Bodkin	487,134	Nov. 23	3152	808	61	1271
Stevens, Samuel J., assignor of one-half to D. S. Trimmer, Springfield, Ohio. Thill-coupling	470,903	Mar. 15	1965	502	58	1497
Stevens, Wilbur N., Ellenville, N. Y. Leg for radiators or other articles	474,270	May 3	591	146	59	752
Stevens, William H. (See Ayer, Melville C., assignor.)						
Stevens, William X., Washington, D. C. Rock-drilling machine	481,598	Aug. 30	3004	735	60	1213
Stevens, William X., Washington, D. C. Fancet	483,795	Oct. 4	410	102	61	86
Stevenson, Archy A., Lewistown, Pa. Die for forging wrought-metal wheels	469,457	Feb. 23	2419	619	58	1023
Stevenson & Co. (See Stevenson, William G., assignor.)						
Stevenson, George B., Chicago, Ill. Wrench	482,281	Sept. 6	589	140	60	1449
Stevenson, George W., assignor of one-half to S. M. Strohecker, Reading, Pa. Metal cross-tie	470,795	Mar. 15	1799	461	58	1464
Stevenson, Harry A., Sag Harbor, N. Y. Stamp-safe	469,607	Feb. 23	2646	679	58	1067
Stevenson-Hoggson Electric Company. (See Hoggson, Samuel H., assignor.)						
Stevenson, Hugh, New York, N. Y. Folding bed	477,967	June 28	2770	696	59	2029
Stevenson, Hugh, New York, N. Y. Clothes-drier	477,968	June 28	2781	697	59	2030
Stevenson, Hugh, New York, N. Y. Hat holder and case	477,969	June 28	2782	697	59	2030
Stevenson, John L., assignor of one-half to J. E. York, Chicago, Ill. Brick	480,879	Aug. 16	1797	419	60	955
Stevenson, John W. (See Thomas, Henry O., assignor.)						
Stevenson, William G., assignor to Stevenson & Co., Wellsville, Ohio. Lubricator for upright shafts	473,269	Apr. 19	1976	495	59	401
Stevenson, William W. (See Clute, Veeder S., assignor.)						
Steward, Hiram P., Elizabeth, N. J., assignor to Singer Manufacturing Company of New Jersey. Tuck-creaser for sewing-machines	481,599	Aug. 30	3008	736	60	1214
Steward, John F. (See Appleby and Steward.)						
Steward, John F., Chicago, Ill. Screw-driver	472,591	Apr. 12	903	231	59	186
Steward, John F., Chicago, Ill. Grain-harvester	474,700	May 10	1310	334	59	901
Steward, John F., Chicago, Ill. Harvester	476,326	June 7	152	37	59	1467
Steward, John F., Chicago, Ill. Harvester	477,709	June 28	2374	{ 593 594 }	59	1952
Steward, John F., Chicago, Ill. Sheaf-carrier for self-binding harvesters	482,931	Sept. 20	1647	{ 414 415 }	60	1683
Steward, John F., Chicago, Ill. Corn-harvester	484,561	Oct. 18	1596	{ 405 406 }	61	347
Stewart, Absalom V., Hopkins, Mo. Churn	468,158	Feb. 2	378	93	58	598
Stewart, Alexander, Jr. (See Stewart, William C., assignor.)						
Stewart, Arthur D., Ithaca, N. Y. Picture-holder	478,478	July 5	638	156	60	127
Stewart, Benjamin B. (See Woolcott, Henry J., assignor.)						
Stewart, Benjamin F., Plano, Ill. Bundle-carrier for harvesters	471,737	Mar. 29	3228	{ 821 822 }	58	1755
Stewart, Benjamin F., Canton, Ohio. Mechanical movement for grain-hinders	473,976	May 3	143	33	59	665
Stewart, Charles, Washington, D. C. Implement for cutting grass	488,667	Dec. 27	2359	583	61	1839
Stewart, David S., Morris, Wis. Link belt	484,827	Oct. 25	2037	521	61	451
Stewart, David S., Morris, Wis. Traction-engine	484,828	Oct. 25	2038	{ 522 523 }	61	451
Stewart, David S., Morris, Wis. Traction-engine	484,829	Oct. 25	2041	523	61	452
Stewart, David S., Morris, Wis. Traction-engine	484,830	Oct. 25	2043	524	61	452
Stewart, Edwin, Albion, Ill. Ribbon and show case	483,024	Sept. 20	1804	{ 455 456 }	60	1715
Stewart, Elizabeth, New York, N. Y. Flat-iron	471,364	Mar. 22	2670	679	58	1645
Stewart, Fred G., <i>et al.</i> (See Cole, Dexter, assignor.)						
Stewart, George E., Ashland, and A. G. Brewer, Hopkinton, Mass. Vamp marking and throating machine	473,952	May 31	3305	834	59	1332
Stewart, H. J. (See Rawson, Manly S., assignor.)						
Stewart, Harry B., assignor of two-thirds to T. Schwer and J. E. Blake, St. Louis, Mo. Bottle-stopper	486,359	Nov. 15	1880	495	61	988
Stewart, J. Hammond. (See Stewart, William C., assignor.)						
Stewart, James, assignor to M. McVicker and R. S. Galbraith, Philadelphia, Pa. Compound for waterproofing	475,713	May 24	2899		59	1240
Stewart, Joseph B. (See Watton, William G., assignor.)						
Stewart, Joseph B., Haverstraw, N. Y. Automatic device for electric block-signals	480,147	Aug. 2	617	157	60	700
Stewart Manufacturing Company. (See Stewart, Samuel, assignor.)						
Stewart, Richard C., Jr., <i>et al.</i> (See Dwyer, Daniel C., assignor.)						
Stewart, Richard C., Jr., and W. A., Wichita, Kans. Iron fence	473,028	Apr. 19	1570	399	59	325
Stewart, Samuel, Ikesburg, Pa. Thill-tug	482,764	Sept. 20	1402	316	60	1633
Stewart, Samuel, Newark, N. J., assignor to Stewart Manufacturing Company, of New Jersey. Gas car-heater	480,216	Aug. 2	743	188	60	722
Stewart, Wallace A. (See Stewart, Richard C., Jr., and W. A.)						
Stewart, Wallace A., <i>et al.</i> (See Dwyer, Daniel C., assignor.)						
Stewart, Walter G., Reading, Pa. Dumping-wagon	474,872	May 17	1589	{ 404 405 }	59	969
Stewart, William C., assignor of one-half to A. Stewart, Jr., Lynn, Mass. Machine for molding heel-stiffeners	467,473	Jan. 19	1889	{ 482 483 }	58	376
Stewart, William C., assignor of one-half to J. H. Stewart, Lynn, Mass. Bullet-greasing machine	476,175	May 31	3661	926	59	1403
Stewart, William H., Brooklyn, N. Y. Apparatus for the manufacture of pipes	467,648	Jan. 26	2184	555	58	438
Stewart, William J. (See Desjardin and Stewart.)						
Stewart, William J., Chicago, Ill. Tension for sewing-machines	477,078	June 14	1334	323	59	1717
Stewart, William W., Brooklyn, N. Y. Fountain-pen	478,653	July 12	898	{ 222 223 }	60	191

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Stewart, William W., Brooklyn, N. Y. Fountain-pen.....	480,294	Aug. 9	882	224	60	762
Stewart, William W., Brooklyn, N. Y. Fountain-pen.....	480,751	Aug. 16	1604	402	60	917
Sthreshley, Elizabeth, Austin, Tex. Slate for the blind.....	471,653	Mar. 29	3081	783	58	1729
Stickney, Charles W., Butte City, Mont. Roasting ores.....	475,824	May 31	3098	784 785	59	1292
Stickney, Frank, Rogers Park, assignor to T. M. Moe, Chicago, Ill. Locking device for box-covers.....	467,960	Feb. 2	81	19	58	540
Stickney, William A. (See Ford, William H., assignor.)						
Stiebel, Hiram H. (See Sheldon, James B., assignor.)						
Stiens, Peter, Charlottenburg, Germany. Electric battery.....	481,075	Aug. 16	2120	528	60	1017
Stieringer, Luther, assignor to himself and W. J. Jenks, New York, N. Y. Ceiling-block for incandescent lamps.....	482,104	Sept. 6	298	70	60	1394
Stierle, John, Marshfield, Wis. Device for preventing railway collisions.....	482,143	Sept. 6	358	85	60	1406
Stiewel, Edward S. (See Sauerman, John F., assignor.)						
Stifel, Otto, <i>et al.</i> (See Trendley, John, assignor.)						
Stifel, William F., <i>et al.</i> (See Altmeyer, Matthew, assignor.)						
Stiger, George. (See Dodd, Charles E., assignor.)						
Stikeman, George, Brooklyn, N. Y. Adjustable book-shelving.....	475,627	May 24	2773	762	59	1217
Stiles, Everett D. (See Little, Robert H., assignor.)						
Stiles, Franklin L. (See Brower and Ross, assignors.)						
Stiles, Henry, Cleveland, Ohio. Spout for cans.....	474,507	May 10	998	277	59	840
Stiles, James P., New York, N. Y. Sewing-machine.....	478,030	June 28	2885	721	59	2049
Stiles, Norman C., Middletown, Conn. Clutch mechanism for power-presses.....	471,777	Mar. 29	3289	839	58	1768
Stiles, William E., assignor of one-half to M. Moyer, Philadelphia, Pa. Dental flask.....	476,088	May 31	3510	885	59	1375
Still, Edward L., New York, N. Y. Wood-clamp.....	471,909	Mar. 29	3479	849	58	1806
Stillians, Charles W., assignor of one-half to I. Freund, Pueblo, Colo. Car-coupling.....	481,676	Aug. 16	2123	528	60	1017
Stillman, George F. (See Brown and Stillman.)						
Stillman, George F., Syracuse, N. Y. Type-writer case.....	468,103	Feb. 2	294	71	58	581
Stillman, George R., and F. Markoe, assignors of two-fifths to E. H. Zitzman and E. J. Thompson, Philadelphia, Pa. Oil-burning stove.....	470,684	Mar. 1	662	163	58	1927
Stillman, Oscar B., Natick, Mass. Evaporating apparatus.....	478,817	Oct. 4	443	110	61	91
Stillman, Oscar B., Natick, Mass. Evaporating apparatus.....	484,831	Oct. 25	2044	524	61	453
Stillwell, Elias, Dadeville, Mo. Evaporator.....	476,837	June 11	136	228	59	1637
Stilphen, Williard C., <i>et al.</i> (See Keene, George A., assignor.)						
Stilson, Amos C., Bradford, Pa. Journal-box.....	469,890	Mar. 1	360	91	58	1170
Stilwell & Bierce Manufacturing Company. (See Stilwell, Edwin R., assignor.)						
Stilwell, Charles B., Wayne, assignor to Union Paper Bag Machine Company, Philadelphia, Pa. Paper-bag machinery.....	473,977	May * 3	144	33, 34	59	665
Stilwell, Edwin R., assignor to Stilwell & Bierce Manufacturing Company, Dayton, Ohio. Feed-water heater.....	476,089	May 31	3511	885	59	1375
Stilwell, Henry C., Dayton, Ohio. Fluid-motor.....	479,855	Aug. 2	119	29	60	606
Stimpson, Walter F., Milan, Mich. Means for raising and lowering harvester-reels.....	476,027	May 31	3411	861	59	1354
Stimson, Charles H., <i>et al.</i> (See Dowling, Robert H., assignor.)						
Stinson, A. M. (See Humphreys, William P., assignor.)						
Stino, Lafayette P., Roseville, Ohio. Hopple.....	488,849	Dec. 27	2640	654	61	1496
Stinebring, George W., assignor of one-half to Carle Brothers, Shreve, Ohio. Sawmill.....	468,733	Feb. 9	1288	327	58	786
Stinebring, George W., assignor of one-half to A., G., and W. H. Carl, Shreve, Ohio. Pawl and ratchet for sawmills.....	477,710	June 28	2378	594	59	1052
Stiner, Clarence M., New York, N. Y., assignor to Reminder Lock Company, of New York. Lock.....	484,759	Oct. 18	1915	488	61	413
Stinson, Charles K., Chelsea, Mass., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Carpet-sweeper.....	475,626	May 24	2773	702	59	1217
Stinson, Charles K., Chelsea, assignor to Safety Oil Stove Company, Boston, Mass. Oil-stove.....	488,957	Dec. 27	2811	692 693 624 625 626	61	1932
Stirckler, Albert E., Northampton, England, assignor, by mesne assignments, to Chase Lasting Machine Company, Portland, Me. Lasting-machine.....	477,788	June 28	2494	626	59	1974
Stirckler, Albert E., Northampton, England, assignor to Chase Lasting Machine Company, Boston, Mass. Lasting-machine.....	477,789	June 28	2500	626	59	1975
Stirckler, John D. (See Mervin and Stirckler.)						
Stirk, David P. (See Aldridge, Joseph A., assignor.)						
Stirk, David P., and J. Summers, Indianapolis, Ind. Gas-burner for stoves.....	473,410	Apr. 19	2219	557	59	448
Stirling, Allan, New York, N. Y., assignor to Stirling Company, Chicago, Ill. Steam-boiler.....	479,678	July 26	2535	631	60	533
Stirling, Archibald, assignor of one-half to A. C. Pessano, Philadelphia, Pa. Packingless valve.....	486,268	Nov. 15	1744	459	61	961
Stirling Company. (See Stirling, Allan, assignor.)						
Stirn, Henry J., Milwaukee, Wis. Bank-account book.....	487,456	Dec. 6	377	98	61	1395
Stirn, Leo. (See Stirn, Max, assignor.)						
Stirn, Louis, <i>et al.</i> (See Goldkind, Isaac, assignor.)						
Stirn, Max, assignor of one-half to L. Stirn, New York, N. Y. Machine for making buttons from plastic material.....	482,144	Sept. 6	360	86	60	1406
Stivers, Harry W., and J. Hoagland, Camden, N. J. Sack.....	483,402	Sept. 27	2410	606	60	1844
Stix & L'Allemand. (See Walters, Thomas F., assignor.)						
Stobaens, John B., Newark, N. J. Apparatus for charging beer with carbonic acid.....	482,881	Sept. 20	1569	392	60	1668
Stobaens, John B., and F. C. Wackenhuth, assignors to Universal Carbonating Company, Newark, N. J. Method of and apparatus for carbonating beer.....	478,176	July 5	166	43	60	35
Stobaugh, Harry. (See Van Dyke and Stobaugh.)						
Stock, Charles L., Fostoria, Ohio. Apparatus for separating oil and water from gas.....	468,138	Feb. 2	350	86	58	592
Stock, Denis N., St. Louis, Mo. Feed-bag support.....	488,850	Dec. 27	2641	654	61	1496
Stock, Denis N., St. Louis, Mo. Feed-bag support.....	488,851	Dec. 27	2643	654	61	1896
Stock, Ephram, Hains Forks, Wyo. Wheel-plow.....	482,816	Sept. 20	1464	364	60	1617
Stock, Louis, Columbus, Ohio. Machine for pasting, cutting, and trimming wall-paper.....	479,473	July 26	2324	558	60	475
Stockbridge, William M., <i>et al.</i> (See Strang, Edgar A., assignor.)						
Stockdale, Alexander, Wolcott, Iowa. Nut-lock.....	483,241	Sept. 27	2143	543	60	1794
Stockdale, Laura E., and G. R. Lawrence, Englewood, Ill. Umbrella suspender and carrier.....	486,135	Nov. 15	1542	407	61	920
Stocker, Arthur, Forest House, Pa. Fuel-saving attachment for stove-grates.....	479,536	July 26	2318	579	60	494
Stocker, Charles, Jr., Saginaw, Mich. Bridge-gate.....	484,122	Oct. 11	884	225	61	196
Stockford, Benjamin F., South Bend, Ind. Speed and whistle recorder for locomotive-engines.....	482,393	Sept. 13	799	192 193	60	1506
Stockheim, Heinrich, Mannheim, Germany. Beer-filling apparatus.....	487,790	Dec. 13	910	230	61	1519
Stockstrom, Charles A. (See Stockstrom, Louis, assignor.)						
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Vapor-stove.....	479,315	July 19	1919	479 480	60	401
Stockton, James S., Cherry Grove, Ark. Double plow.....	475,825	May 31	3100	785	59	1292

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Stockwell, Emory and H. C., assignors to Yale & Towne Manufacturing Company, Stamford, Conn. Time-lock mechanism	479,379	July 19	2027	{ 508 509 }	{ 60 61 }	425
Stockwell, Herbert C. (See Stockwell, Emory and H. C.)						
Stockwell, Lydia, Atchison, Kans. Bed-pan	466,449	Jan. 5	224	57	58	43
Stockwell, Millard E., assignor of one-half to S. W. Peregrine, Grand Rapids, Mich. Automatic car-brake	484,620	Oct. 18	1688	428	61	366
Stoddard, Hiram D., Binghamton, N. Y. Breast-strap slide	477,070	June 14	1335	{ 323 324 }	{ 59 60 }	1717
Stoddard Manufacturing Company. (See Brown, Arthur F., assignor.)						
Stoddard Manufacturing Company. (See Brown and Knaub, assignors.)						
Stoddard, Oren, Busti, N. Y. Basket	476,498	June 7	417	97	59	1518
Stoddard, Oscar, Detroit, Mich. Keyhole-guard	478,768	July 12	1075	267	60	229
Stoddard, Ralph, Rutland, Vt. Centrifugal milk-tester	484,685	Oct. 18	1799	457	61	388
Stoelting, Christian H., assignor to W. A. Vawter, Chicago, Ill. Binder	486,589	Nov. 29	2928	755	61	1226
Stoepelwerth, Edward, and C. H. Kniefelkamp, St. Louis, Mo. Window-blind	481,077	Aug. 16	2124	527	60	1018
Stofer, William A., Foxburg, Pa. Connection for railway-rails	466,634	Jan. 5	512	132	58	99
Stohlman, Edward T., and W. E. Windmiller, Weisburg, Ind. Folding packing-case	467,728	Jan. 26	2320	589	58	403
Stokely, Lewis W., assignor of one-half to S. T. Carnes, Memphis, Tenn. Wire-stretcher	485,066	Oct. 25	2429	621	61	528
Stokely, Samuel B. (See King and Stokely.)						
Stokely, Wells R., Anastasia, Fla. Fruit-box	482,040	Dec. 13	1335	331	61	1604
Stokes, Charles F. (See McGlinchey, Charles E., assignor.)						
Stokes, George E., et al. (See Doheck, Frank H., assignor.)						
Stokes, Joseph F., Philadelphia, Pa. Machine for cleaning streets	472,646	Apr. 12	983	254	59	200
Stokes, Samuel E., Philadelphia, Pa. Elevator	469,984	Mar. 1	518	129	58	1199
Stokesbury, John H., assignor of three-fourths to R. H. Porter and F. P. Arbuckle, Highlands, Colo. Earth-boring apparatus	469,219	Feb. 16	2053	{ 527 528 }	{ 58 59 }	944
Stokoe, John M., assignor of one-half to C. B. Hill, Canandaigua, N. Y. Drum and chimney for oil-stoves	474,782	May 10	1436	364	59	926
Stokoe, John W., Jeanerette, La. Machine for side-filing saws	468,476	Feb. 9	888	{ 225 226 }	{ 58 59 }	706
Stollberg, Charles, assignor to Toledo Tin-Ware Manufacturing Company, Toledo, Ohio. Apparatus for riveting ears upon buckets	480,881	Aug. 16	1799	450	60	956
Stollenwerk, Anton. (See Schroeder, Conrad, assignor.)						
Stoltzenburg, Andrew A., St. Louis, Mo. Safety attachment for elevators	483,025	Sept. 20	1804	456	60	1715
Stolzenberg, Alexander. (See Mestern, Hugo, assignor.)						
Stolzenberg, Friedrich, Berlin, Germany. Turret-head	488,152	Dec. 13	1517	380	61	1641
Stombs, Daniel S., Stillwater, Minn. Portable log-carrier	475,628	May 24	2775	{ 702 703 }	{ 59 60 }	1217
Stone, Allison R., assignor to himself and G. A. Montgomery, Chicago, Ill. Newspaper-elevator	487,791	Dec. 13	911	{ 230 231 }	{ 61 62 }	1519
Stone, Alonzo W. (See Eldridge, Edward E., assignor.)						
Stone, Andrew K., Boston, Mass. Dredge	471,404	Mar. 22	2732	697	58	1657
Stone, Benjamin F., assignor of one-half to M. M. Milligan, East Las Vegas, N. Mex. Ter. Car-coupling	485,512	Nov. 1	546	146	61	684
Stone, Carl O., New York, N. Y. Snow-shoe	476,572	June 7	519	122	59	1543
Stone, Charles A., Newton, and E. S. Webster, Boston, Mass. Electrically-operated railway-switch	484,123	Oct. 11	885	{ 225 226 }	{ 61 62 }	196
Stone, Charles A., and E. S. Webster, Boston, Mass. Electric-railway switch	485,668	Nov. 8	791	211	61	751
Stone, Charles E., Toronto, Canada. Paper-file	472,561	Apr. 12	862	221	59	178
Stone, Dudley G., Negannee, Mich. Tie for bags, boxes, &c.	485,067	Oct. 25	2430	624	61	528
Stone, Edward H., assignor of one-half to J. S. McNeill, West Bay City, Mich. Rod-packing	471,577	Mar. 29	2973	758	58	1710
Stone, Edwin G. (See Reuber, Stone, and Fuchs.)						
Stone, Frank G., Bridgeport, Conn. Mold for casting metal around internal cores	484,124	Oct. 11	888	226	61	197
Stone, Frederick V., and M. A. Campbell, Elyria, Ohio. Foot-rest and shoe-stool	483,403	Sept. 27	2411	606	60	1844
Stone, George M., et al. (See Beesley, Edward, Sr., Ellis, Jr., and Edward, Jr., assignors.)						
Stone, Henrie D., assignor to G. A. White, Boston, Mass. Machine for applying cement, &c.	478,031	June 28	2887	721	59	2050
Stone, Hollis L., Delavan, Wis. Nut-lock	469,924	Mar. 1	410	103	58	1180
Stone, James, assignor of two-thirds to A. M. Ball, Aurora, and E. Florsheim, Chicago, Ill. Corset-lacing	469,422	Feb. 23	2354	604	58	1010
Stone, Jerry M., Howe's Valley, Ky. Automatic brake	479,577	July 26	2377	{ 592 593 }	{ 60 61 }	504
Stone, Joel H., Dallas City, Ill. Truss-bridge	484,686	Oct. 18	1800	458	61	388
Stone, John A., Vail, Iowa. Seed-planter	469,755	Mar. 1	139	36	58	1127
Stone, John A., assignor to W. Deering, Chicago, Ill. Drive-chain	470,718	Mar. 15	1679	434	58	1441
Stone, John D., Syracuse, N. Y. Switch-operating device	487,457	Dec. 6	378	98	61	1395
Stone, John S. (See Hayes and Stone.)						
Stone, John S., assignor to American Bell Telephone Company, Boston, Mass. Development and distribution of electricity	487,102	Nov. 29	3105	797	61	1262
Stone, Julius F., Columbus, and F. Miller, Corning, Ohio. Pump	487,397	Dec. 6	256	70	61	1372
Stone, Mark, et al. (See Parks, Dana, assignor.)						
Stone, Marvin C., et al. (See Freeman, James P., assignor.)						
Stone, Melvin, Fallbrook, Cal. Dish-washer	467,444	Jan. 19	1844	471	58	367
Stone, Peter, Los Angeles, Cal. Filter	466,809	Jan. 12	811	209	58	164
Stone, Richard L., Chicago, Ill. Floor-arch	475,354	May 24	2341	600	59	1134
Stone, Thomas, et al. (See Beesley, Edward, Sr., Ellis, Jr., and Edward, Jr., assignors.)						
Stone, Thomas H., and H. Corser, Birmingham, England. Tire for cycles	481,435	Aug. 23	2729	674	60	1146
Stone, Willard, Hartford, Conn. Package-carrier	473,531	Apr. 26	2417	613	59	507
Stonebraker, John B. (See Stonebraker, William and J. B.)						
Stonebraker, William and J. B., Hagerstown, Ind. Washing-machine	467,315	Jan. 19	1648	420	58	330
Stonemetz, John H., Erie, Pa. Combined paper-folding and sheet-delivering mechanism for printing-presses	479,768	July 26	2700	722	60	564
Stonemetz, John H., assignor to Stonemetz Printers' Machinery Company, Millbury, Mass. Paper-folding machine	472,317	Apr. 5	485	{ 125 126 }	{ 59 60 }	91
Stonemetz, John H., assignor to Stonemetz Printers' Machinery Company, Millbury, Mass. Printing-press	472,318	Apr. 5	486	{ 126 127 }	{ 59 60 }	91
Stonemetz, John H., assignor to Stonemetz Printers' Machinery Company, Millbury, Mass. Cylinder printing-press	472,319	Apr. 5	490	127	59	92
Stonemetz, John H., assignor to Stonemetz Printers' Machinery Company, Millbury, Mass. Mechanical movement	473,562	Apr. 26	2476	{ 626 627 }	{ 59 60 }	519
Stonemetz Printers' Machinery Company. (See Stonemetz, John H., assignor.)						
Stoner, Abraham, Stony Point, La., and F. M. Pennebaker, Pleasant Hill, Ky. Wood-turning machine	476,696	June 7	703	{ 173 174 }	{ 59 60 }	1576
Stoner, John B., assignor to C. B. Hillhouse, New York, N. Y. Letter-box	472,560	Apr. 12	860	221	59	178
Stoner, John B., assignor to C. B. Hillhouse, New York, N. Y. Horseshoe and calk	472,562	Apr. 12	863	222	59	178

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Stoner, John B., assignor to F. J. Hasbrouck, New York, N. Y. Automatic weighing-machine.	480,752	Aug. 16	1605	{ 402 403 }	{ 60 60 }	917
Stoner, John B., New York, N. Y., assignor to L. Fordham, Long Branch, N. J. Automatic door-closer.	478,246	July 5	300	73	60	60
Stoner, John H., <i>et al.</i> (See Clayton, Anna H., assignor.)						
Stoner, William A., Englewood, Ill. Device for raising and moving heavy bodies.	466,585	Jan. 5	439	113	58	85
Stoppenbach, August. (See Illing and Stoppenbach.)						
Storck, Augustus C., <i>et al.</i> (See Sobinski, Charles O., assignor.)						
Storer, Albert, Boston, Mass. Safety-trigger for breech-loading guns.	467,524	Jan. 26	1986	504	58	402
Storer, Bellamy. (See Bazerque, Victor H., assignor.)						
Storer, Jacob J., assignor to M. L. Storer, East Orange, N. J. Apparatus for treating the refuse of cities.	481,680	Aug. 30	3129	764	60	1237
Storer, Mary L. (See Storer, Jacob J., assignor.)						
Storey Electric Drill and Power Company. (See Storey, Imle E., assignor.)						
Storey, Imle E., Boulder, Colo., assignor to Storey Electric Drill and Power Company. Electric motor.	488,041	Dec. 13	1337	331	61	1604
Storie, James D., Oshawa, Canada. Core-setter.	482,394	Sept. 13	803	193	60	1507
Storie, Joshua R., Travisville, Tenn. Hand-sifter.	482,511	Sept. 13	990	240	60	1543
Storm, Edward, Poughkeepsie, N. Y. Vehicle running-gear.	484,259	Oct. 11	1116	283	61	241
Storm, Edward G. and S. M., Lebanon, Ind. Fence.	481,980	Sept. 6	89	23	60	1352
Storm, Samuel M. (See Storm, Edward G. and S. M.)						
Storrs, Aaron P., Owego, N. Y. Ice-cream freezer.	488,325	Dec. 20	1804	452	61	1714
Storrs, Samuel P., New Britain, Conn. Brush.	479,082	July 19	1562	{ 391 392 }	{ 60 60 }	333
Storrs, Thomas. (See Palmer, Irenas J., assignor.)						
Storrsberg, Fritz. (See Hagen, Augustus A., assignor.)						
Story, Adeline E., Clay Centre, Kans. Means for securing coverings of netting to baskets.	478,893	July 12	1262	312	60	265
Story, Albert P., Richland, Minn. Cross-line buckle.	474,195	May 3	480	116	59	731
Story, Alexander, Washington, Iowa. Metal railway-tie.	474,873	May 17	1590	405	59	969
Story, James, <i>et al.</i> (See Pangle, Robert K., assignor.)						
Story, William M. (See Taylor, Horace H., assignor.)						
Stott, Elizabeth, Huddersfield, England. Tape-needle.	478,827	July 12	1181	293	60	249
Stott, Jonathan B., Aurora, S. D. Fire-escape.	487,135	Nov. 29	3153	808	61	1271
Stouffier, Edward A., <i>et al.</i> (See Kline, David, assignor.)						
Stout, Edmund C., <i>et al.</i> (See Strang, Edgar A., assignor.)						
Stout, Edward J. (See Leimbert, Stout, and Springsteen.)						
Stout, John V., Easton, Pa. Damper-controller.	466,450	Jan. 5	226	58	58	43
Stout, John V., Easton, Pa. Electrical valve-controller.	476,573	June 7	520	123	59	1540
Stout, John W., assignor of one-third to S. L. Barr, Amanda, Ohio. Car-coupling.	471,910	Mar. 29	3480	890	58	1806
Stout, William H. B., Chicago, Ill. Apparatus for treating ores.	477,026	June 14	1237	{ 299 300 }	{ 59 59 }	1698
Stout, William H. B., Chicago, Ill. Brick-kiln.	480,940	Aug. 16	1889	{ 472 473 405 }	{ 60 60 60 }	974
Stout, William H. B., Chicago, Ill. Coffee-huller.	482,909	Sept. 20	1621	{ 406 407 408 }	{ 60 60 60 }	1677
Stovall, Philip, assignor of one-half to J. O., N. W., and S. F. Perkins, Atlanta, Ga. Variable friction-feed for sawmills.	488,618	Dec. 27	2272	564	61	1823
Stove, Alfred E., London, England. Diving dress and helmet.	484,885	Oct. 25	2132	546	61	469
Stoveken, Matthias. (See Meyers and Stoveken.)						
Stovell, James, assignor to Waterbury Buckle Company, Waterbury, Conn. Buckle.	480,217	Aug. 2	744	188	60	723
Stover Bicycle Manufacturing Company. (See Hance, William A., assignor.)						
Stover, Daniel C., Freeport, Ill. Type-writing machine.	468,139	Feb. 2	351	87	58	592
Stover, Daniel C., assignor to Stover Manufacturing Company, Freeport, Ill. Grinding-mill.	471,345	Mar. 22	2633	{ 669 670 }	{ 58 58 }	1638
Stover, Edward C. (See Cochran and Stover.)						
Stover, Edward C., Trenton, N. J. Flushing-tank.	487,906	Dec. 13	1101	275	61	1556
Stover, Edward C., Trenton, N. J. Flushing-tank.	487,940	Dec. 13	1155	289	61	1567
Stover, Henry, Lanark, Ill. Clothes-pounder.	475,090	May 17	1939	491	59	1037
Stover Manufacturing Company. (See Stover, Daniel C., assignor.)						
Stow, Franklin, Kirkwood, N. Y. Device for driving fence-posts, &c.	480,941	Aug. 16	1890	473	60	974
Stowe, Benjamin L., Brooklyn, assignor to J. V. Reed, New York, N. Y. Tubular woven fabric.	486,620	Nov. 22	2291	597	61	1082
Stowe, Benjamin L., Brooklyn, assignor to J. V. Reed, New York, N. Y. Tubular woven fabric.	486,621	Nov. 22	2292	598	61	1082
Stowe, Benjamin L., assignor to J. V. Reed, New York, N. Y. Warp-knitting machine.	486,648	Nov. 22	2335	{ 610 611 }	{ 61 61 }	1091
Stowe, Millard F. (See McBride, Charles H., assignor.)						
Stowe, William J., assignor to Southwestern Supply Company, St. Louis, Mo. Attachment for plow-collars.	472,082	Apr. 5	107	29	59	22
Stowell, Calvin L. (See Fickett, William S., assignor.)						
Stracener, Upton W., assignor of one-half to T. J. Nelson, Bettie, Tex. Animal-poke.	475,091	May 17	1940	491	59	1037
Strain, Emma R. (See Strain, Murtagh J., assignor.)						
Strain, Murtagh J., assignor to E. R. Strain, New York, N. Y. Cigar-case.	474,613	May 10	1169	297	59	872
Straight, William, Elmira, N. Y. Plow.	469,756	Mar. 1	141	36, 37	58	1127
Straight, William, Elmira, N. Y. Horse hay-rake.	473,795	Apr. 26	2842	714	59	589
Straight, William, Elmira, N. Y. Harrow.	473,796	Apr. 26	2845	714	59	589
Straley, Henry C., Granite, Mont. Music-stand attachment.	487,165	Nov. 29	3303	821	61	1280
Strand, Richard P., St. John, Canada. Electrical organ.	478,032	June 28	2889	{ 721 722 }	{ 59 59 }	2050
Strang, Edgar A., Montrose, N. Y., assignor of one-fourth to E. C. Stout, New Brunswick, N. J., and W. M. Stockbridge, Washington, D. C. Fire-escape ladder.	467,525	Jan. 26	1988	504	58	402
Strange, John F., assignor to himself and J. B. Winslow, New Bedford, Mass. Top roll for spinning-machines.	484,760	Oct. 18	1917	489	61	413
Strap, Jules, Paris, France. Treating copper and nickel pyrites.	483,639	Oct. 4	182		61	38
Strassburger, Hermann, <i>et al.</i> (See Wojdkow, Louis, assignor.)						
Strasser, Rupert, Fort Wayne, Ind. Motor for fans.	473,029	Apr. 19	1571	400	59	325
Strater, Francis A., Boston, Mass. Drainer.	471,578	Mar. 29	2974	758	58	1711
Strater, Herman, Boston, Mass. Drainer for draft apparatus.	477,917	June 28	2711	679	59	2015
Strater, Herman, Boston, Mass. Drainer-plate.	481,981	Sept. 6	90	23	60	1352
Stratman, John T., Jr. (See Rouse, John H., assignor.)						
Stratton, B. M. (See Crowds, Walter A., assignor.)						
Stratton, John H., Holyoke, Mass. Shears.	477,711	June 28	2379	594	59	1953

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Stratton, William D., and J. H. Drake, Middletown, N. Y. Means for unloading gravel-trains.....	482,951	Sept. 20	1686	424	60	1690
Straub, Ambrose W., Philadelphia, Pa. Metallic railway-tie.....	470,904	Mar. 15	1966	503	58	1497
Stranghn, Charles R., Fernwood, Pa. Inkstand.....	481,600	Aug. 30	3010	736	60	1214
Stranghn, Charles R., Fernwood, Pa. Self-closing inkstand.....	485,397	Nov. 1	386	103	61	651
Straus, Alexander, assignor to New York Belting and Packing Company, Limited, New York, N. Y. Rubber tire for bicycles.....	474,423	May 10	874	228	59	817
Strauss, Bertha. (See Muller, Bernhard, assignor.)						
Strauss & Co. (See Jenny, Caspar J., assignor.)						
Strauss, Joseph B., Cincinnati, Ohio. Electric hose-coupling.....	469,283	Feb. 23	2156	554	58	971
Straut, Hooper B., assignor of one-fourth to J. W. Hitchcock, Lincoln, Nebr. Welding compound.....	475,355	May 24	2342		59	1134
Straut, Hooper B., assignor of one-fourth to J. T. Vought, Lincoln, Nebr. Door-spring.....	475,356	May 24	2343	600	59	1134
Straw, Algernon L., Marlborough, Mass. Thill-coupling.....	481,436	Aug. 23	2740	674	60	1146
Strayer, George D., assignor of two-thirds to W. H. Voss and P. Lyon, East Stroudsburg, Pa. Bail-car and cover-fastener.....	470,147	Mar. 1	747	186	58	1244
Streator, Henry D., Kalamazoo, Mich. Tobacco-moistening case.....	474,424	May 10	875	228	59	817
Streator, Henry D., Galesburg, Mich. Cheese-case.....	485,359	Nov. 1	326	87	61	638
Street, Albert F., Rockville, Conn. Nail-puller.....	483,587	Oct. 4	109	26	61	23
Street, Albert F., Rockville, Conn. Marking attachment for carpenters' pencils.....	486,513	Nov. 22	2115	558	61	1049
Street, Joseph C., Boston, Mass., and H. P. Norton, St. Joseph, Mich. Screw-propeller.....	475,826	May 31	3101	785	59	1292
Street, Willoughby W. (See Beckwith and Street.)						
Street, Willoughby W., Springfield, Mass. Type-writing machine.....	480,677	Aug. 9	1489	{ 370 371 }	60	878
Street, Willoughby W., and C. L. Travis, assignors to Minneapolis Electro Matrix Company, Minneapolis, Minn. Justifying attachment for matrix-making machines.....	480,350	Aug. 9	966	244	60	778
Streeter, Daniel A., Waterbury, Conn. Pipe-plug.....	474,196	May 3	481	116	59	731
Streeter, Emma A., White Plains, N. Y. Foot-support for telegraph-poles.....	471,626	Mar. 29	3047	776	58	1723
Streeter, Emma A., New York, and B. W. Nichols, Herkimer, N. Y. Spike.....	487,587	Dec. 6	567	145	61	1434
Streeter, Herbert A. (See Amot, Edward H., assignor.)						
Streeter, Nelson R., Groton, N. Y. Adjustable swinging bracket.....	482,207	Sept. 6	469	112	60	1427
Streeter, Theodore, Tunkhannock, Pa. Arm-rest for corpses.....	473,200	Apr. 19	1866	470	59	378
Streit, Anton, Cincinnati, Ohio. Loose pulley.....	472,083	Apr. 5	108	29	59	22
Stretch, Joseph, assignor of one-half to A. Milne, Newark, N. J. Fish-hook.....	470,311	Mar. 8	1058	269	58	1312
Stretch, Joseph, assignor of one-half to A. Milne, Newark, N. J. Fish-hook.....	470,312	Mar. 8	1059	269	58	1312
Stretch, Joseph, Newark, and T. M. Blackwell, East Orange, N. J. Hame-fastener.....	475,953	May 31	3308	834	59	1333
Strickland, A. C. (See Browne, Benjamin F., assignor.)						
Strickland, Owen, Bristol, England. Swing.....	471,700	Mar. 29	3159	805	58	1744
Strickland, Ambrose B., Sioux City, Iowa. Thermometer attachment for ovens.....	471,654	Mar. 29	3081	784	58	1729
Strickler, C. M. (See Bushee, Adolphus C., assignor.)						
Strickler, Wilson H., Dodge City, Kans. Lubricant.....	476,574	June 7	522		59	1540
Stringer, Charles A., Munnsville, N. Y. Plow-jointer.....	476,090	May 31	3513	885	59	1375
Stringer, Thomas W. (See Wilkins, John B., assignor.)						
Stringer, William G., assignor of one-fourth to W. G. Henry, New Orleans, La. Crane.....	475,092	May 17	1941	491	59	1037
Stringfellow, John H. W., London, England. Manufacturing gas.....	467,266	Jan. 19	1578	{ 402 403 }	58	317
Strobel, Herman C., New York, N. Y. Attachment for rubbing, polishing, and sandpapering machines.....	467,208	Jan. 19	1483	380	58	299
Strobel, Herman C., New York, N. Y. Rubbing, polishing, and sandpapering machine.....	467,209	Jan. 19	1484	380	58	299
Strobridge, Hines, <i>et al.</i> (See Sauerston, George E., assignor.)						
Stroh, Charles O., Freeland, Pa. Coal-jig.....	486,907	Nov. 29	2801	726	61	1202
Strohecker, Samuel M. (See Stevenson, George W., assignor.)						
Strohmeyer, George W., <i>et al.</i> (See Childs, Edward D., assignor.)						
Strohmeyer, John F., <i>et al.</i> (See Childs, Edward D., assignor.)						
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Semaphore.....	469,002	Feb. 16	1736	442	58	883
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Derailingswitch.....	474,976	May 17	1756	445	59	1002
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Railway-switch. (Reissue).....	11,261	Aug. 16	2268	560	60	1043
Strom, Axel A., Austin, assignor to Strom Manufacturing Company, Chicago, Ill. Switch-rail-adjusting attachment.....	487,458	Dec. 6	379	99	61	1396
Strom Manufacturing Company. (See Strom, Axel A., assignor.)						
Strombeck, Hans von, New York, N. Y. Purifying ammonia.....	477,089	June 14	1350		59	1720
Stromberg, Alfred, Chicago, Ill. Burglar-alarm.....	484,761	Oct. 18	1917	489	61	413
Stromberg, Alfred, assignor of one-half to M. Simons, Chicago, Ill. Automatic test for burglar-alarm systems.....	477,712	June 28	2390	595	59	1953
Stromberg, Alfred, assignor of one-half to M. Simons, Chicago, Ill. Electric burglar-alarm.....	483,728	Oct. 4	304	75, 76	61	64
Stromberg, Alfred, assignor of one-half to M. Simons, Chicago, Ill. Burglar-alarm cabinet.....	486,908	Nov. 29	2801	{ 726 727 }	61	1202
Strong, Abner D., Ashtabula, Ohio. Self-cleaning cistern.....	472,488	Apr. 5	750	191	59	142
Strong, Frederick S., <i>et al.</i> (See Koerper, Michael B.)						
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Device for transmitting motion.....	471,655	Mar. 29	3082	{ 784 785 }	58	1729
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Device for transmitting motion.....	471,656	Mar. 29	3086	785	58	1730
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Boiler-furnace.....	475,357	May 24	2343	601	59	1135
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Steam-engine.....	477,234	June 21	1598	{ 391 392 }	59	1781
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Compound engine.....	477,279	June 21	1670	{ 408 409 }	59	1795
Strong, George S., New York, N. Y., assignor to J. N. Gamble, Cincinnati, Ohio. Compound engine.....	481,773	Aug. 30	3296	{ 802 803 804 }	60	1271
Strong, J. W. (See Kelly, Daniel, J., and W. D., assignors.)						
Strong, John N., Philadelphia, Pa. Tea or other caddy.....	470,018	Mar. 1	561	139	58	1207
Strong, John N., Philadelphia, Pa. Railway-switch.....	483,818	Oct. 4	446	111	61	92
Strong, Levi C., Brooklyn, N. Y. Saw-filing clamp.....	469,032	Feb. 16	1767	451	58	889
Strong, Levi C., Brooklyn, N. Y. Whetstone-holder.....	472,685	Apr. 12	1037	268	59	208
Strong, Robert J., Shiremanstown, Pa. Seed-sower.....	486,388	Nov. 15	1926	{ 510 511 }	61	998
Strong, Samuel D., Chelsea, Mich. Oil-stove.....	474,874	May 17	1591	405	59	969

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Strosberg, Fritz, <i>et al.</i> (See Wieland, Ludwig, assignor.)						
Strotz, Nicolas, <i>et al.</i> (See Steinle, William M., assignor.)						
Strotz, Nicolas, Chicago, Ill. Cigar-bunching machine.....	482,882	Sept. 20	1571	<div> <div>392</div> <div>393</div> <div>394</div> <div>395</div> <div>396</div> <div>397</div> </div>	60	1669
Stroud, Edward, New York, N. Y. Sounding-board for pianos	487,060	Nov. 29	3034	779	61	1247
Stroud, John A. (See McDowell, Albert, assignor.)						
Stroud, Wiley N., Waxabachie, Tex., and R. H. Corey, assignors to D. M. Osborne & Co., Auburn, N. Y. Discharge mechanism for harvesters	484,923	Oct. 25	2210	569	61	485
Stroup, Samuel, Elmwood, Nebr. Corn-sheller	484,474	Oct. 18	1465	<div> <div>373</div> <div>374</div> </div>	61	320
Strouse, Demetrious B. and W. Griffin, assignors to Carper Railway Engine Company, Sa- lem, Va. Spark-arrester	476,176	May 31	3662	926	59	1404
Strouse, Leopold, Baltimore, Md. Speaking-tube exchange	478,380	July 5	498	121	60	98
Strouse, Leopold, Baltimore, Md. Speaking-tube	484,982	Oct. 25	2297	593	61	501
Strowger, Almon B., assignor to Strowger Automatic Telephone Exchange, Chicago, Ill., Automatic telephone or other electrical exchange	486,909	Nov. 29	2803	<div> <div>727</div> <div>728</div> </div>	61	1202
Strowger Automatic Telephone Exchange. (See Strowger, Almon B., assignor.)						
Strub, John G., New York, N. Y. Automatic gas-pressure regulator	471,657	Mar. 29	3088	785	58	1730
Struble, Charles B., Minneapolis, Minn. Box-lid support	478,655	July 12	901	223	60	194
Struble, John B., Shepherd, Mich. Voting-booth	469,503	Feb. 23	2503	642	58	1038
Struck, Charles E., assignor of one-half to J. H. Fischer, New York, N. Y. Ice-can	475,629	May 24	2776	703	59	1217
Strusholm, Anders M. (See Lyle, Robert W., assignor.)						
Strusholm, Anders M., Woodbridge, N. J. Tile	478,656	July 12	902	223	60	194
Strusholm, Anders M., Woodbridge, N. J., assignor of one-half to R. W. Lyle, New York, N. Y. Tile-press	479,749	July 26	2665	<div> <div>661</div> <div>662</div> </div>	60	557
Struss, Henry W., New York, N. Y. Braid	467,584	Jan. 26	2093	530	58	422
Struss, Henry W., New York, N. Y. Braiding-machine	467,585	Jan. 26	2093	531	58	422
Struss, Henry W., assignor to M. F. Struss, New York, N. Y. Rotary braiding-machine..	479,474	July 26	2226	559	60	475
Struss, Marie F. (See Struss, Henry W., assignor.)						
Strüver, Frederick R. C., Pine Creek, Queensland. Butter-worker	476,429	June 7	318	73	59	1499
Stuart, C. W. (See Söderin, Jonas S., assignor.)						
Stuart, James A., assignor to himself, J. Buchanan, Philadelphia, Pa., and T. Marrin, Brooklyn, N. Y. Electric-arc lamp	482,986	Sept. 20	1739	439	60	1701
Stuart, John C., Dalark, Ark. Car-coupling	483,640	Oct. 4	182	45	61	38
Stuart, John J., New York, N. Y. Ore-pulverizer	478,209	July 5	217	51	60	45
Stuart, Perry G., Fitchburg, assignor of one-half to H. P. Kendall, Sterling, Mass. Sema- phore-signal	479,316	July 19	1921	480	60	401
Stuart, Thomas M., Council Bluffs, Iowa. Car-coupling	469,284	Feb. 23	2159	554	58	972
Stubblebine Furnace Company. (See Stubblebine, William, assignor.)						
Stubblebine, William, Bethlehem, assignor to Stubblebine Furnace Company, Philadel- phia, Pa. Furnace	487,103	Nov. 29	3107	<div> <div>797</div> <div>798</div> </div>	61	1262
Stubblefield, Charnel F., assignor to himself, R. N., E. L., and E. Stubblefield, Wood River, Nebr. Corn-harvester	475,223	May 17	2129	538	59	1076
Stubblefield, Edward, <i>et al.</i> (See Stubblefield, Charnel F., assignor.)						
Stubblefield, Edward L., <i>et al.</i> (See Stubblefield, Charnel F., assignor.)						
Stubblefield, Robert N., <i>et al.</i> (See Stubblefield, Charnel F., assignor.)						
Stubbs, Alexander, and W. I. F. Harden, Hartford, Kans. Chimney cap or cowl	469,069	Feb. 16	1828	468	58	902
Stubbs, Edward S., <i>et al.</i> (See Kemp, Solomon M., assignor.)						
Stubbs, Joel, Long Lake, Minn. Ice-shave	482,883	Sept. 20	1582	397	60	1660
Stuchel, John C., Indiana, Pa. Device for threading nut-blanks	481,437	Aug. 23	2742	674	60	1146
Stuchel, John C., Indiana, Pa. Tool for threading axles	481,514	Aug. 23	2860	<div> <div>702</div> <div>703</div> </div>	60	1170
Stuck, Levi, Bad Axe, Mich., assignor to A. P. Gould, J. C. Skelton, and A. Hoeffler, Can- ton, Ohio. Dental chair	484,747	Oct. 18	1895	483	61	409
Stuckey, Sydney J., Danbury, Conn. Automatic block-signal for railways	484,062	Oct. 11	808	204	61	180
Studebaker, John M. (See Collins, Charles M., assignor.)						
Studte, Heinrich, Inowrazlaw-Kruk, Germany. Manufacture of parquetry or inlaid wood	484,063	Oct. 11	810	205	61	181
Stuebner, Gustavus L., Long Island City, N. Y. Coal-chute	483,404	Sept. 27	2412	606	60	1844
Stuff, John A., Bellville, Ohio. Fertilizer-distributor attachment for check-row corn-plant- ers	483,877	Oct. 4	528	133	61	109
Stuhr, Herman F., Cleveland, Ohio. Building-column	476,905	June 14	1051	254	59	1659
Stukes, John M., San Marcos, Tex. Attachment for pianos or organs	480,296	Aug. 9	886	<div> <div>224</div> <div>225</div> </div>	60	763
Stukey, Joseph A., Columbus, Ohio. Bottle-stopper	475,631	May 24	2779	703	59	1218
Stulken, George D., and A. J. Clute, Jr., McCook, Nebr. Hame-tug clip	473,978	May 3	146	34	59	666
Stull, Herbert L., Stoddardsville, Pa. Measuring-reel	475,630	May 24	2777	703	59	1218
Stull, Jacob H., Fremont, Ohio. Bill or letter file	480,862	Aug. 16	1775	444	60	951
Stulp, Fred J., Muskegon, Mich. Water-gate valve	469,336	Feb. 23	2232	572	58	987
Stults, William H., assignor of one-half to A. Rynders and B. A. Witherbee, Waverly, Ill. Car-coupling	488,153	Dec. 13	1518	381	61	1641
Stults, William R., <i>et al.</i> (See Loomis, George L., assignor.)						
Stump, William J. (See Baker and Stump.)						
Stumpf, George P. (See Carter and Stumpf.)						
Stuntz, Robert, <i>et al.</i> (See Bollenstin, Adam, assignor.)						
Stupakoff, Simon H., assignor to C. H. Read, Pittsburg, Pa. Railway-chair	482,765	Sept. 20	1403	346	60	1634
Stupakoff, Simon H., assignor to C. H. Read, Pittsburg, Pa. Guard-rail	482,766	Sept. 20	1404	347	60	1634
Stupakoff, Simon H., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Compensator for signals	486,303	Nov. 15	1794	471	61	972
Sturgeon, Carson J., assignor to Keystone Electric Company, Erie, Pa. Electric eleva- tor	470,158	Mar. 1	770	191	58	1248
Sturgeon, John. (See Lancaster and Sturgeon.)						
Sturges, Lee, assignor to Chicago Stamping Company, Chicago, Ill. Metallic vessel	466,957	Jan. 12	1056	268	58	209
Sturgess, William T., <i>et al.</i> (See Towelson, Edward, assignor.)						
Sturgis, Samuel D., Jr., and F. P. Peck, Presidio, Cal. Game-counter	481,657	Aug. 30	3094	754	60	1230
Sturm, Charles A. (See Lutgen, James R., assignor.)						
Sturm, Henri, Paris, France. Tile	483,180	Sept. 27	2049	517	60	1776
Sturtevant, Benjamin J., St. Paul, Minn. Car-seal	467,387	Jan. 19	1755	448	58	349
Sturtevant Mill Company. (See Sturtevant, Thomas L., assignor.)						
Sturtevant, Thomas J. (See Sturtevant, Thomas L. and T. J.)						
Sturtevant, Thomas L., Framingham, Mass. Steam-generator	473,979	May 3	147	35	59	666

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Sturtevant, Thomas L., Framingham, assignor to Sturtevant Mill Company, Boston, Mass. Making composite millstones.	483,179	Sept. 27	2048	517	60	1776
Sturtevant, Thomas L. and T. J., Framingham, Mass. Steam-generator.	480,417	Aug. 9	1078	270	60	797
Sturtevant, Thomas L. and T. J., Framingham, Mass. Water-jacket and condensing apparatus for marine boilers.	481,379	Aug. 23	2646	649	60	1127
Sturtevant, Thomas L. and T. J., Framingham, Mass. Steam-generator.	487,792	Dec. 13	918	232	61	1521
Sturtevant, Thomas L. and T. J., Framingham, Mass. Boiler.	487,793	Dec. 13	920	232	61	1521
Sturtevant, Thomas L. and T. J., Framingham, Mass. Vertical tubular boiler.	487,794	Dec. 13	922	233	61	1522
Sturtevant, Thomas L. and T. J., Framingham, Mass. Boiler.	488,229	Dec. 20	1654	413	61	1684
Sturtevant, Thomas L., Framingham, and W. H. Ellis, Boston, Mass. Millstone and making the same.	483,504	Sept. 27	2544	639	60	1871
Stut, John C. H., San Francisco, Cal. Cable-railway grip.	474,875	May 17	1592	{ 405 406 }	59	970
Stutsman, Daniel N. (See Murray and Stutsman.)						
Stutt, John H., assignor of one-half to J. J. Briegel, Philadelphia, Pa. Measuring-faucet.	470,881	Mar. 15	1936	495	58	1491
Stutz, Louis F., Washington, D. C. Puzzle.	479,475	July 26	2228	559	60	476
Stutz, Sebastian, Pittsburg, Pa. Coal-washer.	478,479	July 5	639	156	60	127
Stutz, Sebastian, Pittsburg, Pa. Coal or ore jigger and washer.	481,438	Aug. 23	2743	675	60	1146
Stutzman, Frank, assignor of one-half to E. H. and J. G. Coryell, Williamsport, Pa. Round-about.	475,256	May 17	2182	556	59	1086
Stuver, Stephen T., Pnyallup, Wash. Window-shade supporter.	483,796	Oct. 4	412	102	61	86
Subers, Lawrence A., Phœbus, Va., assignor of one-half to S. B. Coughlin, Philadelphia, Pa. Wire string for musical instruments.	467,061	Jan. 12	1226	310	58	241
Sucker, Charles, London, England. Musical instrument.	469,509	Feb. 23	2505	642	58	1039
Sucro, George C., Baltimore, Md. Lock.	476,575	June 7	523	123	59	1540
Sucro, George C., Baltimore, Md. Bottle-case.	476,697	June 7	706	173	59	1577
Suess, Max, Chicago, Ill. Machine for decorating glass and the like.	474,701	May 10	1312	335	59	901
Sueur, Alfred, assignor to A. E. Paillard, New York, N. Y. Coin-controlled starting mechanism for music-boxes.	466,586	Jan. 5	440	113	58	85
Sueur, Alfred, Jersey City, N. J., assignor to M. J. Paillard & Co., New York, N. Y. Musical cigar-stand.	467,359	Jan. 19	1718	439	58	343
Suffern, J. B., et al. (See Goetz, Victor J., assignor.)						
Suffern, James B., Hillburn, N. Y. Railway-switch. (Reissue.)	11,248	June 21	2250	564	59	1909
Suffrins, Charles D., Pickwick, Minn. Box-fastener.	467,082	Nov. 29	3069	788	61	1254
Sugar Apparatus Manufacturing Company. (See Lillie, Samuel M., assignor.)						
Sugg, David W., London, England. Inverted burner for gas-lamps.	479,992	Aug. 2	229	57	60	626
Sugg, William H., Tuscaloosa, Ala. Folding book-rack.	485,068	Oct. 25	2431	625	61	529
Sullins, John W., Bridgeport, Tex. Churn.	468,844	Feb. 16	1461	373	58	829
Sullivan, Bartholomew, Boston, Mass. Fender for street-cars.	477,467	June 21	1971	429	59	1853
Sullivan, Dennis P. (See Wright, William, assignor.)						
Sullivan, James J., New York, N. Y. Device for starting race-horses.	481,835	Aug. 30	3399	{ 834 835 }	60	1289
Sullivan, Jeremiah F., Brooklyn, N. Y. Combination-tool.	472,147	Apr. 5	214	57	59	40
Sullivan, John H. (See Poulter, John H., assignor.)						
Sullivan, John J., Scranton, Pa. Locomotive safety smoke-stack.	477,389	June 21	1850	455	59	1830
Sullivan, Joseph H., assignor to William D. Gibson Company, Chicago, Ill. Spring.	475,904	May 31	3231	817	59	1318
Sullivan, L. B. (See Cline, David L., assignor.)						
Sullivan Machine Company. (See Ball, Albert, assignor.)						
Sullivan, Marvin E., and J. Doss, Denver, Colo. Circuit-switch.	485,327	Nov. 1	284	77	61	630
Sullivan, Philip B., Tuscarora, Nev. Fire-escape.	484,260	Oct. 11	1117	283	61	242
Sullivan, Timothy J. (See Van Patten, John, assignor.)						
Sullivan, William, Cherry Valley, Mass. Burr and shive extractor for carding machines.	482,395	Sept. 13	804	193	60	1507
Sulzer, Hans, Winterthur, Switzerland. Pen.	477,080	June 14	1336	324	59	1717
Sulzervogt Machine Company. (See Poschinger, Mathias, assignor.)						
Sulzer, Charles, Philadelphia, Pa. Trousers-guard.	479,229	July 19	1794	449	60	376
Summers, George H., A. J. Kings, and L. Q. Hardesty, Mitchell, S. D. Drill-operating device.	473,201	Apr. 19	1867	470	59	378
Summers, George H., A. J. Kings, and L. Q. Hardesty, Mitchell, S. D. Drill-operating device.	473,202	Apr. 19	1868	470	59	378
Summers, Jacob. (See Stirk and Summers.)						
Summers, John, San Francisco, Cal. Horse-boot.	475,827	May 31	3103	786	59	1292
Summers, Leland L. (See Parker and Summers.)						
Summers, Robert C., and W. Bolinger, Eureka, Kans. Replanting attachment for cultivators.	479,998	Aug. 2	369	92	60	651
Sumner, John F., Marblehead, Mass. Spectacles.	484,725	Oct. 18	1853	471	61	399
Sumner, William F., West Valley, N. Y. Two-wheeled vehicle.	474,197	May 3	482	116	59	731
Sumpter, John J., et al. (See Rice, Joel T., assignor.)						
Sundberg, Per Theodor, Domnarfoet, Sweden. Rope-clutch.	487,061	Nov. 29	3035	779	61	1247
Sunderland, George B. (See Wagner and Sunderland.)						
Sunderland, William H., Miller, S. D. Pump.	486,136	Nov. 15	1543	407	61	920
Sunderlin, William D., Green Island, N. Y. Insecticide.	469,285	Feb. 23	2160		58	972
Sunderlin, William D., Green Island, N. Y. Drying apparatus.	481,212	Aug. 23	2357	581	60	1075
Sunderlin, William D., Green Island, N. Y. Pruning implement.	483,588	Oct. 4	110	27	61	23
Sundgren, Olof, Östersund, Sweden. Winnowing-wheel for separating granular substances.	478,298	July 12	1183	293	60	249
Sundh, August, Yonkers, N. Y. Combined weighing, lifting, measuring, and electric machine.	477,613	June 21	2204	{ 547 548 }	59	1900
Sundstrom, Charles F., Michigamme, Mich. Braid-case.	485,995	Nov. 8	1295	344	61	855
Sundstrom, Karl J., assignor to Church & Co., Brooklyn, N. Y. Apparatus for washing sodium bicarbonate.	488,702	Dec. 27	2412	598	61	1849
Sundwall, Frank O., Chicago, and E. Blakeslee, Neponset, Ill. Steam-cooker.	473,096	Apr. 19	1669	424	59	343
Suppiger, Joseph A., Hirslanden, near Zurich, Switzerland. Stove.	486,910	Nov. 29	2810	728	61	1203
Supplee, Charles H., Philadelphia, Pa. Delivery-wagon.	479,031	July 19	1488	370	60	319
Surbaugh, John S., Ottumwa, Iowa. Flexible handle for tools.	479,032	July 19	1489	370	60	319
Surrenant, Edward, Cohoes, N. Y. Car-coupling.	475,168	May 17	2048	515	59	1059
Sutcliffe, James A., Blackburn, England. Silver-can.	469,337	Feb. 23	2233	575	58	987
Sutcliffe, William W., New Orleans, La. Hydraulic-pressure accumulator or regulator.	477,468	June 21	1972	489	59	1853
Sutcliffe, William W., New Orleans, La. Hollow grate-bar.	483,797	Oct. 4	413	{ 102 103 }	61	86
Suter, Jacob, New York, N. Y. Water or wind wheel.	487,381	Dec. 6	232	63	61	1367
Sutherland, John A. (See Knoeller, Charles E., assignor.)						
Sutherland, Thomas, Stillwater, Minn. Vehicle running-gear.	472,280	Apr. 5	424	109	59	79
Sutley, Ernest T., and W. H. Nicholson, Washington, Pa. Temper-screw.	467,866	Jan. 26	2537	643	58	505
Sutphen, Edward A., Aurora, assignor to himself and H. T. Windsor, Chicago, Ill. Device for sharpening razors.	480,976	Aug. 16	1961	490	60	986

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Sutro, Richard, New York, N. Y. Button	471,911	Mar. 29	3481	890	58	1807
Sutter, Joseph, New York, N. Y. Tide and current wheel	475,632	May 24	2780	704	59	1218
Sutton, Benjamin F., Brooklyn, assignor to Parker, Stearns & Sutton, New York, N. Y. Closed conduit for electric railways	484,924	Oct. 25	2211	570	61	485
Sutton, Frederick R., assignor to M. Sutton, Lawrence, Kans. Sad-iron heater	483,878	Oct. 4	530	133	61	110
Sutton, Harry S., assignor of one-half to A. N. Hilger, St. Paul, Minn. Music-chart	479,902	Aug. 2	191	47	60	619
Sutton, John, Islip, N. Y. Filter	470,338	Mar. 8	1104	281 282 290 291	58	1319
Sutton, John, Islip, N. Y. Filter	470,355	Mar. 8	1133	290 291	58	1325
Sutton, John W., New York, N. Y. Machine for removing water-hairs from pelts	468,270	Feb. 2	558	137	58	632
Sutton, Mary. (See Sutton, Frederick R., assignor.)						
Sutton, Samuel. (See Géant, Eugene, assignor.)						
Sutton, Simon T., Chicago, Ill. Knit nether garment	475,734	May 24	2937	745	59	1246
Sutton, Thomas A. and W. H., Salford, England. Finishing bookbinders' cloth	482,596	Sept. 13	1129		65	1569
Sutton, William H. (See Sutton, Thomas A. and W. H.)						
Sutton, William S., Bluff Point, Ind. Cutter-bar	468,583	Feb. 9	1064	272	58	740
Snydam, John, Albany, N. Y. Flexible coupling for pipes	479,556	Aug. 2	122	30	60	606
Svanson, Andrew. (See Krogstedt and Svanson.)						
Svensson, Alfred, Rockford, Ill. Picture-exhibitor	488,042	Dec. 13	1338	331	61	1605
Svensson, Claes A., assignor to A. D. Isham, Buffalo, N. Y. Lineman's wire-grip	486,911	Nov. 29	2811	728	61	1203
Svensson, John H. (See Dahlgren and Svensson.)						
Swain & Fuller Manufacturing Company. (See Washburn, Albion K., assignor.)						
Swain, James E., assignor to N. S. Hill, Baltimore, Md. Composition for leather-dressing	474,702	May 10	1313		59	902
Swain, John F., assignor to Electric Boot and Shoe Finishing Company, Lynn, Mass. Machine for finishing parts of boots or shoes	469,379	Feb. 23	2300	592	58	1001
Swain, Walter, and W. Philipson, Astley Bridge, near Bolton, England. Tire for bicycles	488,852	Dec. 27	2645	655	61	1897
Swallow, Hiram H., and M. T. Jones, Carbondale, Kans. Valve-seat grinder	468,431	Feb. 9	817	205	58	692
Swan, George E., Beaver Dam, Wis. Curtain-fixture	467,692	Jan. 26	2254	573	58	451
Swan, Henry C., Washington, D. C. Stilt	469,102	Feb. 16	1871	478	58	910
Swan, Henry C., Oshkosh, Wis., assignor to Lippelmann Carriage Company, Cincinnati, Ohio. Two-wheeled vehicle	467,210	Jan. 19	1485	380	58	299
Swan, Horace, Rutland, Vt. Whiffletree-center	478,033	June 28	2891	722	59	2050
Swan Lamp Manufacturing Company. (See Roberts, Edward P., assignor.)						
Swan, Lyman A., Freeman, N. Y. Hay-rack	486,978	Nov. 29	2911	752	61	1223
Swan, Phineas W., Winchester, Mass. Automatic sprinkler	488,257	Dec. 20	1692	423	61	1692
Swan, William B., Seymour, Conn. Tool-handle	468,969	Feb. 16	1670	426	58	869
Swaney, Lemuel H., et al. (See Neal, Andrew J., assignor.)						
Swann, Scott, et al. (See Crighton, William, assignor.)						
Swann, Thomas A., Baltimore, Md. Closet-seat protector	467,062	Jan. 12	1227	310	58	241
Swannell, Frederick O., Chicago, Ill. Linsed-cake stripper	476,327	June 7	153	38	59	1467
Swanson, Swan, Chicago, Ill. Cultivator	468,271	Feb. 2	560	137	58	632
Swanson, Swanty, and E. Espee, Minneapolis, Minn. Artesian-well reamer	471,153	Mar. 22	2358	602	58	1584
Swarthout, Albert S., Ponghekepsie, N. Y. Bicycle	486,687	Nov. 22	2393	625 626	61	1103
Swartout, William, Reynolds, Ill. Rotating grain-weigher	479,537	July 26	2319	580	60	494
Swartz, Allen G. (See Dietrich, Oscar S., assignor.)						
Swartz, Eli, and D. S. Beemer, Scranton, Pa. Vehicle-brake	482,027	Sept. 6	174	41	60	1369
Swartz, Hiram B., Wooster, Ohio. Window-blind	472,592	Apr. 12	904	232	59	186
Swartz, Samuel, Detroit, Mich. Bending-press	487,435	Dec. 6	345	88	61	1389
Swartz, William B., Buckeye City, Ohio. Horse-power	484,524	Oct. 18	1542	391	61	336
Sweatt, William R. (See Hubbard, Arthur O., assignor.)						
Sweeney, Daniel, Newark, N. J. Line-holder	480,351	Aug. 9	971	245	60	778
Sweeney, Daniel, assignor of one-half to E. Shepard, Newark, N. J. Grinding-machine	466,729	Jan. 5	674	173	58	128
Sweeney, Hugh M., Boston, Mass. Curtain-fixture	472,832	Apr. 12	1250	320	59	249
Sweeney, James B., and R. W. Laird, St. Johnsbury, Vt. Power-hammer	477,159	June 14	1451	356	59	1740
Sweeney, John, assignor of one-half to J. Graham & Co., New Haven, Conn. Awning-blind hinge	488,509	Dec. 20	2100	521	61	1774
Sweeney, John J., New York, N. Y. Stove board or platform	469,875	Mar. 1	338	87	58	1167
Sweeney, Patrick J., Albany, N. Y. Steam or hot-water heating apparatus	467,445	Jan. 19	1845	471	58	367
Sweeney, Peter, assignor of one-half to C. H. Boyer, New York, N. Y. Journal-bearing for car-axles	483,405	Sept. 27	2414	607	60	1844
Sweeney, Thomas. (See Burnett and Sweeney.)						
Sweeney, Vardiman T., Springfield, Ky. Wagon-brake	484,687	Oct. 18	1801	458	61	388
Sweeny, James M., Pittsburg, Pa. Gas-regulator	478,480	July 5	641	156	60	128
Sweet, Augustus L., et al. (See Brown, James W., assignor.)						
Sweet, Benjamin W., Portsmouth, Ohio. Spark and cinder attachment for smoke-stacks	478,296	July 5	369	90	60	74
Sweet, Daniel F., and J. B. Parker, Grand Rapids, Mich.; said Sweet assignor to said Parker. Dental tool	472,004	Mar. 29	3612	923	58	1831
Sweet, James C., assignor of one-half to J. H. Lanway, South Arm, Mich. Folding square	484,261	Oct. 11	1118	283	61	242
Sweet, Lartine C., assignor of two-thirds to W. G. Miller, Loami, and E. R. Thayer, Chatham, Ill. Pitman-rod connection for harvesters	475,358	May 24	2345	601	59	1135
Sweet, S. S. (See Sankey, William J., assignor.)						
Sweet, Wallach & Co. (See Newell, John, assignor.)						
Sweet, William A., Syracuse, N. Y. Pool-hall frame	484,562	Oct. 18	1598	406	61	347
Sweet, William F., assignor of fifty-one one-hundredths to M. T. Cassada, Webb's Mills, and J. B. Stanchfield, Elmira, N. Y. Reversible plow	470,019	Mar. 1	562	139	58	1208
Sweeting, Thomas H., Philadelphia, Pa. Tire for bicycle-wheels	485,898	Nov. 8	1133	300	61	821
Sweetland, Frank, Angola, N. Y. Tire for vehicles	468,370	Feb. 9	726	179	58	674
Sweetland, Frank, Angola, N. Y. Bicycle-pedal	473,030	Apr. 19	1572	400	59	325
Sweetland, Frank, Angola, N. Y. Bicycle-saddle	474,106	May 3	351	84	59	705
Sweetland, Frank, Angola, N. Y. Bicycle-fork	475,633	May 24	2781	704	59	1218
Sweetland, Frank, Angola, N. Y. Bicycle-saddle	476,838	June 14	937	228	59	1637
Sweetland, Frank, Angola, N. Y. Bicycle	482,067	Sept. 6	234	57	60	1381
Sweetland, Jerome B., Pontiac, Mich. Swing	481,439	Aug. 23	2745	675	60	1147
Sweetland, Jerome B., Pontiac, Mich. Mop-wringer	484,688	Oct. 18	1803	458	61	389
Sweetland, William P., San Francisco, Cal. Nut-lock	472,489	Apr. 5	751	191	59	143
Sweetland, William W., Edwardsburg, Mich. Grate	479,728	Sept. 26	2632	653	60	550
Swegles, John, Wayne, Mich. Axle-cutter	482,767	Sept. 20	1405	347	60	1634
Swenson, Daniel, Kansas City, Mo. Corn-popper	471,152	Mar. 22	2356	602	58	1584
Swenson, Daniel, Kansas City, Mo. Corn-popper	470,882	Mar. 15	1937	495	58	1491
Swenson, Daniel, Kansas City, Mo. Corn-popper	481,877	Aug. 30	3460	849	60	1302
Swenson, Lorens. (See Patterson and Swenson.)						
Swenson, Lorens, assignor of two-thirds to W. Patterson, Cresco, Iowa. Vehicle-wheel hub	482,418	Sept. 13	838	201	60	1513

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Swenson, Paul, Hopkins, Minn. Band-cutter and feeder.....	470,265	Mar. 8	948	235	58	1292
Swenson, Paul, Minneapolis, Minn. Exhaust-nozzle.....	481,334	Aug. 23	2579	633	60	11.5
Swetland, Irvin S., Glenalpin, Nebr. Feed-trough.....	485,022	Oct. 25	2370	634	61	516
Swift, Charles W. (See Swift, William H., assignor.)						
Swift, Daniel W. (See Swift, Henry D. and D. W.)						
Swift, Ernest, De Kalb, Ill. Horse hay-rake.....	479,033	July 19	1490	370	60	319
Swift, Gustavus F. (See Gardner, Horace C., assignor.)				371		
Swift, Henry D. and D. W., Worcester, Mass. Envelope-machine.....	470,632	Mar. 8	1548	403	58	1406
Swift, Henry D. and D. W., assignors of one-half to J. Logan and J. S. Brigham, Worcester, Mass. Envelope-machine.....	470,218	Mar. 8	883	218	58	1279
Swift, Lester C., Plano, Ill. Check-bit.....	475,634	May 24	2782	704	59	1219
Swift, Samuel H. (See Hayton and Swift.)						
Swift, William H., assignor to C. W. Swift, Brunswick, Ga. Fan attachment for chairs, cribs, &c.....	468,090	Feb. 2	270	66	58	577
Swigert, John, Blanchester, Ohio. Hame.....	485,996	Nov. 8	1296	344	61	855
Swindell, Edward H. (See Swindell, James D., assignor.)						
Swindell, James D., assignor of one-half to E. H. Swindell, Allegheny, Pa. Casing for furnace-valves.....	478,769	July 12	1076	267	60	229
Swindell, John C. (See Swindell, William and J. C.)				268		
Swindell, William, Allegheny, Pa. Brick-kiln.....	479,679	July 26	2536	632	60	533
Swindell, William, Pittsburg, Pa. Casing for furnace valves.....	482,463	Sept. 13	908	221	60	1525
Swindell, William and J. C., Allegheny, Pa. Grate.....	469,070	Feb. 16	1829	468	58	902
Swindley, Harry J., Barnes, England. Wheel for velocipedes.....	475,828	May 31	3104	726	59	1293
Swing, Marcus A., Washington, Ind. Feed-regulator.....	484,064	Oct. 11	810	205	61	181
Swinscoe, Henry K., Clinton, Mass. Loom-shuttle.....	473,677	Apr. 26	2665	671	59	555
Swinscoe, Henry K., Clinton, Mass. Wire-netting machine.....	483,181	Sept. 27	2050	517	60	1776
Swinscoe, Henry K., Clinton, Mass. Wire-netting machine.....	483,182	Sept. 27	2053	518	60	1777
Swinson, George W., Magnolia, N. C. Plow.....	480,637	Aug. 9	1425	355	60	866
Swiontkowski, Frank. (See Guzowski, Joseph, assignor.)						
Swisher, Isaac C., Coffeyville, Kans. Automatic metal boring and turning lathe.....	472,833	Apr. 12	1251	320	59	249
Swiss, Morris R., assignor of one-third to J. Hecht, New York, N. Y. Ignition-cap for cigars or cigarettes.....	487,232	Nov. 29	3340	850	61	1304
Swope, Zuriel, Lancaster, Pa. Door-check.....	476,328	June 7	154	38	59	1467
Sword, Robert, assignor to S. E. Sword, Kemnay, Canada. Weather-board.....	467,063	Jan. 12	1228	310	58	241
Sword, Sarah E. (See Sword, Robert, assignor.)						
Sydney, James, London, England. Portable appliance for supporting and suspending candles, lamps, or flowers.....	475,093	May 17	1942	492	59	1037
Sydes, Benjamin J., Sykesville, Pa. Lubricator for windmills.....	471,443	Mar. 22	2792	712	58	1667
Sykes, John B., Dawson, Pa. Adjustable shingle-gage.....	485,436	Nov. 1	441	118	61	662
Sykes, William L., Benzinger, Pa. Drive-chain.....	472,563	Apr. 12	864	222	59	179
Syler, Frank W., Columbus, Ohio. Mining-machine.....	480,418	Aug. 9	1079	270	60	798
Syllwasschy, Elise, Magdeburg-Neustadt, Germany. Spool-holder.....	484,563	Oct. 18	1599	471	61	348
Sylvia, George, Waltham, Mass., assignor to Brown & Sharpe Manufacturing Company, Providence, R. I. Automatic stop for micrometer-gages.....	487,410	Dec. 6	302	78	61	1381
Symington, Thomas A. (See Reilly, John, assignor.)						
Symington, William H., and W. Anderson, Market-Harborough, England. Guiding device for sewing-machines.....	477,341	June 21	1771	433	59	1814
Symonds, Clarence M., San Francisco, Cal. Paint-can.....	467,290	Jan. 19	1613	411	58	323
Symonds, Herbert, St. Louis, Mo., assignor to G. C. Keene & Co., Cincinnati, Ohio. Metal-bending device.....	468,584	Feb. 9	1065	272	58	741
Symonds, S. C. (See Bennett, Henry P., assignor.)						
Symonds, Thomas, Leominster, Mass. Valve-operating mechanism for clam-shell buckets.....	470,020	Mar. 1	563	139	58	1208
Symonds, Thomas, Leominster, Mass. Friction device for windlasses.....	472,564	Apr. 12	866	222	59	179
Synnott, Thomas W., Wenonah, N. J. Machine for making glass bottles.....	468,140	Feb. 2	354	88	58	593
Synnott, Thomas W., Wenonah, N. J. Bottle-mold.....	487,498	Dec. 6	440	113	61	1408
Synon, John H., Chicago, Ill. Boring-machine.....	478,266	July 5	328	79	60	66
Sypher, Abraham J., Chicago, Ill. Rock-drill.....	485,720	Nov. 8	872	234	61	769
Sypher, Abraham J., Chicago, Ill. Rock-drill.....	485,721	Nov. 8	876	234	61	769
Sypher, Abraham J., Chicago, Ill. Rock-drill.....	485,722	Nov. 8	879	235	61	770
Syracuse Specialty Manufacturing Company. (See Dickinson, Austin R., assignor.)						
Syracuse Specialty Manufacturing Company. (See Manggang, George, assignor.)						
Szarvady, Géza. (See Marinovitch and Szarvady.)						
Szigethy, Stephan, New York, N. Y. Candlestick.....	473,797	Apr. 26	2846	715	59	590
T. & B. Tool Company. (See Johnson, Moses C., assignor.)						
T. I. Smith & Company. (See Lettré, Philip H., assignor.)						
T. W. Heinemann Company. (See Heinemann, Walter S., assignor.)						
Tabele, Joseph H., Jersey City, N. J., assignor to Meyer-Sniffen Company, Limited, New York, N. Y. Tank or cistern for water-closets.....	473,980	May 3	149	35	59	666
Taber, Benjamin F., Buffalo, N. Y. Rotary pump.....	471,279	Mar. 22	2541	645	58	1619
Taber, Benjamin F., Buffalo, N. Y. Rotary pump.....	471,280	Mar. 22	2543	646	58	1619
Taber, Clark, Sumpter, Oreg. Water-wheel.....	488,723	Dec. 27	2442	606	61	1855
Taber, Orrin, Nashua, N. H. Harness-saddle.....	486,912	Nov. 29	2813	728	61	1203
Taber, Orrin, assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle-tree.....	480,218	Aug. 2	746	188	60	723
Taber, Orrin, assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle-tree.....	480,219	Aug. 2	747	189	60	723
Taber, Orrin, assignor to Nashua Saddlery Hardware Company, Nashua, N. H. Saddle-tree.....	480,220	Aug. 2	748	189	60	723
Taber, William M., assignor of one-half to D. H. Bailey, Denison, Tex. Sash-fastener.....	480,221	Aug. 2	749	189	60	724
Tabor, Levi L., and A. Sedmihradsky, Milwaukee, Wis., said Sedmihradsky assignor to said Tabor. Glove.....	470,719	Mar. 15	1679	434	58	1441
Tabor, Lorin R., Westford, Vt. Sap-spout.....	474,929	May 17	1671	427	59	986
Tabor, Lorin R., Westford, assignor to Vermont Farm Machine Company, Bellows Falls, Vt. Evaporating-pan.....	473,270	Apr. 19	1977	496	59	401
	471,229	Mar. 22	2470	627	58	1606

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Tache, Augustus, San Francisco, Cal. Chalk-line holder	472,593	Apr. 12	904	232	59	186
Tachytype Manufacturing Company. (See Johnson, Frank A., assignor.)						
Tackitt, Louis L., Kasoga, Tex. Guard for horned stock	486,743	Nov. 22	2483	647	61	1122
Taft, Arthur M. (See Behrens, Henry R., assignor.)						
Taft, Cyrus A., assignor to Whitin Machine Works, Whitinsville, Mass. Stop-motion for drawing-frames	485,997	Nov. 8	1297	344	61	855
Taft, Cyrus A., assignor to Whitin Machine Works, Whitinsville, Mass. Separator for spinning-machines	486,798	Nov. 22	2574	671	61	1139
Taft, Cyrus A., assignor to Whitin Machine Works, Whitinsville, Mass. Yarn-separator for spinning-machines	488,136	Dec. 13	1482	373	61	1635
Taft, Edward L., assignor of one-half to H. M. Rich, Gardner, Mass. Knit rattan fabric	472,320	Apr. 5	491	127	59	92
Taft, Frank. (See Taft, George L. and F.)						
Taft, George L. and F., Ionia, Mich. Feed-rack	473,245	Apr. 19	1939	487	59	303
Taft, George W. (See Chambers and Taft.)						
Taft, Walter E., assignor, by mesne assignments, to Anchor Pearl Company, Providence, R. I. Tool for making pearl buttons, &c.	487,233	Nov. 29	3341	850	61	1304
Taft, Walter E., assignor to Anchor Pearl Company of Portland, Me., Providence, R. I. Making pearl buttons	487,234	Nov. 29	3342	850	61	1305
Taft, William E., Dunmore, Pa. Cutting-knife	478,381	July 5	499	121	60	98
Taggart, John V., et al. (See Campbell, George W., assignor.)						
Taggart, Rollin C., Defiance, Ohio. Saw-handle fastening	488,703	Dec. 27	2413	598	61	1849
Taintor, Charles C., Elizabeth, N. J., assignor to Taintor Manufacturing Company, New York, N. Y. Saw-set	475,359	May 24	2346	601	59	1135
Taintor, Giles, Keene, N. H. Two-wire-telephone system	473,532	Apr. 26	2418	613	59	507
Taintor, Giles, Keene, N. H., assignor, by mesne assignments, to Western Electric Company, of Illinois. Multiple-switchboard signal	487,795	Dec. 13	923	233	61	1522
Taintor Manufacturing Company. (See Taintor, Charles C., assignor.)						
Tait, James F., Evanston, Ill. Holdback for vehicles	476,839	June 14	939	229	59	1637
Tait, William, assignor to William Cramp & Sons Ship and Engine Building Company, Philadelphia, Pa. Device for flooding ships' magazines	482,282	Sept. 6	590	140 141	60	1450
Taitte, Annet, Leigneux, France. Velocipede	488,745	Dec. 27	2473	614 615	61	1862
Takken, Evert, Holland, Mich. Wagon-gear	486,304	Nov. 15	1795	472	61	972
Talbert, Daniel H., Spiceland, Ind. Bottle-stopper	473,031	Apr. 19	1573	400	59	326
Talbot, Benjamin, Chattanooga, Tenn. Purifying metals	476,091	May 31	3514		59	1375
Talbot, Benjamin, Chattanooga, Tenn. Refining metals	476,092	May 31	3516		59	1376
Talbot, Benjamin, Chattanooga, Tenn. Manufacturing sheet-iron	482,336	Sept. 13	806		60	1507
Talbot, Benjamin, Chattanooga, Tenn., assignor of one-fourth to J. Meehan, Covington, Ky. Making malleable-iron castings	481,313	Aug. 23	2549		60	1110
Talbot, Coleman, assignor of one-half to J. M. Talbot, Santa Rosa, Cal. Gate	481,078	Aug. 16	2125	529	60	1018
Talbot, George, Aix-la-Chapelle, Germany. Railway dumping-car	488,295	Dec. 20	1754	441 442	61	1704
Talbot, Joseph M. (See Talbot, Coleman, assignor.)						
Talbott, Willard, Oaksdale, Wash. Fire-escape	474,876	May 17	1594	406	59	970
Talcott, Fred, Providence, R. I. Knife for shearing paper, &c.	467,316	Jan. 19	1650	420	58	330
Taliaferro, Charles K. (See Taliaferro, William B. and C. K.)						
Taliaferro, William B. and C. K., Middlesborough, Ky. Combined folding couch and cradle	473,181	Apr. 19	1838	462	59	372
Talley, Henry J., assignor to G. G. Thomson, Philadelphia, Pa. Reference-file	468,312	Feb. 2	631	157	58	646
Talley, Reuben J., assignor of one-half to S. P. Gorden, Leesville, Tex. Insecticide-distributor	483,269	Sept. 27	2218	557	60	1807
Tallmadge, James W., Albany, N. Y., assignor to F. W. Beardsley, Bayonne, N. J. Apparatus for the manufacture of carburized hydrogen	484,475	Oct. 18	1467	374	61	321
Tallmadge, Horace K., Buffalo, N. Y. Furnace	486,990	Nov. 29	2931	756	61	1227
Tallman, Harry E., Cleveland, Ohio. Apparatus for photographic printing	486,913	Nov. 29	2814	729	61	1204
Tallman, John C., Bridgeport, Conn. Horse-tail holder	478,894	July 12	1263	312	60	265
Tallman, William M., et al. (See Beers, Franklin H., assignor.)						
Tandy, Gustavus A. (See Huvelle, Hector, assignor.)						
Tandy, John L., Columbia, Mo. Corn-thinner	473,678	Apr. 26	2667	672	59	555
Tangenberg, Christiaan, Chicago, Ill. Flour-bin	476,430	June 7	320	73	59	1499
Tangenberg, Christiaan, assignor to W. M. Sherman and F. H. Butler, Chicago, Ill. Carpet-sweeper	471,515	Mar. 22	2887	735	58	1686
Tangney, Thomas, South Superior, Wis. Hinge	480,790	Aug. 16	1665	416	60	928
Tannenber, August O., assignor to W. H. Bofinger, New Orleans, La. Lock	485,899	Nov. 8	1133	300	61	821
Tannenber, August O., assignor to W. H. Bofinger, New Orleans, La. Combined side and center brace attachment for step-ladders	485,900	Nov. 8	1135	301	61	821
Tanner, David W., Martin, Tex. Thill-coupling	471,199	Mar. 22	2423	616	58	1596
Tanner, David W., assignor of one-half to S. P. Rice, Marlin, and L. T. Fuller, Calvert, Tex. Thill-coupling	488,908	Dec. 27	2734	674	61	1916
Tanner, George W., Providence, R. I. Cigar-wrapper-cutting machine	474,107	May 3	352	84	59	705
Tanner, Richard W., Albany, N. Y. Caster	470,266	Mar. 8	950	236	58	1292
Tanner, Thomas. (See McDonald, Ronald, assignor.)						
Tanner, Ulysses, Minneapolis, Minn. Artificial leg	473,097	Apr. 19	1671	424	59	343
Tanner, William W., and T. W. Burch, assignors of one-third to J. Gerber, Fremont, Mich. Door-fastener	482,817	Sept. 20	1465	364	60	1648
Tannette Manufacturing Company. (See Field, Walter D., assignor.)						
Tannrath, Fritz, Chicago, Ill. Combined coal-scuttle and ash-sifter	486,360	Nov. 15	1881	495	61	988
Tapley, Jesse F., New York, N. Y. Temporary binder	469,757	Mar. 1	142	37	58	1127
Tapley, John P. (See Dore and Tapley.)						
Tapley, Rufus P., Jr., et al. (See Beckwith, Theodore A., assignor.)						
Tapley, Rufus P., Jr., et al. (See Hunter, William, assignor.)						
Tapley, Walter H., assignor to Ware Automatic Heat Generator and Regulator Company, Chicago, Ill. Thermotic circuit-closer	477,315	June 21	1734	425	59	1807
Taplin, Clarence A. (See Hart and Taplin.)						
Tarbell, Wendell P., Milford, N. H. Mirror-hinge	472,409	Apr. 5	629	161	59	118
Tardy, Jules H., Glencoe, Minn. Elevator	487,104	Nov. 29	3110	798	61	1263
Tarpenning, Charles T., Fresno, and L. B. Sherwood, Tnlock, Cal. Means for transmitting power	477,469	June 21	1974	490	59	1854
Tarr, John B., New Bedford, Mass. Tobacco-shaver	420,638	Aug. 9	1426	355 356	60	867
Tarrant, Robert, et al. (See Pronty, Enoch, assignor.)						
Tarring, Lida A., Baltimore, Md. Mop-holder	478,657	July 12	903	294	60	194
Tarris, Andrew, Marion, Ind., assignor to N. C. Richardson and L. J. Tarris. Swinging gate	474,489	May 10	972	251	59	835

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Tarris, Lavina J., <i>et al.</i> (See Tarris, Andrew, assignor.)						
Tartt, Pembroke S., Wingo, Ky. Side-bar vehicle	484,689	Oct. 18	1804	459	61	389
Tate, Frank R., assignor of one-half to J. L. Blair, St. Louis, Mo. Buckle	474,198	May 3	483	117	59	731
Tate, John M., New York, N. Y. Stationery-box	476,576	June 7	524	123	59	1541
Tate, Richard B., <i>et al.</i> (See Buhop, John J., assignor.)						
Tate, Robert, Toronto, Canada. Hot-air furnace	483,819	Oct. 4	448	111	61	92
Tatem & Co., C. P. (See Deane, Frank H., assignor.)						
Tatro, Charles P., Spokane, Wash. Underground conduit for electric railways	466,471	Jan. 5	200	66	58	50
Tatro, Charles P., assignor of three-fifths to J. Hauauer, Spokane, Wash., and J. E. and J. Montgomery, Chicago, Ill. Electric railway	476,935	June 14	1101	266	59	1670
				235		
				236		
				237	61	770
Tatro, Joseph A., Beaver Falls, Pa. Machine for making wire fencing-hands	485,723	Nov. 8	881			
Tattersall, Hargreaves, <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Tatum, Sidney S. (See Bush, Aylmer, assignor.)						
Tatum, William O. (See Marsh, Pickens B., assignor.)						
Taunay, Edward, New York, N. Y. Peanut-heater	478,721	July 12	993	246	60	214
Tausig, Emil, <i>et al.</i> (See Bowerbank, John W., assignor.)						
Tausig, Solomon, <i>et al.</i> (See Bowerbank, John W., assignor.)						
Tausig, Emil and S., New York, N. Y. Disinfecting apparatus	487,588	Dec. 6	567	145	61	1434
Tausig, Salomon. (See Tausig, Emil and S.)						
Taylor, Abraham B., Mount Airy, Ohio. Car-door	479,143	July 19	1662	416	60	351
Taylor, Abraham B., Mount Airy, Ohio. Car-door	479,144	July 19	1664	416	60	351
Taylor, Albert A., and W. C. Edwards, Cornwall, N. Y. Lubricator	470,085	Mar. 1	663	164	58	1228
Taylor, Albert J., Silver City, Nev. Grinding-pan	485,069	Oct. 25	2432	625	61	529
Taylor, Alexander, <i>et al.</i> (See Jones and Myers, assignors.)						
Taylor, Alfred, assignor of one-half to E. J. Mahoney, T. W. Shaw, and R. A. Donald, San Francisco, Cal. Hydraulic stump-extractor	470,086	Mar. 1	664	164	58	1228
Taylor, Andrew W., Wayne, Nebr. Swinging gate	486,799	Nov. 22	2576			
				671	61	1140
				672		
Taylor, Augustus G., Claremont, N. H. Plumb-level	474,152	May 3	411	99	59	718
Taylor, Barnett, Forestville, assignor to W. G. Rundell, E. H. Crain, and E. G. H. Adams, Spring Valley, Minn. Swarm-catcher	476,762	June 7	799	197	59	1597
Taylor, Bayard E., Chicago, Ill. Safety gas-burner	486,991	Nov. 29	2933	756	61	1227
Taylor, Benjamin F., Newark, N. J. Locomotive	471,281	Mar. 22	2544	646	58	1619
Taylor, Benjamin F., Newark, N. J., assignor of one-half to J. Moffet, New York, N. Y. Pneumatic stack for steam-boilers	483,589	Oct. 4	111	27	61	24
Taylor & Boggis Foundry Company. (See Clemes, William H., assignor.) (Design reissue.)						
Taylor, Bruce, Wooster, assignor to Ney Manufacturing Company, Canton, Ohio. Track for hay-carriers	486,812	Nov. 22	2598	676	61	1145
Taylor, Charles C., New York, N. Y. Suspensory garment	484,065	Oct. 11	812	205	61	181
Taylor, Charles H., South Orange, N. J. Car-coupling	480,836	Aug. 16	1734	433	60	942
Taylor, Charles H., Montreal, Canada, assignor of one-half to J. W. Carmichael, Wilmington, N. C. Tool to fish out drills, &c., from Artesian wells	488,909	Dec. 27	2735	675	61	1916
Taylor, Cyrus, Buffalo, N. Y., assignor to Excelsior Specialty Company, of New York. Steam-trap	481,601	Aug. 30	3011	736	60	1214
Taylor, Daniel B., St. Louis, Mo. Apparatus for elevating and moving grain	475,035	May 24	2783	705	59	1219
Taylor, David H., Cincinnati, Ohio. Sash-fastener	481,440	Aug. 23	2747	675	60	1147
Taylor, E. C., <i>et al.</i> (See Gunn, John M., assignor.)						
Taylor, Edward H., <i>et al.</i> (See Campbell, William A., assignor.)						
Taylor, Edward H., <i>et al.</i> (See Trump, John G., assignor.)						
Taylor, Edward T., Oakland, Cal. Cash-register	485,998	Nov. 8	1298			
				344	61	855
				345		
Taylor, Edward U. (See Layer and Taylor.)						
Taylor, Edward W., Salt Lake City, Utah Ter. Nut-lock	475,094	May 17	1942	492	59	1038
Taylor, Emery E., Minneapolis, Minn. Journal-box lifter	472,835	Apr. 12	1256	321	59	250
Taylor, Esau D., Hornellsville, N. Y. Manufacture of trunks, &c.	476,840	June 14	939	229	59	1637
Taylor, Eugene H. (See Busell and Taylor.)						
Taylor, Eugene H., Lynn, Mass., assignor to Cushman Paper Box Machine Company, Portland, Me. Corner-cutter for paper-box blanks	473,859	Apr. 26	2945			
				742	59	609
				743		
Taylor, Eugene H., Lynn, assignor to J. Q. A. Wittemore, Boston, Mass. Heel-making machine	475,714	May 24	2900			
				734	59	1240
				735		
Taylor, Ezekiel F., Washington, Ky. Metal railway-tie	474,877	May 17	1595	406	59	970
Taylor, Frank H., <i>et al.</i> (See Miller, Lewis, assignor.)						
Taylor, George, <i>et al.</i> (See Knowles, Louis T., assignor.)						
Taylor, George, Atlanta, Ga. Machine for edging and surfacing marble tiles	474,033	May 3	237	57	59	683
Taylor, George A. (See Buence and Bash, assignors.)						
Taylor, George H. (See McMillan and Taylor.)						
Taylor, Henry B. (See Elder, Maxwell E., assignor.)						
Taylor, Horace H., assignor of one-half to N. W. Moody, Fresno, Cal. Pessary	476,698	June 7	706	173	59	1577
Taylor, Horace H., assignor of one-half to R. Pollard, San Francisco, Cal. Ore-separator	482,853	Sept. 20	1519	377	60	1659
Taylor, Horace H., assignor of one-half to W. M. Story, Fresno, Cal. Tray for drying fruit	486,137	Nov. 15	1544	407	61	921
Taylor, Isaac. (See Nelson, Knapper, and Taylor.)						
Taylor, Isaiah H., Baltimore, Md. Sheet-metal can-body	483,660	Oct. 4	210	52	61	43
Taylor, Jacob, and W. J. Purdy, Hagerstown, Ind. Loop for mail-pouches	469,727	Mar. 1	93	25	58	1117
Taylor, James, Edwards, Ill. Coal-mining machine	469,608	Feb. 23	2648	679	58	1068
Taylor, James C., Chattanooga, Tenn. Device for carrying keys	477,970	June 28	2783	697	59	2030
Taylor, James F., Brooklyn, N. Y. Steaming-kettle	481,982	Sept. 6	92	24	60	1352
Taylor, James H., Toledo, Ohio. Washing-machine	477,918	June 28	2713	679	59	2015
Taylor, James M., Omaha, Nebr. Track-cleaner	469,103	Feb. 16	1872	479	58	910
Taylor, James W., Vermillion, S. D. Fifth-wheel for vehicles	472,834	Apr. 12	1255	321	59	250
Taylor, James W., Vermillion, S. D. Vehicle running-gear	482,597	Sept. 13	1130	273	60	1569
Taylor, John, Troy, N. Y. Car-brake	471,444	Mar. 22	2792	713	58	1667
Taylor, John, Troy, N. Y. Car-truck	471,912	Mar. 29	3482			
				890	58	1807
				891		
Taylor, John, Troy, N. Y. Car-truck	472,236	Apr. 5	358	92, 93	59	67
Taylor, John C., Westport, Mass., A. P. Benjamin and G. F. Allen, Oakland, Me. Can-labeling machine	469,906	Mar. 1	381	96	58	1174
Taylor, John F., West Park, N. Y. Hydraulic press	479,317	July 19	1922	480	60	402
Taylor, John G., Kosse, Tex. Buckle	481,079	Aug. 16	2126	529	60	1018
Taylor, John M., and M. Falk, Pittsburg, assignors of one-third to J. Klee, Allegheny, Pa. Trousers	467,064	Jan. 12	1229	311	58	241

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Taylor, Joseph A., Jr., Savannah, Ga. Truck or rice farm plow	477,971	June 28	2784	697	59	2030
Taylor, Kenner, assignor of one-half to J. Meagher, Frankfort, Ky. Tester for spirituous liquors	476,093	May 31	3517	885	59	1376
Taylor, Lawrence H., Muscatine, Iowa. Sleeve and cuff holder	475,905	May 31	3231	817	59	1318
Taylor, Louis C., Trenton, N. J. Library-furniture	477,190	June 14	1506	369	59	1752
Taylor, Lucian A., executor. (See Fobes, Richard.)						
Taylor, Melvin A., assignor of one-half to G. M. Blair, Oakland, Cal. Routing-machine	487,589	Dec. 6	568	{ 145 146 }	{ 61 61 }	{ 1434 599 }
Taylor, Phillips T., San Francisco, Cal. Cable-railway grip	485,237	Nov. 1	123	37	61	599
Taylor, R. E., et al. (See Gunn, John M., assignor.)						
Taylor, Samuel S., Schooley's Mountain, assignor of one-half to F. Bell, Jersey City, N. J. Tension device	488,230	Dec. 20	1655	413	61	1685
Taylor, Thomas R. C. (See Robinson, Walter H., assignor.)						
Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Latch-bolt	467,564	Jan. 26	2067	522	58	416
Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Lock	474,783	May 10	1437	{ 364 365 }	{ 59 59 }	{ 926 926 }
Taylor, Warren H., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Tool for forming key-slots	487,701	Dec. 6	748	191	61	1408
Taylor, William, Allegheny, Pa. Nail or spike	472,913	Apr. 12	1370	351	59	275
Taylor, William C., New York, N. Y. Copy-holder	466,472	Jan. 5	262	66	58	50
Taylor, William H., Narragansett Pier, R. I. Life-boat	481,602	Aug. 30	3015	737	60	1215
Taylor, William M. (See Heath, Charles F., assignor.)						
Taylor, William W., assignor of one-half to C. L. Searcy, Waco, Ky. Vehicle-wheel	482,658	Sept. 13	1209	295	60	1585
Teachout, Samuel T., Cohoes, N. Y. Elevator	475,524	May 24	2616	666	59	1185
Teague, Francis, assignor to J. A. Iliffe, London, England. Electric meter	482,324	Sept. 6	677	{ 161 162 }	{ 60 60 }	{ 1468 1468 }
Teague, Jasper K., Alliance, Tex. Adjustable standard for plows	470,219	Mar. 8	884	219	58	1280
Teal, Benjamin F., Chicago, Ill. Pneumatic water-elevator	470,386	Mar. 8	1187	{ 303 304 }	{ 58 58 }	{ 1334 1334 }
Teal, Benjamin F., Chicago, Ill. Air-compressor	474,034	May 3	239	57	59	684
Teale, Walter. (See Hand and Teale.)						
Teall, James, Rochester, N. Y. Bill-file	482,659	Sept. 13	1211	295	60	1585
Teamer, Rachel, administratrix. (See Teamer, William.)						
Teamer, William, deceased; R. Teamer, Evansville, Ind., administratrix. Jar-fastening	469,985	Mar. 1	520	129	58	1199
Teate, Thomas A., Waukegan, Fla. Cyclometer	468,371	Feb. 9	727	180	58	674
Tebbets, Eugene L. (See Trask, Lucius C., assignor.)						
Tebyrca, José P. (See Mariosa, José, assignor.)						
Teegarden, Freeman M., assignor to Chief Manufacturing Company, Colfax, Ind. Saw-ing-machine	477,972	June 28	2785	698	59	2030
Teel, John, assignor of one-half to J. Rawson, Grand Rapids, Mich. Wardrobe-bed	468,184	Feb. 2	421	104	58	607
Teel, Joseph, Kunkletown, Pa. Car-coupling	475,829	May 31	3107	787	59	1293
Teft, Charles E. (See Hays and Teft.)						
Teft, Emory N., assignor of one-half to R. Cook and C. H. Fryer, Iola, Kans. Electric belt	485,754	Nov. 8	921	246	61	778
Teft, Henry B., assignor of two-thirds to W. S. Bogle, Chicago, Ill. Transfer-carriage for elevated ways	483,183	Sept. 27	2056	{ 518 519 }	{ 60 60 }	{ 1777 1777 }
Telemeter Company. (See Dibble, Fernando J., assignor.)						
Temple, Edward B., Philadelphia, and J. W. Meigs, Reading, Pa. Machine for grinding spectacle and eyeglass lenses	475,068	May 17	1896	481	59	1029
Temple, William G. (See Panchaud and Temple.)						
Ten Eyck, Maning F., Clifton, N. J. Shutter-fastener	477,973	June 28	2789	699	59	2031
Tench, George H., Pottsville, Pa. Conveyer	488,460	Dec. 20	2020	504	61	1757
Tenney, Mary J., Oskaloosa, Iowa. Door or window screen	471,579	Mar. 29	2975	758	58	1711
Tenney, Milton G., et al. (See Beckwith, Theodore A., assignor.)						
Tente, Christian F., et al. (See Barton, Charles N., assignor.)						
Terens, Nicholas H., Mishicot, Wis. Milk-can cover and cooler	473,481	Apr. 26	2337	592	59	493
Terfloth, Hermann, Laer, Germany. Shedding mechanism for looms	466,635	Jan. 5	513	{ 132 133 134 }	{ 58 58 58 }	{ 99 99 99 }
Terhune, John H., Paterson, N. J. Sheet-music turner	467,211	Jan. 19	1486	{ 380 381 }	{ 58 58 }	{ 300 300 }
Terman, James W., New Sharon, assignor to L. W. Beard, Decorah, Iowa. Journal-bearing	471,405	Mar. 22	2735	698	58	1657
Ternan, Edward F., Beloit, Wis. Machine for grinding tools	467,961	Feb. 2	82	20	58	540
Ternes, B., et al. (See Hartman, Henry, assignor.)						
Terpening, Charles S., Prescott, Wash. Supporter for the rear flap of trousers	476,699	June 7	708	174	59	1577
Terrell, Charles M., and G. T. Bartlett, San Antonio, Tex. Press	488,296	Dec. 20	1755	442	61	1704
Terrell, John K., Omro, Wis. Bird-trap	466,473	Jan. 5	264	66	58	50
Terrell, Nathaniel A., assignor to himself, T. S. Keller, and J. Arundale, Charlottesville, Va. Center arbor for watches	478,528	July 5	719	174	60	142
Terrian, Clifford. (See Cossette, Pitre, assignor.)						
Terro, Charles, Cannstatt, Germany. Circular-knitting machine	467,330	Jan. 19	1670	{ 425 426 }	{ 58 58 }	{ 334 334 }
Terry, Alice V. (See Green, William W., assignor.)						
Terry, Cornelius E. (See Terry, Solon M., assignor.)						
Terry, Cyrus, Richland Springs, Tex. Oscillating gate	466,381	Jan. 5	114	32	58	24
Terry, David C., assignor of one-half to F. Foster, Abilene, Tex. Nut-lock	471,627	Mar. 29	3048	776	58	1723
Terry, David C., and W. J. Maltby, Baird, Tex. Nut-lock	475,636	May 24	2784	705	59	1219
Terry, Edward, and W. Hayter, London, England. Stocking	488,487	Dec. 20	2066	513	61	1766
Terry, Henry C. (See Rowand, Lewis G., assignor.)						
Terry, John M., Fairview, S. C. Cotton-planter	466,839	Jan. 12	861	220	58	174
Terry, Lottie S., et al. (See Robinson, Walter, assignor.)						
Terry, Louis C., Columbus, Miss. Spark-deflector for railway freight-cars	469,609	Feb. 23	2649	680	58	1068
Terry, Robert E., assignor of one-half to T. N. Jordan, Mobile, Ala. Log-carrier	481,314	Aug. 23	2550	626	60	1110
Terry, Samuel H., St. Louis, Mo. Metallic pole	467,526	Jan. 26	1988	504	58	402
Terry, Schuyler W., et al. (See Robinson, Walter, assignor.)						
Terry, Solon M., assignor of one-half to C. E. Terry, Pittsfield, Mass. Device for raising and lowering suspended electric lights	468,159	Feb. 2	379	93	58	598
Terry, William, and F. Rawnsley, Bradford, England. Loom for weaving pile fabrics	471,835	Mar. 29	3383	{ 862 863 }	{ 58 58 }	{ 1786 1786 }
Terry, William T., assignor of one-half to A. A. Lee, North Adams, Mass. Holdback for vehicles	470,313	Mar. 8	1060	269	58	1312

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Tersch, William H. (See Seymour, George H., assignor.)						
Terslose, Anders C., St. Paul, Minn., assignor of one-half to J. W. Skinner, La Crosse, Wis. Base.	486,549	Nov. 22	2162	571	61	1058
Terstegen, Fred, Elizabeth, N. J. Timepiece repeating mechanism.	487,398	Dec. 6	258	70, 71	61	1372
Terstegen, Fred, Elizabeth, N. J. Timepiece repeating mechanism.	487,399	Dec. 6	270	71, 72	61	1375
Teschner, August H. and P. E., Atchison, Kans. Harrow.	479,476	July 26	2230	560	60	476
Teschner, Paul E. (See Teschner, August H. and P. E.)						
Tesla Electric Company. (See Tesla, Nikola, assignor.)						
Tesla, Nikola, assignor to Tesla Electric Company, New York, N. Y. System of electrical transmission of power.	487,796	Dec. 13	925	{ 233 234 284 285 286 287	61	1522
Tessaro, Angelo, Padua, Italy. Apparatus for writing music.	484,262	Oct. 11	1120	{ 285 286 287	61	242
Tessmer, Hermann G., Pittsburg, Kans. Zinc-furnace.	469,104	Feb. 16	1873	479	58	911
Tetaz, August L., and L. C. Hadoru, Chicago, Ill. Charm or locket.	482,208	Sept. 6	470	112	60	1427
Tetley, Frederick J. (See Calls and Tetley.)						
Tettelbach, John, Cleveland, Ohio. Range hot-closet door.	479,857	Aug. 2	123	30	60	606
Tenfel, Charles, Chicago, Ill. Wardrobe-bed.	482,028	Sept. 6	175	42	60	1369
Tenfel, Wilhelm J., Stuttgart, Germany. Shoulder-brace.	482,768	Sept. 20	1406	347	60	1635
Tevis, Edwin L., Philadelphia, Pa., assignor of one-fourth to A. Smith, Jr., New York, N. Y. Tobacco-stripping machine.	467,143	Jan. 12	1384	354	58	272
Tevis, Edwin L., assignor of one-half to J. Tevis, Philadelphia, Pa. Bottle designed to prevent refilling.	482,329	Sept. 6	685	163	60	1470
Tevis, Joshua. (See Tevis, Edwin L., assignor.)						
Tewesles, Louis, and T. A. Robinson, Paterson, N. J. Picker for looms.	479,903	Aug. 2	192	47, 48	60	620
Tewksbury, Andrew J., Haverhill, Mass. Leather-skiving machine.	472,148	Apr. 5	215	57	59	40
Thacher, John B. (See Fasoldt, Ernest C., assignor.)						
Tharp, William W., Urbana, Mo. Churn.	466,636	Jan. 5	516	134	58	100
Thatcher, John M., Kansas City, Mo. Hot-water or steam boiler.	477,470	June 21	1975	490	59	1854
Thatcher Manufacturing Company. (See Barnhart, Harvey P., assignor.)						
Thatcher, Thomas, Elizabethport, N. J. Divided-cylinder steam-engine.	477,027	June 14	1239	{ 300 301	59	1698
Thayer, Edward R., et al. (See Sweet, Larntine C., assignor.)						
Thayer, Fred N., and E. W. Francis, Binghamton, N. Y. Magazine-pistol.	477,280	June 21	1672	{ 409 410	59	1795
Thayer, H. W. (See Keating, Alphonso S., assignor.)						
Thayer, William H., Weymouth, Mass. Ticket-holder.	473,135	Apr. 19	1746	441	59	356
Theby, Edward R., Neenah, Wis. Sash-fastener.	480,148	Aug. 2	620	157	60	701
Thedens, Ferdinand F., Lyons, Iowa. Furnace.	472,183	Apr. 5	272	71	59	51
Theis, Henry, Lawrenceburg, Ind. Machine for beveling barrel-heads.	481,335	Aug. 23	2581	634	60	1116
Theisen, Eduard, Sinzig-on-the-Rhine, Germany. Condenser.	477,471	June 21	1977	491	59	1855
Then, Christian D., Rochester, N. Y. Bill-file.	482,660	Sept. 13	1212	296	60	1585
Theobald, William H., New York, N. Y. Envelope.	466,382	Jan. 5	116	33	58	25
Therien, Nelson, Hammond, Ind. Ceiling ornament.	488,531	Dec. 20	2141	530	61	1780
Thermo Electric Company. (See Dickerson, Edward N., assignor.)						
Thermo Electric Company. (See Iden, Charles W., assignor.)						
Theurer, Jacob F., and R. Birkholz, Milwaukee, Wis. Bottle-soaking machine.	467,137	Jan. 12	1374	352	58	270
Thian, Louis R. (See Mullaney, John E., assignor.)						
Thickins, Richard W., Minneapolis, Minn. Motor mechanism for street-cars.	467,693	Jan. 26	2255	{ 573 574	58	451
Thiel, Ernst E., Ruhla, Germany. Watch-movement.	479,923	Aug. 2	230	57	60	627
Thieleman, Jonas. (See Rivers, Thomas L., assignor.)						
Thielen, John, Fremont, Nebr. Horso-collar fastener.	474,878	May 17	1597	407	59	971
Thielsen, Hans H., Custer City, S. D. Oil-can.	479,318	July 19	1925	480	60	402
Thierry, Louis, Detroit, Mich. Vehicle chafe-iron.	476,577	June 7	525	124	59	1541
Thies, John B., Dayton, Ohio. Autographic registering apparatus. (Reissue)	11,235	Apr. 26	3014	{ 759 760	59	622
Thillman, Nicholas W., and C. W. Firme, Chicago, Ill. Turn-table.	479,858	Aug. 2	123	30	60	607
Thissell, Earl A., Northampton, Mass. Scissors sharpener.	488,043	Dec. 13	1339	332	61	1605
Thoeni, Martin, Monticello, assignor of one-half to J. Milne, Scotch Grove, Iowa. Bail-car for buckets.	483,798	Oct. 4	415	103	61	87
Thoens, Burchard, New Orleans, La. Candy-machine.	480,149	Aug. 2	620	157	60	701
Tholen, William A., and W. J. Murray, Leavenworth, Kans. Folding-machine.	476,329	June 7	156	{ 38 39 40	59	1467
Thom, John C., Cincinnati, Ohio. Work-holder and safety-guard for universal woodworkers.	481,983	Sept. 6	93	24	60	1353
Thomas, Benjamin A., Bardwell, Ky. Land-roller.	483,242	Sept. 27	2144	{ 543 544	60	1795
Thomas Car Coupling Company. (See Thomas, James B., assignor.)						
Thomas, Carlyle W., Boston, Mass., assignor to Wheeler & Wilson Manufacturing Company, Bridgeport, Conn. Power-transmitting friction clutch-pulley.	485,513	Nov. 1	548	146	61	685
Thomas, Carroll, Omaha, Nebr. Umbrella.	488,407	Dec. 20	1934	485	61	1739
Thomas, Cassius D., Moberly, Mo. Fruit-jar.	478,659	July 12	906	224	60	195
Thomas, Charles E., Williamstown, N. J. Clamp for fruit-jar caps, &c.	478,771	July 12	1079	268	60	230
Thomas, Charles W., Jersey City, N. J., assignor of part to P. Van Volkenburgh, New York, and J. H. Pendleton, Brooklyn, N. Y. Electric railway.	468,708	Feb. 9	1255	319	58	779
Thomas, Charles W., Jersey City, N. J., assignor of part to P. Van Volkenburgh, New York, and J. H. Pendleton, Brooklyn, N. Y. Dynamo-electric machine.	478,529	July 5	720	{ 174 175 176	60	143
Thomas, Charles W., Jersey City, N. J., assignor of five-sixths to P. Van Volkenburgh, New York, and J. H. Pendleton, Brooklyn, N. Y. Dental engine.	480,678	Aug. 9	1494	372	60	879
Thomas, Chauncey, Boston, Mass. Road-cart.	467,962	Feb. 2	83	20	58	541
Thomas, Daniel M., Columbia, Pa. Stove.	486,946	Nov. 29	2867	740	61	1214
Thomas, Edmund M., Little Rock, Ark. Device for treating patients by electricity.	485,238	Nov. 1	124	38	61	599
Thomas, Edward, Los Angeles, Cal. Can-stand.	479,099	July 19	1590	398	60	338
Thomas, Edward E. (See Thomas, Judge D. and E. E.)						
Thomas, Edward E., San José, Cal. Fruit-dipper.	482,283	Sept. 6	593	141	60	1450
Thomas, Edward S., and J. E. Littlejohn, Cedar Rapids, Iowa. Car-coupling.	483,879	Oct. 4	531	134	61	110
Thomas, Edward W., Lowell, Mass. Cloth-napping machine.	478,143	July 5	104	26, 27	60	23
Thomas, Edward W., Lowell, Mass. Machine for napping cloth.	478,144	July 5	105	27	60	23
Thomas, Francis, San Francisco, Cal. Cupping-glass with electrical attachment.	474,977	May 17	1757	445	59	1002
Thomas, George, Royersford, Pa. Fence-post.	488,724	Dec. 27	2443	606	61	1856

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Thomas, George G. (See Kline and Thomas.)						
Thomas, George W., assignor to G. W. Bishop and N. Gibson, Baltimore, Md. Toy.....	483,087	Sept. 20	1895	479	60	1734
Thomas, Henry O., Fremont, Nebr. Shrub-binder.....	475,361	May 24	2349	602	59	1136
Thomas, Henry O., assignor of one-half to J. W. Stevenson, North Bend, Nebr. Machine for baling trees.....	473,482	Apr. 26	2338	592	59	493
Thomas, Henry W. (See Gilbert and Thomas.)						
Thomas, J. H. (See Klapperich, John W., assignor.)						
Thomas, James B., assignor to Thomas Car Coupling Company, Sulphur Springs, Tex. Combined car and air-brake coupling.....	481,984	Sept. 6	95	24	60	1353
Thomas, James M., Chillicothe, Ohio. Drive-gate.....	479,319	July 19	1924	481	60	402
Thomas, John C., assignor of one-half to E. H. Bemus, Jamestown, N. Y. Washing-machine.....	485,143	Oct. 25	2540	652	61	551
Thomas, John E., Bloomington, Ill. Soot-collector.....	467,527	Jan. 26	1990	505	58	402
Thomas, John H., Springfield, Ohio. Hay-rake.....	482,532	Sept. 13	1031	249	60	1550
Thomas, John R., assignor to S. A. Woods Machine Company, Boston, Mass. Planing-machine.....	483,970	Oct. 4	674	169	61	139
Thomas, John W., Jr., Nashville, Tenn. Railway switch and signal interlocking mechanism.....	468,160	Feb. 2	380	93 94 95	58	598
Thomas, John W., Jr., Nashville, Tenn. Switch and signal mechanism.....	488,853	Dec. 27	2646	655	61	1897
Thomas, Joshua, Cleveland, Ohio. Feed-water regulator.....	488,619	Dec. 27	2274	564	61	1823
Thomas, Judge D. and E. E., San José, Cal. Fruit pitting and spreading machine.....	482,284	Sept. 6	594	141	60	1451
Thomas, Lancaster, Philadelphia, Pa. Compound microscope.....	475,362	May 24	2350	602	59	1136
Thomas, Lyndsey P., Cannon, Mich. Bean-planter.....	468,977	Feb. 16	1694	452	58	875
Thomas, Oscar J., Peninsula, Ohio. Pail-holder.....	468,161	Feb. 2	325	95	58	599
Thomas, Robert B., Blackburn, La. Fertilizer-distributor.....	481,315	Aug. 23	2551	626	60	1110
Thomas, Robert S., and C. E. Woltz, Reidsville, N. C. Railway-switch lock.....	466,474	Jan. 5	265	67	58	51
Thomas, Samuel S., et al. (See Green, James A., assignor.)						
Thomas, Thomas C. J., London, England. Lamp.....	477,081	June 14	1337	324 325	59	1718
Thomas, Thomas L., and J. B. Hillman, Prince's End, England. Galvanizing metal tubes or bars.....	469,925	Mar. 1	411	103	58	1180
Thomas, Van A., Providence, R. I. Electric cut-out.....	469,220	Feb. 16	2055	528	58	944
Thomas, Van A., Providence, R. I. Detachable step for poles.....	480,977	Aug. 16	1962	491	60	987
Thomas, William D. (See Greer and Thomas.)						
Thomas, William H., and G. F. Reynolds, assignors to W. W. Sanborn, Lewiston, Me. Crimping-machine.....	484,510	Oct. 18	1522	386 387	61	332
Thomas, William J. (See Heckert, Thomas, and Heckert.)						
Thomas, William J., Sausalito, assignor of one-half to J. T. Wilson, San Francisco, Cal. Balanced piston.....	473,032	Apr. 19	1574	401	59	326
Thomas, William J., Sausalito, assignor to American Balance-Slide-Valve Company, San Francisco, Cal. Balance slide-valve.....	474,153	May 3	412	100	59	718
Thomas, William M., assignor to L. Warfield, Detroit, Mich. Reduction-gear.....	480,679	Ang. 9	1495	372 373	60	879
Thomas, William R., Watertown, Wis. Switch-signal.....	466,968	Jan. 12	1070	271	58	212
Thomas, William R., Catasauqua, Pa. Mixing alloys.....	482,338	Dec. 6	162	46	61	1353
Thomason, Sue, Itasca, Tex. Sad-iron heater.....	472,149	Apr. 5	217	58	59	41
Thomason, Whiteford S. (See Harris, William A. and B. S. H., assignors.)						
Thomassen, Ole K., Christiania, Norway. Apparatus for purifying oil.....	477,281	June 21	1675	416	59	1796
Thompson, Abraham W. (See Lentz and Thompson.)						
Thompson, Albert A., Leadville, Colo. File for bills, periodicals, &c.....	485,514	Nov. 1	549	146	61	685
Thompson, Andrew J., Montrose, Colo. Machine for forming irrigating laterals.....	478,034	June 28	2892	723	59	2050
Thompson, Asa H., Groton, Mass. Heel-stiffener machine.....	483,184	Sept. 27	2057	519	60	1778
Thompson, Carrie V., Brooklyn, N. Y. Trunk-protector.....	471,154	Mar. 22	2359	603	58	1584
Thompson, Charles E., assignor to S. Palmer, Lansingburg, N. Y. Apparatus for inserting plugs in brush-heads.....	485,670	Nov. 8	795	212	61	752
Thompson, Charles H., et al. (See Jennings, Charles C., assignor.)						
Thompson, Charles T., and R. H. Sanders, Philadelphia, Pa. Magnetic ore-separator.....	470,455	Mar. 8	1304	335	58	1356
Thompson, Charles T., and R. H. Sanders, Philadelphia, Pa. Magnetic ore-separator.....	470,456	Mar. 8	1306	336	58	1357
Thompson & Co., William. (See Hopkins, William H., assignor.)						
Thompson, Edward H. (See Thompson, Francis and E. H.)						
Thompson, Edward J., et al. (See Stillman and Markoe, assignors.)						
Thompson, Edward J., assignor to Goodell Company, Antrim, N. H. Hydrocarbon-burner.....	476,177	May 31	3665	927	59	1404
Thompson, Evert M., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Sack-case for packing-machines.....	486,960	Nov. 29	2885	745	61	1218
Thompson, Evert M., assignor to Nordyke & Marmon Company, Indianapolis, Ind. Packing-machine.....	487,355	Dec. 6	192	52 53	61	1359
Thompson, Francis and E. H., Allegheny, Pa. Cigar-bunching machine.....	481,722	Aug. 30	3206	783	60	1252
Thompson, Frank H., and G. P. Torney, Philadelphia, Pa. Wedging device for tool-handles.....	477,082	June 14	1341	335	59	1718
Thompson, Fred W., Brooklyn, assignor to Twist Pipe Company, New York, N. Y. Drop-hammer.....	488,620	Dec. 27	2275	564	61	1823
Thompson, Freeman, Dover, N. H. Car-coupling.....	482,598	Sept. 13	1131	273	60	1570
Thompson, George A., Brooklyn, N. Y. Screening device for coal-pockets.....	483,799	Oct. 4	416	103	61	87
Thompson, George E., Minneapolis, Minn. Wagon-body.....	482,398	Sept. 13	807	194	60	1507
Thompson, George H. (See Keifer and Thompson.)						
Thompson, George L., Chicago, Ill. Curling-tongs.....	482,702	Sept. 13	1287	315	60	1600
Thompson, George R., Brockton, Mass. Car-coupling.....	488,586	Dec. 27	2228	552	61	1814
Thompson, George W., Sag Harbor, N. Y. Rein-holder.....	487,975	Dec. 13	1203	300	61	1576
Thompson, Horace B., Brooklyn, N. Y. Rotary printing-machine.....	476,906	June 14	1052	254 255	59	1659
Thompson, Jacob W. (See Hall, Major, assignor.)						
Thompson, James C., Brockley, England. Fuse for explosive projectiles or shells.....	482,533	Sept. 13	1032	250	60	1551
Thompson, James F., Rockland, assignor of one-half to C. F. Baker, Boston, Mass. Coloring and burnishing composition.....	473,679	Apr. 26	2668	891 892	59	556
Thompson, James G., Boston, Mass. Electric lock.....	471,913	Mar. 29	3425	892	58	1807
Thompson, James M., San Francisco, Cal. Ore-concentrator.....	471,258	Mar. 22	2510	638	58	1613
Thompson, James M., San Francisco, Cal. Amalgamator.....	475,360	May 24	2348	602	59	1136
Thompson, James W., and R. Golling, Lenoir City, Tenn. Table-leg fastener.....	486,305	Nov. 15	1796	472	61	972
Thompson, John. (See Frey and Thompson.)						
Thompson, John, assignor to Frey-Scheckler Company, Bucyrus, Ohio. Brick and tile machine.....	478,481	July 5	642	157	60	128
Thompson, John F., Fulton, Ky. Agricultural machine.....	483,026	Sept. 20	1808	457	60	1716

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Thompson, John G. (See Goodrich, Charles F., assignor.)						
Thompson, John P., Olneyville, R. I. Tension device for loom-shuttles.....	478,895	July 12	1264	312	60	265
Thompson, John S., Cyrus, Minn. Draft-equalizer.....	479,034	July 19	1493	371	60	320
Thompson, John T., Jaynesville, Miss. Cultivator.....	466,383	Jan. 5	117	33	58	25
Thompson, Joseph B. (See Hinman and Thompson.)						
Thompson, Joseph R., Philadelphia, Pa. Book-holder.....	467,317	Jan. 19	1652	420	58	330
Thompson, Joseph T., Oneida, N. Y. Rake.....	486,361	Nov. 15	1882	495	61	989
Thompson, La Marcus A., Philadelphia, Pa. Pleasure-railway and car therefor.....	470,220	Mar. 8	885	219	58	1280
Thompson, Norman J. (See Frost, Eli C., assignor.)						
Thompson & Norris Company. (See Chapin, William G., assignor.)						
Thompson & Norris Company. (See Thompson, Robert H., assignor.)						
Thompson & Norris Company. (See Watt, William, assignor.)						
Thompson, Otis D., Elkhart, Ind. Truck.....	477,472	June 21	1980	492	59	1855
Thompson, Otis D., Elkhart, Ind. Lawn-sweeper.....	481,269	Aug. 23	2464	607	60	1096
Thompson, Paul. (See Phillips, William H., assignor.)						
Thompson, Philander D., Neligh, Nebr. Grain cut-off.....	481,080	Aug. 16	2127	529	60	1018
Thompson, Ralph P., assignor to John M. Waddel Manufacturing Company, Greenfield, Ohio. Cash register and indicator.....	485,240	Nov. 1	129	39	61	599
Thompson, Richard, <i>et al.</i> (See Baldwin, Franklin T., assignor.)						
Thompson, Robert H., <i>et al.</i> (See Shaw, Charles H., assignor.)						
Thompson, Robert H., New York, assignor to Thompson & Norris Company, Brooklyn, N. Y. Corrugated packing.....	479,999	Aug. 2	371	92	60	651
Thompson, Robert J., assignor of one-half to J. B. White, Grandi Mo. Log-binder.....	478,972	July 12	1386	{ 341 342 }	{ 60	288
Thompson, Ross. (See Thompson, Thomas J., assignor.)						
Thompson, Samuel H., South Boston, Va., and E. M. Cooke, Swepsonville, N. C., assignors of one-third to W. I. Jordan, South Boston, Va. Cigarette-machine.....	466,759	Jan. 5	720	{ 186 187 }	{ 58	137
Thompson & Sons, Henry G. (See Mower, Samuel E., assignor.)						
Thompson, Sven O., McPherson, Kans. Collapsible fence for hay-stacks.....	479,680	July 26	2538	632	60	534
Thompson, Thomas J., Greystones, Ireland, assignor to R. Thompson, Port Arthur, Canada. Bicycle.....	474,784	May 10	1439	365	59	927
Thompson, Valdemar C. (See Dodge, Isaac F., assignor.)						
Thompson, Victor, Russiaville, Ind. Sliding gate.....	469,286	Feb. 23	2162	554	58	972
Thompson, William. (See Walker, Alexander, assignor.)						
Thompson, William A., Boston, assignor of one-half to M. E. Crocker, Malden, Mass. Hanging window-shelf.....	482,502	Sept. 13	979	237	60	1540
Thompson, William H., East Stroudsburg, Pa. Combination-lock.....	470,720	Mar. 15	1680	434	58	1441
Thompson, William H., Winnipeg, Canada. Combination-lock.....	478,658	July 12	903	224	60	195
Thompson, Wilson, Whitwell, Tenn. Kitchen-cabine.....	469,842	Mar. 1	282	73, 74	58	1155
Thoms, Alexander S., Paterson, N. J. Relief-valve.....	480,528	Aug. 9	1249	314	60	832
Thomson, Alexander, Lake Charles, La. Stereotype-plate and holder.....	476,240	Nov. 15	1691	448	61	950
Thomson, Chester G., Lafayette, Ind. Blank book for type-writers.....	470,769	Mar. 15	1760	453	58	1457
Thomson, Claude, Chicago, Ill. Folding window-balcony.....	478,177	July 5	168	43	60	36
Thomson Electric Welding Company. (See Lemp, Hermann assignor.)						
Thomson Electric Welding Company. (See Lemp and Moody assignors.)						
Thomson Electric Welding Company. (See Méritens, Auguste de assignor.)						
Thomson Electric Welding Company. (See Thomson, Elihu, assignor.)						
Thomson, Elihu, Swampscott, Mass. Commutator for dynamo-electric machines and motors	467,318	Jan. 19	1653	420	58	331
Thomson, Elihu, Swampscott, Mass. Method of and means for interrupting electric currents.....	468,120	Feb. 2	319	78	58	586
Thomson, Elihu, Swampscott, Mass. Dynamo-electric machine.....	468,121	Feb. 2	320	78, 79	58	586
Thomson, Elihu, Swampscott, Mass. System of electrical distribution.....	468,122	Feb. 2	323	79	58	587
Thomson, Elihu, Swampscott, Mass. System of telephony.....	481,878	Aug. 30	3461	849	60	1302
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric switch.....	468,119	Feb. 2	317	77	58	585
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester.....	468,497	Feb. 9	928	236	58	714
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric railway.....	470,221	Mar. 8	889	220	58	1280
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Lightning-arrester.....	470,721	Mar. 15	1682	{ 434 435 }	{ 58	1442
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Safety device for electric motors.....	476,330	June 7	163	40	59	1468
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Dynamo electric machine.....	476,331	June 7	166	40	59	1469
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electric-arc lamp.....	478,145	July 5	107	27, 28	60	24
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Induction-coil for electric meters.....	482,209	Sept. 6	471	113	60	1427
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Ventilating-armature for dynamo-electric machines.....	482,397	Sept. 13	806	193	60	1507
Thomson, Elihu, Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Regulator for dynamo-electric machines.....	485,239	Nov. 1	126	38	61	599
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Manufacture of axes.....	476,967	June 14	1153	278	59	1680
Thomson, Elihu, Lynn, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric soldering.....	480,392	Aug. 9	1038	261	60	791
Thomson, Elihu, New Britain, Conn., assignor to Thomson-Houston Electric Company, Boston, Mass. Electric-arc lamp.....	488,585	Dec. 27	2225	{ 551 552 }	{ 61	1813
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Alternating-current motor.....	471,155	Mar. 22	2360	603	58	1584
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Distribution of electric currents.....	478,722	July 12	994	247	60	214
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Armature for dynamos and motors.....	483,700	Oct. 4	267	66	61	56
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Continuous-current transformer.....	485,669	Nov. 8	793	{ 211 212 }	{ 61	751
Thomson, Elihu, Swampscott, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Electrical transformer.....	486,916	Nov. 29	2518	730	61	1205
Thomson, Elihu, Swampscott, Mass., assignor to Thomson Electric Welding Company, of Maine. Electric welding.....	487,302	Dec. 6	99	30	61	1341
Thomson, Elihu, Swampscott, and E. W. Rice, Jr., Lynn, Mass. System of electrical distribution.....	468,123	Feb. 2	325	79	58	587

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Thomson, George G., <i>et al.</i> (See Talley, Henry I., assignor.)						
Thomson-Houston Electric Company. (See Bassett, Norman C., assignor.)						
Thomson-Houston Electric Company. (See Blackwell, Francis O., assignor.)						
Thomson-Houston Electric Company. (See Burnett and Doane, assignors.)						
Thomson-Houston Electric Company. (See Deacon, Samuel, assignor.)						
Thomson-Houston Electric Company. (See Demmick, George W., assignor.)						
Thomson-Houston Electric Company. (See Ekström, Axel, assignor.)						
Thomson-Houston Electric Company. (See Elkins, William H., assignor.)						
Thomson-Houston Electric Company. (See Fiske, Jonathan P. B., assignor.)						
Thomson-Houston Electric Company. (See Garland, William H., assignor.)						
Thomson-Houston Electric Company. (See Hoppes, John J., assignor.)						
Thomson-Houston Electric Company. (See Hunter, Rudolph M., assignor.)						
Thomson-Houston Electric Company. (See Moore and Henry, assignors.)						
Thomson-Houston Electric Company. (See Rice, Edwin W., Jr., assignor.)						
Thomson-Houston Electric Company. (See Rohrer, Albert L., assignor.)						
Thomson-Houston Electric Company. (See Sperry, Elmer A., assignor.)						
Thomson-Houston Electric Company. (See Stephens, George, assignor.)						
Thomson-Houston Electric Company. (See Thomson, Elihu, assignor.)						
Thomson-Houston Electric Company. (See Van Depoele, Charles J., assignor.)						
Thomson-Houston Electric Company. (See Wakefield, William O., assignor.)						
Thomson-Houston Electric Company. (See Wightman, Merle J., assignor.)						
Thomson-Houston Electric Company. (See Wirt, Herbert C., assignor.)						
Thomson Hydraulic Company. (See Thomson, John, assignor.)						
Thomson, John, Brooklyn, N. Y. Proportional water-meter	476,099	May 31	3530	888	59	1378
Thomson, John, Brooklyn, N. Y. Gearing	476,101	May 31	3534	888	59	1378
Thomson, John, Brooklyn, N. Y. Disk water-meter	476,102	May 31	3534	889	59	1378
Thomson, John, Brooklyn, N. Y. Positive proportional meter	476,103	May 31	3537	890 891	59	1379
Thomson, John, Brooklyn, N. Y. Proportional water-meter	476,104	May 31	3542	891	59	1380
Thomson, John, Brooklyn, N. Y. Pointer and dial for counting-registers	476,105	May 31	3543	891	59	1380
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Proportional water-meter	476,094	May 31	3519	886	59	1376
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Apparatus for calibrating water-meters	476,095	May 31	3520	886	59	1376
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Positive proportional water-meter	476,096	May 31	3521	886	59	1377
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Proportional water-meter	476,097	May 31	3524	886	59	1377
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Method of and apparatus for maintaining a proportional flow of fluids through separate chambers	476,098	May 31	3526	887	59	1377
Thomson, John, Brooklyn, assignor to Thomson Meter Company, New York, N. Y. Positive proportional water-meter	476,100	May 31	3532	888	59	1378
Thomson, John, Brooklyn, N. Y., assignor to Thomson Hydraulic Company, Newark, N. J. Disk water-meter	485,437	Nov. 1	443	118 119	61	663
Thomson, John, Brooklyn, N. Y., assignor to Thomson Hydraulic Company, Newark, N. J. Positive proportional water-meter	485,438	Nov. 1	444	119	61	663
Thomson, John, Brooklyn, N. Y., assignor to Thomson Hydraulic Company, Newark, N. J. Multiple proportional meter	485,439	Nov. 1	446	119	61	663
Thomson, John, and F. Lambert, Brooklyn, assignors to Thomson Meter Company, New York, N. Y. Disk water-meter	471,295	Mar. 22	2564	651	58	1624
Thomson, Judson L., assignor to Judson L. Thomson Manufacturing Company, Waltham, Mass. Rivet	481,123	Aug. 16	2196	543	60	1031
Thomson, Judson L., assignor to Judson L. Thomson Manufacturing Company, Waltham, Mass. Lacing-stud	481,124	Aug. 16	2197	544	60	1031
Thomson, Mary J., administratrix. (See Serrell, James E.)						
Thomson, McLeod W. (See Vaughan, David F., assignor.)						
Thomson Meter Company. (See Cartright, Robert, assignor.)						
Thomson Meter Company. (See Thomson, John, assignor.)						
Thomson Meter Company. (See Thomson and Lambert, assignors.)						
Thomson, Robert W. (See Phelps and Thomson.)						
Thomson, Robert W., and E. M. Phelps, Lynn, Mass., assignors, by mesne assignments, to Hand Method Finishing Machine Company, Nashua, N. H. Sewing-machine	469,610	Feb. 23	2650	680 681	58	1068
Thomson, Robert W., and E. M. Phelps, Lynn, Mass., assignors to Hand Method Finishing Machine Company, Nashua, N. H. Sewing-machine for finishing buttonhole-pieces	477,028	June 14	1241	301 302	59	1698
Thomson, Robert W., and E. M. Phelps, Lynn, Mass., assignors to Hand Method Finishing Machine Company, Nashua, N. H. Machine for overstitching buttonhole-thrums	484,647	Oct. 18	1739	441 442 443	61	375
Thomson Van Depoele Electric Mining Company. (See Pocock, Francis A., assignor.)						
Thomson, Warren T. (See Scovell, George W., assignor.)						
Thomson, William B., assignor to Detroit Paper Package Company, Detroit, Mich. Pail	486,800	Nov. 22	2577	672	61	1140
Thorén, Emil G., Kristianstad, Sweden. Sewing-machine	483,623	Oct. 4	160	39	61	33
Thorn, Frederick A. and G. Salt Lake City, Utah Ter. Decoy	477,084	June 14	1342	325	59	1719
Thorn, George. (See Thorn, Frederick A. and G.)						
Thorn, George, Salt Lake City, Utah Ter. Grater	477,083	June 14	1341	325	59	1718
Thornbeck, John, Malvern, Canada. Folding rocking-chair	488,704	Dec. 27	2414	599	61	1850
Thorne, Joel W., New York, N. Y. Puzzle	483,820	Oct. 4	449	112	61	93
Thorne Type Setting Machine Company. (See Andrews, Elbert J., assignor.)						
Thorne Type Setting Machine Company. (See Lorenz, William A., assignor.)						
Thorne Type Setting Machine Company. (See Lumis, Thomas J., assignor.)						
Thornhill, Herbert E., Lyons, N. Y. Pen or pencil carrier	485,440	Nov. 1	447	120	61	663
Thornton, Chester B., assignor of one-half to W. E. Thornton, Kaintuck, Idaho. Plow attachment	484,943	Oct. 25	2240	577	61	491
Thornton, Edward S., assignor of one-half to T. Horton, Troy, N. Y. Game-counter	472,744	Apr. 12	1131	290	59	226
Thornton, John, Melbourne, Victoria. Spark-arrester	485,901	Nov. 8	1135	301	61	821
Thornton, John B. (See Guinn, John L., assignor.)						
Thornton, John E., assignor of one-half to E. Pickard, Manchester, England. Photographic shutter	482,854	Sept. 20	1521	378	60	1659
Thornton, William, Chattanooga, Tenn. Clothes-wringer	480,297	Aug. 9	887	225	60	763
Thornton, William C., Jefferson City, Mo. House-door letter-box	475,095	May 17	1943	492	59	1038
Thornton, William C., Jefferson City, Mo. House-door letter-box	475,096	May 17	1945	493	59	1038
Thornton, William E. (See Thornton, Chester B., assignor.)						
Thornton, Winfield G., Minneapolis, Minn. T-square	486,186	Nov. 15	1608	426 427	61	934

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Thornycroft, John L. (See Barnaby, Sydney W., assignor.)						
Thorp, Adelbert H., Toledo, Ohio. Railway time-signal	481,723	Aug. 30	3207	783	60	1252
Thorp, Charles, Trenton, Wis. Thill-coupling	488,781	Dec. 27	2529	628	61	1873
Thorp, Charles, Trenton, Wis. Thill-coupling	488,782	Dec. 27	2530	628	61	1873
Thorp, Henry H., Cleveland, Ohio. Bicycle	478,770	July 12	1077	268	60	230
Thorp, Thomas J. (See Adams and Thorp.)						
Thorp, Thomas J., Chicago, Ill. Metal spoke	467,602	Jan. 26	2121	538	58	426
Thorp, Thomas J., Chicago, Ill. Magazine-gun	473,370	Apr. 19	2147	{ 538 539 }	59	434
Thorpe, Henry H. (See Ledbetter, John W., assignor.)						
Thorpe, Vincent, Fall River, Mass. Shuttle-binder for looms	475,069	May 17	1898	482	59	1029
Thorsen, Ludwig, assignor of one-half to G. Newgard, St. Paul, Minn. Shingle-basket	474,800	May 10	1469	373	59	932
Thowless, Arthur J., assignor to O. M. Thowless, Newark, N. J. Process of and apparatus for forming solid metal ingots	484,476	Oct. 18	1470	374	61	321
Thowless, Orlando M. (See Thowless, Arthur J., assignor.)						
Thrall, Forrest E. (See Doyle, Thrall, and Wilkinson.)						
Thrasher, Pline A., Prosser, Nebr. Draft-equalizer	468,978	Feb. 16	1695	432	58	875
Threlkeld, Calvert W. and C. H., Alfred Centre, N. Y. Chain propeller	485,241	Nov. 1	131	39, 40	61	600
Threlkeld, Colin H. (See Threlkeld, Calvert W. and C. H.)						
Thresher, William H., Amboy, Ill. Car and air-brake coupling	468,372	Feb. 9	728	180	58	674
Thro, John E., et al. (See Williams, William E., assignor.)						
Throckmorton, Isaac N. (See Conway, Harrison V., assignor.)						
Thron, John E., Philadelphia, Pa. Electric bell	484,762	Oct. 18	1919	489	61	414
Throop, John H., Evansville, Ind. Boat-lowering apparatus	472,410	Apr. 5	630	161	59	118
Throop, Josephine L., Greencastle, Ind. Universal adjustable lifter	487,105	Nov. 29	3112	792	61	1263
Thrush, John W., assignor of two-thirds to A. P. Ritzell and P. H. Nefflen, Keyser, W. Va. Reversible double-shovel plow	476,578	June 7	526	124	59	1541
Thuenner, William, Jr., and P. Herchenbach, assignors to Star Cornice and Furnace Company, St. Louis, Mo. Hot-air furnace	479,769	July 26	2701	673	60	564
Thuge, Johan A., assignor to A. W. Rasmussen, Chicago, Ill. Order-holder	478,035	June 28	2893	793	59	2051
Thuge, Johan A., assignor to C. R. Hadley and W. A. Vawter, Chicago, Ill. Temporary holder	475,257	May 17	2183	556	59	1086
Thum, Mandeville, Louisville, Ky. Safety cut-out	472,084	Apr. 5	110	30	59	22
Thum, Mandeville, Louisville, Ky. Electric-circuit-controlling device	473,594	Apr. 26	2542	641	59	532
Thum, Mandeville, Louisville, Ky. Circuit-controlling device	473,595	Apr. 26	2544	641	59	532
Thum, Mandeville, Louisville, Ky. Safety device for electric circuits	479,035	July 19	1494	372	60	320
Thum, Otto and W., Grand Rapids, Mich. Sticky fly-paper	466,637	Jan. 5	519	135	58	100
Thum, Otto and W., Grand Rapids, Mich. Sticky fly-paper. (Reissue)	51,276	Oct. 11	1316	336	61	220
Thum, Otto and W., Grand Rapids, Mich. Book of sticky fly-paper	486,138	Nov. 15	1545	408	61	921
Thum, William. (See Thum, Otto and W.)						
Thuman, Frederic. (See Frazar and Thuman.)						
Thunen, Gerhard L., Oroville, Cal. Safety attachment for gas-burners	471,914	Mar. 29	3491	892	58	1809
Thurber, Alfred, San Pablo, Cal. Slate-cleaner	473,033	Apr. 19	1576	401	59	326
Thurell, John, North Adams, assignor of one-half to J. B. Keany, Milford, Mass. Furnace-grate	487,648	Dec. 6	661	170	61	1452
Thurman, Clemens, Heidelberg, Germany. Spittoon	468,904	Feb. 16	1553	395	58	847
Thurmond Car Coupling Company. (See McKeen, Thomas L., assignor.)						
Thurston, Edwin L., Cleveland, Ohio, assignor to L. Watson, Denver, Colo. Puzzle	487,797	Dec. 13	928	234	61	1523
Thurston, Edwin L., Cleveland, Ohio, assignor to L. Watson, Denver, Colo. Puzzle	487,798	Dec. 13	930	235	61	1523
Thurston, Eli A., Avondale, Ala. Vehicle-wheel	477,473	June 21	1981	492	59	1855
Thurston, George E., Olean, N. Y. Log-turner	471,200	Mar. 22	2424	617	58	1596
Thurston, Harrison F., Centre Bartlett, N. H. Evaporating-pan	476,701	June 7	709	174	59	1578
Thurston, Harrison F., Centre Bartlett, N. H. Culinary vessel	481,316	Aug. 23	2552	626	60	1110
Thurston, Henry C., Norwich, Conn., assignor to Morison-Allen Company, New York, N. Y. Distributing feed-nozzle for filters	488,297	Dec. 20	1756	442	61	1704
Thurston, Henry W., Brooklyn, N. Y. Machine for making fish or other nets	477,085	June 14	1343	{ 326 327 }	59	1719
Thurston, Henry W., Woodside, N. Y., and E. Stenersen, Rockaway, N. J., assignors of one-third to G. R. Barns, Brooklyn, N. Y. Bicycle	483,661	Oct. 4	211	52	61	43
Thurston, James B., Concord, assignor of one-half to W. S. Head, Hooksett, N. H. Joint-clamp for fishing-rods	475,024	May 17	1831	464	59	1016
Thurston, John L., Somerville, and F. B. How, Boston, Mass. Outlet-valve for set bowls	482,534	Sept. 13	1035	{ 250 251 }	60	1551
Thurston, Minnettie R., Kalamazoo, Mich. Cylindrical sewing-machine needle	480,150	Aug. 2	622	157	60	701
Thurston, Robert H., Ithaca, N. Y. Electric-arc lamp	476,700	June 7	708	174	59	1578
Thury, René, assignor to Cuénod, Sautter & Company, Geneva, Switzerland. Regulation of dynamo-electric machines	406,760	Jan. 5	725	187	58	139
Tibbets, Lewis D. (See Imeson, Tibbets, and Kellogg.)						
Tibbits, Edwin A., and C. W. Sadler, Sutter Creek, Cal. Cigar and ash holder	473,646	Apr. 26	2620	660	59	546
Tibbits, James H. (See Brown, George H., assignor.)						
Tibbits, Jonathan H., San Diego, Cal. Bass-bar for violins, tenor-violis, and bass-violis	476,907	June 14	1053	255	59	1660
Tichborne, Charles R. C., A. E. Darley, M. F. Purcell, and S. Geoghegan, Dublin, Ireland, assignors to Brewers and Distillers CO ₂ Company, Limited, Westminster, England. Method of and appliance for the collection and utilization of carbonic-acid gas and other products given off during the process of fermentation	472,085	Apr. 5	111	30	59	22
Tidblad, Carl E., Jamaica Plain, Mass. Valve-gear	482,399	Sept. 13	809	194	60	1508
Tidnam, Frederick H. (See Browne and Tidnam.)						
Tietjen, George H., assignor to Tietjen Sign Company, San Francisco, Cal. Sign-stenciling machine	477,474	June 21	1982	492	59	1856
Tietjen Sign Company. (See Tietjen, George H., assignor.)						
Tiffany, Albert R. (See Young, Wesley, assignor.)						
Tiffany, Albert R., assignor of one-half to W. Young, Dayton, Ohio. Tag-package	470,956	Mar. 15	2045	523	58	1511
Tiffany, Albert R., assignor of one-half to W. Young, Dayton, Ohio. Tag-wiring machine	470,957	Mar. 15	2046	{ 523 524 }	58	1512
Tiffany Chemical Company. (See Tiffany, Walton C., assignor.)						
Tiffany, John C., Xenia, Ohio. Locking device for removable barrel-covers	470,519	Mar. 8	1392	364	58	1374
Tiffany Pressed Brick Company. (See Plant, Stephen J., assignor.)						
Tiffany, Walton C., New York, N. Y., assignor of one-half to B. Cameron, Tucson, Ariz. Ter. Making tanning-extracts	480,376	Aug. 9	1011	.....	60	786
Tiffany, Walton C., New York, N. Y., assignor to Tiffany Chemical Company, of New York. Hydrometer	480,480	Aug. 9	1181	297	60	818
Tiffany, William G. (See d'Amilly and Caillet, assignors.)						
Tighe, Lewis, Detroit, Mich. Device for the transmission of power	487,303	Dec. 6	102	30	61	1342
Tilbery, Scott. (See Bendure and Tilbery.)						
Tilden, Clayland, Jersey City, N. J. Buffer and device for shifting freight on cars	467,065	Jan. 12	1230	311	58	242

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Tilden, Frank W. (See Merriman and Tilden.)						
Tilden, James A., Hyde Park, assignor to Hersey Manufacturing Company, Boston, Mass. Watchman's electric time-recorder	485,591	Nov. 1	668	{ 177 178 179 }	61	711
Tilden, James A., Hyde Park, Mass., assignor to Hersey Manufacturing Company, Portland, Me. Disk water-meter	486,992	Nov. 29	2934	{ 756 757 }	61	1227
Tilden, James A., Hyde Park, Mass., assignor to Hersey Manufacturing Company, Portland, Me. Rotary water-meter	488,587	Dec. 27	2230	552	61	1814
Tileston, Henry M., Kansas City, Mo. Girth-fastener	485,481	Nov. 1	507	134	61	675
Tileston, Henry M., Kansas City, Mo. Band-fastener	485,482	Nov. 1	508	134	61	675
Tilley, John W. (See Baldwin, Frank S., assignor.)						
Tillinghast, Pardon W., Providence, R. I. Pneumatic tire	473,798	Apr. 26	2847	715	59	590
Tillinghast, Pardon W., Providence, R. I. Pneumatic tire and means for inflating the same	477,316	June 21	1736	425	59	1808
Tillinghast, Pardon W., Providence, R. I. Velocipede	486,914	Nov. 29	2815	729	61	1204
Tillinghast, Pardon W., Providence, R. I. Pneumatic tire	486,915	Nov. 29	2817	729	61	1205
Tillmann, E. M., et al. (See Hacke, Karl W., assignor.)						
Tillmann, H., et al. (See Hacke, Karl W., assignor.)						
Tillou, William H. Le Roy, N. Y. Supplementary seat for vehicles	475,954	May 31	3309	835	59	1333
Tilton, Abram, Brooklyn, and A. Hornel, New York, N. Y. Machine for decorating wood	482,855	Sept. 20	1523	378	60	1660
Tilton, Charles F. (See Bailey and Tilton.)						
Tilton, George S., Bristol, N. H. Automatic fire-alarm	467,212	Jan. 19	1487	381	58	300
Tilton, Josephus S. (See Gray, Isaac C., assignor.)						
Timby, Theodore R., Washington, D. C. Revolving-tower fortification	474,271	May 3	592	{ 147 148 149 }	59	752
Timby, Theodore R., Washington, D. C. Apparatus for evaporating brine	475,637	May 24	2785	{ 705 706 707 }	59	1219
Timby, Theodore R., Washington, D. C. Process of and apparatus for aging liquors	485,999	Nov. 8	1300	{ 345 346 347 }	61	856
Timby, Theodore R., Washington, D. C. Apparatus for aging wines, spirits, or other liquors	486,000	Nov. 8	1303	{ 346 347 348 }	61	856
Timewell, Arthur T. (See Bibb and Timewell.)						
Timken, Henry, San Diego, Cal. Vehicle-spring	437,201	Nov. 29	3258	833	61	1291
Timken, Henry, San Diego, Cal. Vehicle-spring	437,202	Nov. 29	3259	834	61	1291
Timm, Charles. (See Woodward and Timm.)						
Timm, Charles, Morgan Park, and A. Johnson, Chicago, Ill. Cutting and gripping tool	471,445	Mar. 22	2794	713	58	1668
Timmerman, Jason D., Spring Lake, N. Y. Bag-holder	477,225	June 21	1601	392	59	1782
Timmis, William, Wilkesburg, Pa. Nut-lock	470,520	Mar. 8	1393	364	58	1374
Timmis, Charles H., assignor of one-half to C. Johnson, John Day, Oreg. Door-check	480,232	Aug. 2	750	189	60	724
Tindall, Augustus, Brenton, Ill. Cultivator	480,529	Aug. 9	1250	314	60	832
Tindall, Charles E., et al. (See Gillespie, Cyrus E., assignor.)						
Tiner, John F., assignor to himself and R. C. Houston, Lavernia, Tex. Spring draft attachment	479,681	July 26	2541	633	60	534
Tingley, David S., et al. (See Marvick, Frederick N., assignor.)						
Tingley, Horace W., Michigan City, Ind., assignor to Automatic Turning Company, Chicago, Ill. Rotary lathe	488,372	Dec. 20	1885	{ 471 472 473 }	61	1729
Tinker, Albert A., Madison, Wis. Flour-cabinet	468,709	Feb. 9	1256	320	58	779
Tinkham, Charles A., Campello, Mass. Superheating steam-coil for smoke-consuming furnaces	468,313	Feb. 2	632	158	58	646
Tinkham, Howard A., Norton, Mass. Water-heating attachment for hot-air furnaces	470,267	Mar. 8	950	236	58	1292
Tinkler, Thomas, Whitechurch, Canada. Plow	479,036	July 10	1495	372	60	320
Tinnemeyer, Frederick C., Evansville, Ind. Roof-valley	484,263	Oct. 11	1128	287	61	243
Tinsley, George W., Columbus, Ind. Hose-nozzle holder	471,156	Mar. 22	2362	603	58	1585
Tinsley, Rufus W., Union, S. C. Coupling for pneumatic car-brakes	486,001	Nov. 8	1304	347	61	856
Tinsley, Rufus W., Union, S. C. Water-elevator	486,002	Nov. 8	1306	{ 347 348 349 }	61	856
Tinsley, William J., Brooklyn, N. Y. Printer's quoin	483,185	Sept. 27	2059	520	60	1778
Tinsman, Samuel H., Morris, Ill. Sulky-plow	476,579	June 7	527	124	59	1541
Tinsman, Samuel H., assignor to Morris Manufacturing Company, Morris, Ill. Draft-equalizer	485,144	Oct. 25	2542	652	61	551
Tipson, William A., San Francisco, Cal. Pipe-making machine	455,242	Nov. 1	132	40	61	600
Tirrell, Jacob P., Boston, assignor to W. H. Kilbourn, Greenfield, Mass. Apparatus for stopping engines or other motors	468,753	Feb. 9	1317	334	58	792
Tirrell, Jacob P., Boston, assignor to W. H. Kilbourn, Greenfield, Mass. Apparatus for stopping engines	469,669	Feb. 23	2740	{ 704 705 706 }	58	1089
Tischler, George, and C. Holmok, Cleveland, Ohio. Safety device for vehicles	466,840	Jan. 12	862	220	58	174
Titus, Charles T., et al. (See Weller, Chester A., assignor.)						
Titus, John C., assignor of one-half to New Bremen Machine Company, New Bremen, Ohio. Brick or tile machine	478,267	July 5	330	80	60	66
Titus, Jonah E. (See Bowers and Titus.)						
Titzel, John A., Glenshaw, Pa. Saturating articles or substances	486,744	Nov. 22	2483	648	61	1122
Tloczynski, Apollonius A. (See Wurzburg and Tloczynski.)						
Tobey, Charles W., New Bedford, Mass. Connection for electric conductors	474,584	May 10	1128	288	59	865
Tobey, Charles W., assignor to Burr & Tobey, New Bedford, Mass. Rheostat	480,151	Aug. 2	623	158	60	701
Tobey, Charles W., assignor to Burr & Tobey, New Bedford, Mass. Electric-cord tip	480,152	Aug. 2	627	159	60	702
Tobey, Edward A. (See Winchester, William W., assignor.)						
Tobey, Fred W., assignor to Grand Rapids Brass Company, Grand Rapids, Mich. Screw-driving and washer-feeding machine	480,530	Aug. 9	1251	{ 314 315 316 }	60	832
Tobey, Henry A., Toledo, Ohio. Gas-meter	487,907	Dec. 13	1103	276	61	1557
Tobey, Henry A., Toledo, Ohio. Gas-meter register	487,908	Dec. 13	1106	276	61	1557
Tobey, Henry A., Toledo, Ohio. Art of and mechanism for recording the state of meter-registers	487,909	Dec. 13	1107	277	61	1557
Tobey, Samuel W., assignor to himself and C. J. Furer, Fairfield, Nehr. Milk-cooler	478,482	July 5	643	158	60	128
Tobie, Charles E., Hiawatha, Kans. Automatic regulator for windmills	486,688	Nov. 22	2395	626	61	1104
Todd, Charles A. (See Adams, Joseph C., assignor.)						
Todd & Co., Edward. (See Smith, James B., assignor.)						
Todd Cotton Harvester Company. (See Todd, George N., assignor.)						
Todd, Edmund N., Newark, N. J. Apparatus for the manufacture of transparent sheets of pyroxyline	483,701	Oct. 4	269	66	61	56
Todd, George N. (See Foote, Walter E., assignor.)						
Todd, George N., Chicago, Ill. Cotton-harvester	468,373	Feb. 9	730	181	58	674
Todd, George N., Chicago, Ill., assignor to Todd Cotton Harvester Company, of Illinois. Picker-stem and mechanism for operating the same	483,121	Sept. 20	1945	492	60	1745
Todd, Herman A., and A. H. Anderson, Shelton, Wash. Journal-bearing	472,150	Apr. 5	218	58	59	41
Todd, Herman A., and A. H. Anderson, Shelton, Wash. Center-plate for logging-cars	472,151	Apr. 5	219	58	59	41

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Todd, Herman A., and A. H. Anderson, Shelton, Wash. Chock-block for logging-cars	472,152	Apr. 5	220	58, 59	59	41
Todd, Jefferson D., assignor of one-half to J. M. Garner, Chico, Cal. Sheep-shears	484,379	Oct. 11	1307	334	61	278
Todd, John R., Glenrock, Wyo. Branding-tool	487,304	Dec. 6	103	30	61	1342
Todd, John W., Wilmington, Del. Spike	471,658	Mar. 29	3089	786	58	1731
Todd, John W., Portland, Oreg. Saw-tooth	481,836	Aug. 30	3400	835	60	1289
Todd, Paul P. (See Doremus, Victor E., assignor.)						
Todd, Richard, Manchester, England. Feed-regulating attachment for sewing-machines	478,660	July 12	907	225	60	195
Todd, Samuel G., New Haven, Conn. Releasing device	487,062	Nov. 29	3037	779	61	1247
Toledo Bicycle Company. (See Kenney and Cable, assignors.)						
Toledo Electric Heating Company. (See Perkins and Jones, assignors.)						
Toledo Tin-Ware Manufacturing Company. (See Stollberg, Charles, assignor.)						
Tolliver, Charles T., and P. Ruffin, Boston, Mass. Odor-removing device for cooking-stoves	486,550	Nov. 22	2164	571	61	1058
Tollner, Charles, Pulaski, N. Y. Trick savings-bank	475,525	May 24	2617	666	59	1186
Tom, Joseph C., Pontotoc, Tex. Pump	483,406	Sept. 27	2416	607	60	1845
Tomek, Frank J., St. Louis, Mo. Hand-vice	468,000	Feb. 2	143	34	58	551
Tomey, John J., assignor of one-half to N. B. Russell, Washington, Ind. Pipe and rod wrench	472,153	Apr. 5	222	59	59	42
Tomey, John J., assignor of one-half to N. B. Russell, Washington, Ind. Wrench	476,841	June 14	942	229	59	1638
Tomlinson, Jonas, assignor of one-half to E. P. McNally, Brinkley, Ark. Lamp-chimney protector	484,564	Oct. 18	1600	406	61	348
Tomlinson, Lyman O., Chicago, Ill. Wagon-starter	469,758	Mar. 1	143	37	58	1128
Tomlinson, Thomas, Toronto, Canada. Seal-trap for catch-basins	468,141	Feb. 2	355	88	58	593
Tomlinson, Thomas, London, England. Apparatus for distribution of electricity	487,356	Dec. 6	194	53 54	61	1359
Tompkins, Cornelius B., assignor to himself, W. W. and S. D. Tompkins, Elmira, N. Y. Dry closet	482,987	Sept. 20	1742	440	60	1702
Tompkins, Daniel A., and P. Bigelow, Charlotte, N. C. Engine-governor	469,105	Feb. 16	1874	480	58	911
Tompkins, Jordan W., Amesbury, Mass. Reamer	479,682	July 26	2542	633	60	534
Tompkins, Stewart D., et al. (See Tompkins, Cornelius B., assignor.)						
Tompkins, William, and G. Schneider, Sidney, Ohio. Horseshoeing-rack	470,958	Mar. 15	2048	524	58	1512
Tompkins, William W., et al. (See Tompkins, Cornelius B., assignor.)						
Tomson, William H. (See Benham and Tomson.)						
Toney, George W., Westborough, and M. V. Livingston, Newton, Mass. Pneumatic tire	472,411	Apr. 5	632	161	59	118
Toney, Squire, assignor of one-half to M. Brown, Viroqua, Wis. Lath	487,166	Nov. 29	3205	821	61	1281
Tong, James H., assignor of seven-fifteenths to J. F. De Lassus, St. Louis, Mo. Car-brake	480,910	Aug. 16	1848	460	60	966
Tong, Lucius G. (See Slater, George L., assignor.)						
Tonkin, John J., Philadelphia, Pa. Steam-boiler	469,287	Feb. 23	2163	555	58	972
Tonkin, John J., assignor to W. G. Warden, Philadelphia, Pa. Steam-boiler	474,785	May 10	1441	365 366	59	927
Tonks, Harry and T., Newark, N. J. Pearl-button machine	485,338	Nov. 1	286	77, 78	61	630
Tonks, Thomas. (See Tonks, Harry and T.)						
Toof, Edwin J. (See Botsford, George, assignor.)						
Toohy, Cornelius, San Francisco, Cal. Grocer's caddy	482,285	Sept. 6	596	142	60	1451
Toole, Oswald E., Hnnnewell, Mo. Tobacco-cutter	483,588	Dec. 27	2232	552	61	1815
Toone, Benjamin, Nottingham, England. Jacquard punch-selecting apparatus	487,499	Dec. 6	441	113 114	61	1408
Toops, Emory D., Indianapolis, Ind. Elevator-gate	482,286	Sept. 6	597	142	60	1451
Toops, John W., Kionsville, Ohio. Gravity-latch	485,724	Nov. 8	884	237	61	771
Toops, John W., Kionsville, Ohio. Key	485,725	Nov. 8	885	237	61	771
Topham, George, assignor to J. S. Topham, Washington, D. C. Purse	487,760	Jan. 26	2367	600	58	473
Topham, Henry, Philadelphia, Pa. Heddle for cross-weaving looms	472,412	Apr. 5	633	162	59	118
Topham, James S. (See Topham, George, assignor.)						
Topliss, John R., and J. A. Kay, Melbourne, Victoria. Machine for nicking printing-type	473,271	Apr. 19	1978	496	59	401
Topp, George A., et al. (See Cook, Thomas R., assignor.)						
Topping, George W., San Mateo, Cal. Ice-pick	474,879	May 17	1597	407	59	971
Toquet, Benjamin H. (See Smith, Heman P., assignor.)						
Toresen, Hans, Yankton, S. D. Lever for raising and lowering buggy-tops	480,531	Aug. 9	1254	315	60	833
Torian, W. H. (See Fox, James T., assignor.)						
Torinus, George E. (See Pirrung, Frank E. and H. A., assignors.)						
Tormey, George P. (See Thompson and Tormey.)						
Torrance, George J. (See Pawling, William M., assignor.)						
Torrance, George J., Harrison, N. J. Balling-machine	472,774	Apr. 12	1173	300	59	234
Torrey, Francis B. (See Cherry, Thomas E., assignor.)						
Torrey, George H., et al. (See Miller, Lewis, assignor.)						
Torrey, James W. (See Hollar and Holmes, assignors.)						
Torrey, James W. (See Holmes, Frederick S., assignor.)						
Tosh, James B., Valley Falls, Kans. Corn-harvester	477,317	June 21	1738	426	59	1808
Tothill, William S., Chicago, Ill. Baby-jumper	483,270	Sept. 27	2219	557	60	1807
Totten, Homer L., Canton, Ohio. Double-seam folder	478,723	July 12	996	247	60	214
Toucey, Ferris D., assignor of three-fourths to F. C. Johnson, Minneapolis, Minn. Rotary valve	487,687	Dec. 6	732	187	61	1465
Toucey, Ferris D., assignor of three-fourths to F. C. Johnson, Minneapolis, Minn. Balanced slide-valve	488,488	Dec. 20	2066	513	61	1767
Touche, John E., Christchurch, New Zealand. Gearing	488,373	Dec. 20	1889	473	61	1730
Toungreau, Napoleon, assignor of one-half to J. O. Marceau, Montreal, Canada. Reel for unraveling tubular-knitted goods and winding the yarn	482,932	Sept. 20	1648	415	60	1683
Tournell, John. (See Fredrikson, Andrew J., assignor.)						
Towar, George W., Jr., Detroit, Mich. Centrifugal machine for emulsifying liquids	474,880	May 17	1598	407	59	971
Tower, Abner J., trustee. (See Noll, Augustus, assignor.)						
Tower, Caleb E., assignor to Economist Plow Company, South Bend, Ind. Sulky-plow	475,638	May 24	2787	706 707	59	1220
Tower, Clinton A., Cleveland, Ohio. Car-coupling	487,546	Dec. 6	512	133	61	1422
Tower, Clinton A., Cleveland, Ohio. Car-coupling	487,649	Dec. 6	663	171	61	1453
Tower, Clinton A., Cleveland, Ohio. Car-coupling	487,650	Dec. 6	666	171 172	61	1453
Tower, Clinton A., Cleveland, Ohio, assignor to Empire Car Coupler Company, Weehawken, N. J. Car-coupling	482,105	Sept. 6	300	71	60	1394
Tower, Clinton A., Cleveland, Ohio, assignor to Empire Car Coupler Company, Weehawken, N. J. Car-coupling	484,125	Oct. 11	890	236 237	61	197
Tower, Cyrus R. (See Atkinson, William, assignor.)						
Tower, Daniel L., Brooklyn, N. Y. Automatic passenger-register	468,845	Feb. 16	1462	373 374	58	830
Tower, Daniel L., Brooklyn, N. Y. Change making and delivering device	486,201	Nov. 15	1628	431	61	937

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Tower, John J. (See Kahlke, Henry W., assignor.)						
Towl, Forrest M. (See Squire, Cobb, and Towl.)						
Towle, William A. (See Smith and Towle.)						
Towler, Maximilian J. L., Detroit, Mich. Detachable calk for horseshoes.....	487,038	Nov. 29	3002	773	61	1240
Towilson, Edward, assignor to Rotary Engine Syndicate, Limited, Norwich, England. Rotary fluid-pressure engine.....	481,441	Aug. 23	2748	676	60	1147
Towilson, Edward, assignor to W. T. Sturgess and E. Towilson, Norwich, England. Rotary engine.....	483,027	Sept. 20	1809	457 458 459	60	1716
Town, Jane, Dekorra, Wis. Shoulder-brace.....	472,086	Apr. 5	112	30	59	23
Towne, E. B. (See Hay, Walter, assignor.)						
Townsend, Crighton R., Idaho Springs, Colo. Ore-concentrator.....	474,272	May 3	595	148	59	753
Townsend, Israel, Portsmouth, Va. Traction-engine.....	482,599	Sept. 13	1132	273	60	1570
Townsend, Jerome C., Minneapolis, Minn. Button-fastener.....	479,538	July 26	2320	580	60	494
Townsend, John J., Portsmouth, Va., assignor to Townsend Marine Invention Company, Baltimore, Md. Recording-compass.....	477,282	June 21	1676	410 411	59	1796
Townsend, John J., Portsmouth, Va., assignor to Townsend Marine Invention Company, Baltimore, Md. Automatic recording-compass.....	477,283	June 21	1680	412 413	59	1797
Townsend, John J., Portsmouth, Va., assignor to Townsend Marine Invention Company, Baltimore, Md. Automatic course, speed, and time recorder for vessels.....	477,284	June 21	1682	412	59	1797
Townsend, John R., Bloomsburg, Pa. Lead-pencil attachment for fountain-pens.....	487,799	Dec. 13	932	235	61	1524
Townsend, Louis, Evansville, Ind. Harness-suspending device.....	488,854	Dec. 27	2647	655	61	1-97
Townsend Marine Invention Company. (See Townsend, John J., assignor.)						
Townsend, Philip S., Rochester, N. Y. Paper-weight.....	470,222	Mar. 8	891	220	58	1281
Townsend, Philip S., Rochester, N. Y. Safety attachment for street-cars.....	472,184	Apr. 5	273	71	59	52
Townsend, Ralph. (See Jones and Townsend.)						
Townsend, Ralph, New York, N. Y. Recoil attachment for gun-stocks.....	488,855	Dec. 27	2648	656	61	1897
Towry, William J. (See Pickup and Towry.)						
Tozier, G. W., et al. (See Hendricks, Frank P., assignor.)						
Trabold, Valentin C., Newark, N. J. Beer-cooler.....	468,050	Feb. 2	216	53	58	567
Tracy, Doria, Toledo, Ohio. Rolling blower for fireplaces and grates.....	474,978	May 17	1759	446	59	1002
Tracy, Harriet R., New Brighton, N. Y. Sewing-machine.....	469,367	Feb. 23	2929	585	58	997
Tracy, Harriet R., New Brighton, N. Y. Loop-taker and actuating mechanism therefor.....	470,796	Mar. 15	1-00	462 463 464	58	1464
Tracy, Harriet R., New Brighton, N. Y. Safety device for elevators.....	470,960	Mar. 15	2050	524 525	58	1513
Tracy, Harriet R., New Brighton, N. Y. Loop-taker for sewing-machines.....	471,035	Mar. 15	2164	557	58	1535
Tracy, Harriet R., New Brighton, N. Y. Feeding mechanism for sewing-machines.....	471,036	Mar. 15	2166	557	58	1535
Tracy, Harriet R., New Brighton, N. Y. Shuttle-actuating mechanism for sewing-machines.....	471,037	Mar. 15	2167	557	58	1535
Tracy, Harriet R., New York, N. Y. Sewing-machine table.....	470,959	Mar. 15	2049	524	58	1512
Tracy, John E., and A. N. Graham, Chicago, Ill. Twine-holder.....	468,856	Dec. 27	2650	656	61	1897
Tracy, William P., Grand Rapids, Mich. Folding bed.....	472,321	Apr. 5	492	128	59	92
Tragethon, Arne S., Kensett, Iowa. Power-transmitter.....	484,066	Oct. 1	813	206	61	181
Tragethon, Arne S., Kensett, Iowa. Grinding-mill.....	486,003	Nov. 8	1807	348	61	857
Trainer, John W., assignor to Fort Wayne Organ Company, Fort Wayne, Ind. Reed-organ.....	472,201	Apr. 5	299	79	59	56
Trainer, John W., assignor to Fort Wayne Organ Company, Fort Wayne, Ind. Stop-action for organs.....	474,881	May 17	1599	408	59	971
Tramblay, Felix, Chicago, Ill. Check-file.....	486,993	Nov. 29	2935	757	61	1237
Transue, Frank. (See Cornelius, John, assignor.)						
Trapp, Edward A., Jersey City, N. J. Guard-rail for railways.....	477,713	June 28	2381	595	59	1953
Trask, Leo B., assignor of one-half to A. Perry, Pontiac, Mich. Book-index.....	466,530	Jan. 5	354	89	58	68
Trask, Lucius C., assignor to E. L. Tebbets, Greenwood, Me. Gage-lathe.....	478,178	July 5	169	43, 44	60	36
Trasbe, Isidor, and A. Kattentidt, Hanover, Germany. Bottle-stopper.....	478,483	July 5	644	158	60	128
Trant & Hine Manufacturing Company. (See Richards, Hubert P., assignor.)						
Trant, Justus A. (See Haslam, Henry, assignor.)						
Trant, Justus A. (See Shelby, Christopher C., assignor.)						
Trant, Justus A., New Britain, Conn. Suspender-buckle case.....	471,259	Mar. 22	2542	638	58	1613
Trant, Justus A., New Britain, Conn. Trousers-guard.....	478,772	July 12	1080	268	60	230
Trant, Justus A., New Britain, Conn. Suspender-buckle.....	480,660	Aug. 9	1497	373	60	879
Trant, Justus A., New Britain, Conn. Cast-off buckle.....	480,791	Aug. 16	1666	416	60	929
Trant, Justus A., New Britain, Conn. Snap-hook.....	480,792	Aug. 16	1667	417	60	929
Trant, Justus A., New Britain, Conn. Buckle.....	481,213	Aug. 23	2359	581	60	1076
Trant, Justus A., Hartford, Conn. Suspender-buckle.....	474,199	May 3	484	117	59	731
Trant, Justus A., assignor to Stanley Rule and Level Company, New Britain, Conn. Marking-gage.....	481,515	Aug. 23	2861	703	60	1170
Trautman, Adam, et al. (See Widmer, Jacob A., assignor.)						
Trantvettter, Erwin von, Brooklyn, N. Y. Music-leaf turner.....	477,828	June 28	2565	642 643	59	1987
Travers, Vincent P. (See Rod, Albert O., assignor.)						
Traves, Webster F., and M. O. Whelan, Detroit, Mich. Force-feed lubricator.....	469,821	Mar. 1	253	65	58	1150
Travis, Albert P., Grundy Centre, Iowa. Car-seal.....	485,070	Oct. 25	2433	625	61	529
Travis, Charles L. (See Street and Travis.)						
Travis, Charles L., Minneapolis, Minn. Machine for removing superfluous material from thread.....	477,285	June 21	1684	412 413 414	59	1798
Travis, Charles L., assignor to Union Stock Car Company, Minneapolis, Minn. Stock-car.....	475,258	May 17	2185	556 557	59	1087
Travis, Charles L., assignor to Minneapolis Electro Matrix Company, Minneapolis, Minn. Matrix-making machine.....	479,539	July 26	2321	580	60	494
Travis, John J., assignor of one-half to H. G. Ide, Oxford, Mich. Key-fastener.....	468,630	Feb. 9	1129	287	58	754
Travis, John J., Three Rivers, assignor of one-half to H. G. Ide, Oxford, Mich. Stovepipe and collar-fastener.....	468,629	Feb. 9	1129	287	58	753
Travis, Owen J., assignor of one-half to A. E. Shorthill, Marshalltown, Iowa. Derailing-frog.....	479,338	July 19	1953	488	60	408
Travis, William C., assignor of one-half to P. Dickman, Defiance, Ohio. Road-cart.....	470,021	Mar. 1	565	140	58	1208
Trawick, Joseph E., assignor of three-fourths to H. R. Jones, T. B. Vance, Spear, and G. H. Zimmerman, Cranberry, N. C. Grinder.....	482,400	Sept. 13	810	194 195	60	1508
Traylor, John H., Richmond, Va. Plate-lifter.....	475,363	May 24	2352	603	59	1136
Treadwell, Harry D., et al. (See Lawrence, George A., assignor.)						
Treadwell, Levi P., Danbury, Conn. Sash-fastener.....	476,431	June 7	321	73	59	1500
Treadwell, Levi P., Danbury, Conn. Sash-fastener.....	476,432	June 7	322	74	59	1500
Treadwell, Wellington C., Adrian, Mich. Ice-cream mold.....	486,362	Nov. 15	1883	496	61	989

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. &c.	Vol.	Page.
Treat, Charles H., Baltimore, Md. Packing and shipping case for fruit.....	469,986	Mar. 1	521	{ 129 130 327 328 }	58	1199
Treat, Charles H., and A. B. Banghart, Baltimore, Md.; said Banghart assignor to said Treat. Machine for cutting veneer dish-blanks.....	477,026	June 14	1346	{ 327 328 }	59	1720
Treat, Cornelius A., assignor to C. A. Treat Manufacturing Company, Hannibal, Mo. Chill for casting car-wheels.....	481,442	Aug. 23	2749	676	60	1148
Treat, Joseph A., Stuart, Iowa. Cash-register.....	474,614	May 10	1170	{ 297 298 299 }	59	873
Treat, Joseph A., Stuart, Iowa. Monument.....	475,003	May 17	1801	456	59	1010
Treacy, Laurence J., St. Louis, Mo., assignor to Champion Heating and Ventilating Com- pany, of Missouri. Hot-air furnace.....	471,038	Mar. 15	2168	558	58	1535
Treacy, Laurence J., St. Louis, Mo., assignor to Champion Heating and Ventilating Com- pany, of Missouri. Ventilating-furnace.....	471,701	Mar. 29	3160	806	54	1744
Tree, Thomas, Ithaca, N. Y. Hot-water heater.....	476,218	May 31	3741	945	59	1418
Trefz, Otto R., assignor to Lester Piano Company, Philadelphia, Pa. Muffling attachment for upright pianos.....	476,842	June 14	943	230	59	1638
Tregoning, Edgar, assignor of one-half to A. E. Bliss, Malden, Mass. Tell-tale device for electric circuits.....	470,722	Mar. 15	1686	435	58	1442
Tremain, Charles W., Portland, Oreg. Steam-engine.....	467,458	Jan. 19	1862	475	58	371
Tremain, Charles W., Portland, Oreg. Steam-stamp.....	469,187	Feb. 16	1987	598	58	933
Tremain, Charles W., Portland, Oreg. Steam-stamp.....	480,923	Aug. 2	752	190	60	724
Tremain, Charles W., and S. Johnson, assignors to Prospective Mining and Machinery Company, Portland, Oreg. Steam-engine.....	480,153	Aug. 2	627	159	60	702
Tremblay, Alfred, Holyoke, Mass. Bicycle.....	482,856	Sept. 29	1525	379	60	1660
Tremble, Joseph J., Whitewood, S. D. File.....	470,923	Mar. 8	892	220	58	1281
Tremper, Eugene. (See Lynch and Tremper.)						
Trench, Ira J., Middletown, Conn. Adjustable nut for axles.....	473,272	Apr. 19	1981	407	59	402
Trendley, John, assignor of three-fourths to J. W. Schorr, O. Stifel, and C. Noll, St. Louis, Mo. Car-brake.....	486,801	Nov. 22	2578	672	61	1140
Trenkamp, Henry, Cleveland, Ohio. Water-heater.....	470,924	Mar. 8	893	{ 220 221 }	58	1281
Trenner, Alfred B., assignor to National Fly Paper Company, Cincinnati, Ohio. Packing sticky fly-paper.....	467,125	Jan. 12	1350	344	58	265
Trenton Iron Company. (See Hewitt, William, assignor.)						
Trenton Iron Company. (See Spillsbury, Edmund G., assignor.)						
Tresidder, Tolmie J., Sheffield, England. Manufacture of armor-plates.....	475,364	May 24	2353	603	59	1136
Trethewey Manufacturing Company. (See Trethewey, Samuel, assignor.)						
Trethewey, Samuel, Pittsburg, Pa. Valve-gear for steam-hammers.....	470,723	Mar. 15	1687	435	58	1442
Trethewey, Samuel, assignor to Trethewey Manufacturing Company, Pittsburg, Pa. Ro- tary shears.....	479,037	July 19	1496	372	60	321
Trethewey, Samuel, assignor to Trethewey Manufacturing Company, Pittsburg, Pa. Power-hammer.....	482,988	Sept. 20	1743	449	60	1702
Trew, Charles R., Dunbar, Pa. Safety-catch for mining-cars.....	475,939	May 24	2789	707	59	1240
Trewby, George C., London, England. Apparatus for charging gas-retorts.....	468,374	Feb. 9	733	182	58	675
Trehwella, Benjamin, Jr. (See Trehwella, William, assignor.)						
Trehwella, William, assignor of one-half to B. Trehwella, Jr., Blackwood, Victoria. Lever- jack.....	476,702	June 7	710	{ 174 175 }	59	1578
Trexler, Milton W., East Greenville, Pa. Car-coupling.....	474,703	May 19	1314	335	59	902
Triant, Thomas, et al. (See Raymond, Silas H., assignor.)						
Tribbett, Francis M., Abingdon, Ill. Sawbuck.....	486,415	Nov. 15	1973	523	61	1007
Trick, Philip, Crestline, Ohio. Fence.....	483,186	Sept. 27	2060	520	60	1778
Tricycle Manufacturing Company. (See Rodgers and Grant, assignors.)						
Trier, John M., Jefferson, Ind. Harvester and binder.....	481,706	Aug. 30	3170	774	60	1245
Trillich, Heinrich, Munich, Germany. Coffee substitute and preparing the same.....	488,801	Dec. 27	2562	636	61	1880
Trimble, William. (See Cline and Trimble.)						
Trimble, William D., et al. (See Phelan, John, assignor.)						
Trimby, Thomas W., Rochester, N. Y. Sole.....	476,499	June 7	418	97	59	1519
Trimmer, D. S. (See Stevens, Samuel J., assignor.)						
Trimont Manufacturing Company. (See Dearborn, Richard J., assignor.)						
Trine, Samuel G., assignor of one-half to G. W. Brong, Pierre, S. D. Car-coupling.....	467,839	Jan. 26	2490	631	58	497
Trisold, Ambrose A., and C. F. Davenport, Brooklyn, N. Y. Packing for pistons.....	473,182	Apr. 19	1839	463	59	372
Tripp, Charles A., Brattleborough, Vt. Badge.....	471,039	Mar. 15	2169	558	58	1536
Tripp, Henry A., et al. (See Barber, Arthur J., assignor.)						
Tripp, Seth D., Lynn, Mass. Wrapping-machine.....	472,202	Apr. 5	363	79, 80	59	57
Tripp, Thomas, Avon, Mass. Balanced slide-valve.....	470,339	Mar. 8	1106	{ 282 283 }	58	1320
Tripp, Walter, et al. (See Barber, Arthur J., assignor.)						
Trippe, Sylvanus L., New York, N. Y. Electric-lighting system.....	468,487	Feb. 9	911	{ 231 232 }	58	710
Trips, Peter, Lebanon, Ind. Case-cleaner.....	482,690	Sept. 13	1133	274	60	1570
Trist, Nicholas B., Pittsburg, Pa. Means for shaping metal plates, bars, &c.....	484,264	Oct. 11	1129	{ 287 288 }	61	243
Tritz, Joseph, Burlington, Iowa. Meat-mixing machine.....	488,098	Dec. 13	1425	356	61	1623
Triumph Compound Engine Company. (See Hobart, James C., assignor.)						
Trix, John, assignor to American Injector Company, Detroit, Mich. Injector.....	488,099	Dec. 13	1426	356	61	1623
Troast, William F., et al. (See Slaymaker, Samuel R., assignor.)						
Troast, William F., assignor of one-third to Slaymaker, Barry & Co., Lancaster, Pa. Pad- lock.....	467,528	Jan. 26	1991	505	58	403
Troast, William F., assignor to Slaymaker, Barry & Co., Lancaster, Pa. Padlock.....	470,268	Mar. 8	953	{ 236 237 }	58	1293
Troast, William F., and S. R. Slaymaker, assignors to Slaymaker, Barry & Co., Lancaster, Pa. Padlock.....	488,331	Dec. 20	1655	413	61	1685
Trochu, Athanase, Redon, France. Tailor's measuring apparatus.....	483,271	Sept. 27	2220	557	60	1807
Troll, Joseph, Belleville, Ill. Apparatus for delineating the moon's orbit.....	487,800	Dec. 13	933	235	61	1524
Trone, Pierre G., assignor of one-half to H. Levi, New Orleans, La. Burglar-alarm.....	479,320	July 19	1925	481	60	402
Tropical Fibre Machine and Process Company. (See Myers, James L., assignor.)						
Trossen, August, et al. (See Doty, James, assignor.)						
Troth, William H. (See Nichols, Abel P., assignor.)						
Trott, Warren E., Brooklyn, N. Y. Safety-guard for scarf-pins, studs, &c.....	479,578	July 26	2378	593	60	504
Trotter, Joseph A., Valleyfield, Canada. Bottle-alarm.....	475,526	May 24	2619	666	59	1186
Trousers Stretcher Company. (See Macdonald, George S., assignor.)						
Trout, Carver C., Sharon, Pa. Fence.....	487,083	Nov. 29	3070	788	61	1254

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. ^{ss}	Vol.	Page.
Trouvé, Gustave. (See Haas and Trouvé.)						
Trowbridge, Munn, Hackensack, N. J. Belt-holder	488,639	Dec. 27	2309	572	61	1829
Troxler, Gustavus, Jr. (See Silberberg, Reichman, and Troxler.)						
Troxler, Gustavus, Jr., assignor of one-half to I. L. Silberberg, Newark, N. J. Machine for securing lacing studs or staples	466,810	Jan. 12	813	209 210	58	165
Troxler, Gustavus, Jr., assignor of one-half to I. L. Silberberg, Newark, N. J. Lacing-stud	466,811	Jan. 12	815	210	58	165
Troy, Edward, <i>et al.</i> (See Mooney, Benjamin F., assignor.)						
Troy Laundry Machinery Company. (See Wiles and Wendell, assignors.)						
Troy Steel and Iron Company. (See Arnold, Everett D., assignor.)						
Truax, Charles H., Chicago, Ill. Surgical pump	487,136	Nov. 29	3154	808 809	61	1271
Truax, George E., Denver, Colo. Ore-car	466,717	Jan. 5	654	168	58	124
Truax, George E., Denver, Colo. Steam-boiler cleaner	487,651	Dec. 6	669	172	61	1454
True, Irving J., Hope Valley, R. I. Tag-holder	483,314	Sept. 27	2283	573	60	1819
True, James A., Pawtucket, R. I. Shoe-sewing machine	480,882	Aug. 16	1800	450	60	956
True, Moses E., Batavia, N. Y. Crosscut-saw handle	476,936	June 14	1104	266	59	1670
True, Richard S., assignor, by mesne assignments, to R. S. True Company, Syracuse, N. Y. Bicycle-saddle. (Reissue)	11,249	June 21	2252	564	59	1909
True, Willie W., and E. C. Blanchard, Newport, Vt. Strainer	468,032	Feb. 2	191	47	58	561
Truitt, Owen K., Washington, D. C. Device for moistening the leaves of press-copy books	485,592	Nov. 1	671	178	61	712
Truman, Edgar H., Wilmington, Del. Game apparatus	479,683	July 26	2543	633	60	534
Trumble, Channcey B., assignor, by mesne assignments, of one-half to H. G. Moe, Groton, N. Y. Animal-trap	481,707	Aug. 30	3171	775	60	1245
Trumbull, Hugh, Hartford, Conn. Band-marker for backs of books	475,830	May 31	3108	787	59	1294
Trump, Edward N. (See Bradburn, Trump, and Pennock.)						
Trump, John G., assignor of eleven-twelfths to P. J. Trump, J. Jordan, C. Hildner, Richville, E. H. Taylor, R. Preston, R. V. Bray, J. C. Loss, R. Morris, Vassar, M. Reichle, G. Reid, Reese, and S. M. Haight, Denmark, Mich. Vehicle	477,475	June 21	1984	492	59	1856
Trump, Paul J., <i>et al.</i> (See Trump, John G., assignor.)						
Truscott, Charles H., <i>et al.</i> (See Shipley, Henry T., assignor.)						
Trussell Automatic Freezer Company. (See Trussell, Wilburt C., assignor.)						
Trussell, Wilburt C., Boston, Mass., assignor to Trussell Automatic Freezer Company, of Maine. Refrigerating compound	484,983	Oct. 25	2299		61	502
Trussell, Wilburt C., Boston, Mass., assignor to Trussell Automatic Freezer Company, of Maine. Refrigerator	486,841	Nov. 22	2649	692	61	1156
Tryon, John M., <i>et al.</i> (See Brown, James W., assignor.)						
Tschantz, Abraham J., Orrville, Ohio. Oil-can. (Reissue)	11,223	Feb. 9	1360	343	58	801
Tschantz, Abraham J., Orrville, Ohio. Oil-can	487,500	Dec. 6	444	114	61	1409
Tschofen, Fidelius, Vienna, Austria-Hungary. Magic picture	471,305	Mar. 22	2581		58	1627
Tschop, Albert, Poughkeepsie, N. Y. Automatic tension and take-up lever in grain or straw binding machines	467,550	Jan. 26	2047	517	58	412
Tubbs, Dean C., Detroit, Mich. Ironing-machine	476,332	June 7	168	41	59	1469
Tubbs, N. B. (See Noble, Samuel C., assignor.)						
Tubular Rivet Company. (See Bray and Hemmenway, assignors.)						
Tuch, Charles L. (See King and Tuch.)						
Tuch, Morris, assignor to S. G. Tuch, Elmira, N. Y. Buckle	470,625	Mar. 8	1538	400	58	1404
Tuch, Sarah G. (See Tuch, Morris, assignor.)						
Tuck, Josiah H. L., San Francisco, assignor of one-half to E. E. Tucker, Stockton, Cal. Conveyer	474,766	May 10	1443	366	59	927
Tuck, Josiah H. L., San Francisco, assignor of one-half to E. E. Tucker, Stockton, Cal. Cable	488,640	Dec. 27	2310	572	61	1829
Tucker, Albert F., Anburndale, Mass. Telegraph-key	479,859	Aug. 2	125	31	60	607
Tucker, Andrew J., Springfield, Mass. Dandy-roll	476,968	June 14	1155	278 279	59	1680
Tucker, E. E. (See Tuck, Josiah H. L., assignor.)						
Tucker, George E., Mount Vernon, Ill. Stirrup	470,770	Mar. 15	1761	453	58	1457
Tucker, Junius E., Memphis, Tenn. Perforating attachment	473,483	Apr. 26	2341	593	59	494
Tucker, Richard M., Conway, Mass. Car-coupling	468,846	Feb. 16	1466	374	58	830
Tucker, Stephen D., <i>et al.</i> (See Crowell, Luther C., assignor.)						
Tucker, Stephen D., <i>et al.</i> (See Crowell, Luther C., assignor.) (Reissue.)						
Tucker, Stephen D., <i>et al.</i> (See Scott, Walter, assignor.)						
Tucker, Stephen D., New York, N. Y. Press	471,778	Mar. 29	3292	839 840 841	59	1768
Tucker, Stephen D., New York, N. Y. Double-cylinder flat-bed printing-machine	473,484	Apr. 26	2342	593 594	59	494
Tucker, Stephen D., New York, N. Y. Machine for bending metal plates	477,390	June 21	1851	455	59	1830
Tucker, Stephen D., New York, N. Y. Registering mechanism for double-cylinder flat-bed printing-machines	479,860	Aug. 2	125	31	60	667
Tucker, Thomas J., Weaubleau, Mo. Lawn-mower	476,908	June 14	1054	255	59	1660
Tucker, William W., Hartford, Conn. Machine for taper-turning	482,210	Sept. 6	472	114	60	1427
Tucker, William W., Hartford, Conn. Machine for milling plug-valves	482,211	Sept. 6	475	114	60	1428
Tucker, William W., Hartford, Conn. Grinding-fixture	482,212	Sept. 6	477	114	60	1428
Tudor, Henri, Rosport, Luxemburg. Electrode for storage batteries	478,661	July 12	907	225	60	195
Tudor, James H., Lexington, assignor of one-half to J. O. Brooks, Union City, Ky. Gate	478,036	June 28	2894	723	59	2051
Tudor, Robert L., assignor of one-half to G. A. Springmeier, Cincinnati, Ohio. Composition for softening enameled leather	481,516	Aug. 23	2602		60	1171
Tuerk, Frederick W., Jr., assignor of two-thirds to J. and J. Hunter, Fulton, N. Y. Fan	477,614	June 21	2210	549	59	1901
Tuerk, Sammel O., Fulton, N. Y. Fare-box	473,680	Apr. 26	2669	672 673	59	556
Tuerk, Sammel O., Fulton, N. Y. Checking device	476,333	June 7	169	41	59	1469
Tuffley, George E., assignor of one-half to W. Clendenin, Moline, Ill. Power-hammer	467,565	Jan. 26	2068	522	58	416
Tufts, David, Pittsburg, Pa. Apparatus for operating elevator-doors	483,407	Sept. 27	2418	608	60	1815
Tufts, Seth G., Mainville, Ohio. Device for operating hatchway-doors	478,297	July 5	371	90	60	71
Tuller, Eugène, St. Croix, Switzerland. Music-box	467,485	Jan. 19	1909	488 489	58	380
Tuller, Eugène, St. Croix, Switzerland, assignor to M. J. Paillard & Co., New York, N. Y. Music-box	467,388	Jan. 19	1756	448	58	349
Tuller, Willis E., assignor of one-half to H. Smith, Willink, N. Y. Eaves-trough hanger	484,347	Oct. 11	1259	321	61	268
Tulloch, James, Angel's Camp, Cal. Concentrator	471,319	Mar. 22	2599	659	58	1631

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'gt	Vol.	Page.
Tulloch, James, Angel's Camp, Cal. Concentrator.....	476,500	June 7	419	97	59	1515
Tulloch, James, Angel's Camp, Cal. Concentrator.....	486,622	Nov. 22	2293	598	61	1082
Tulloch, Louis R., Angel's, Cal. Stamp-mill attachment.....	473,371	Apr. 19	2150	540	59	434
Tully, H. Clinton, Mechanicsburg, Ohio. Bale-tie.....	471,628	Mar. 29	3049	776	58	1723
Tully, William, Leytonstone, assignor of one-half to J. Corbett, London, England. Apparatus for controlling the supply of steam to motors.....	469,611	Feb. 23	2652	681	58	1069
Tunnichiff, John C., Galesburg, Ill. Corn-planter.....	472,221	Apr. 5	425	109 110	59	79
Turek, Frederick M., assignor to C. R. Hadley and W. A. Vawter, Chicago, Ill. Temporary holder.....	475,259	May 17	2187	557	59	1087
Turncott, Gédéon L., Newport, assignor to J. R. Cutting, Newport Centre, Vt. Horseshoe.....	477,476	June 21	1985	493	59	1856
Turk, Frank W., <i>et al.</i> (See Cross, Thomas A., assignor.).....						
Turk, Frank W., <i>et al.</i> (See Violet, Ashford W., Jr., assignor.).....						
Turk, Thomas, assignor of one-half to W. G. Crow, London, England. Boat-detaching apparatus.....	484,648	Oct. 18	1742	443	61	375
Turley, Leslie C., Portsmouth, Ohio. Paving-brick.....	487,652	D-c. 6	670	172	61	1454
Turner, Adelaide S., London, England. Ear-compressing cap.....	488,802	Dec. 27	2563	636	61	1880
Turner, Alonzo G., assignor of two-thirds to F. A. Kimball, Durango, and A. Levy, Walsenburg, Colo. Nut-lock.....	477,318	June 21	1740	426	59	1808
Turner, Alonzo G., assignor of two-thirds to F. A. Kimball, Durango, and A. Levy, Walsenburg, Colo. Drill.....	480,978	Aug. 16	1964	491	60	987
Turner, Alonzo G., assignor of two-thirds to F. A. Kimball, Durango, and A. Levy, Walsenburg, Colo. Drill.....	480,979	Aug. 16	1965	491	60	987
Turner, Alonzo G., assignor of two-thirds to F. A. Kimball, Durango, and A. Levy, Walsenburg, Colo. Wagon-frame.....	480,980	Aug. 16	1966	491	60	987
Turner-Beard Automatic Brake Company. (See Turner, William B., assignor.).....						
Turner, Byron L., Pittsford, Mich. Picture-support.....	468,847	Feb. 16	1468	374	58	831
Turner, Calvin, Bangor, Me. Stew-pan.....	477,974	June 28	2789	699	59	2032
Turner, Claude W. (See Prouty and Turner.).....						
Turner, David G., Underwood, Neb. Car-coupling.....	480,481	Aug. 9	1183	297	60	819
Turner, Don C., Roseburg, Oreg. Plow.....	471,915	Mar. 29	3492	893	58	1809
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Elevated railway.....	488,154	Dec. 13	1519	381	61	1642
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Elevated railway.....	488,155	Dec. 13	1521	381	61	1642
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Elevated railway.....	488,156	Dec. 13	1523	382	61	1643
Turner, Ephraim M., St. Louis, Mo., assignor of one-half to R. E. Maddox, Fort Worth, Tex. Double-track elevated railway.....	488,157	Dec. 13	1524	382 383	61	1643
Turner, George T. (See Lewis, Walter, assignor.).....						
Turner, George W., assignor of one-half to C. Hininger, Hale, Mo. Washing-machine.....	467,066	Jan. 12	1231	311	58	242
Turner, Harvey F. (See Hoffman and Turner.).....						
Turner, Jacob W., Van Wert, Ohio, assignor of one-half to T. Clapper. Band-cutter and feeder for thrashing-machines.....	479,477	July 26	2233	560 561	60	476
Turner, James J., Pittsburg, Pa. Compensator for signals.....	479,230	July 19	1795	450	60	376
Turner, James J., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Compensator for signals.....	470,148	Mar. 1	748	186 187	58	1244
Turner, James J., Pittsburg, assignor to Union Switch and Signal Company, Swissvale, Pa. Compensator for signals.....	479,380	July 19	2040	509	60	425
Turner, Jennie A. (See Turner, William H., assignor.).....						
Turner, Jesse W., and J. H. Engle, Louisiana, Mo. Ventilated boot or shoe.....	485,243	Nov. 1	134	40	61	601
Turner, Joseph S. (See Hadaway, John B., assignor.).....						
Turner, McDonald M., and I. H. Grant, Atlanta, Ga. Safety-switch.....	481,153	Aug. 16	2261	558	60	1042
Turner & Seymour Manufacturing Company. (See Brothwell, John G., assignor.).....						
Turner, William A., Worcester, Mass. Separable button.....	480,352	Aug. 9	972	245	60	778
Turner, William A., assignor to E. Converse, Worcester, Mass. Flushing-valve.....	477,714	June 28	2383	595	59	1954
Turner, William A., assignor to E. Converse, Worcester, Mass. Flushing-valve.....	477,715	June 28	2384	596	59	1954
Turner, William A., assignor to E. Converse, Worcester, Mass. Flushing-valve.....	477,716	June 28	2385	596	59	1954
Turner, William A., assignor to E. Converse, Worcester, Mass. Flushing-valve.....	477,717	June 28	2386	596	59	1954
Turner, William A., assignor to E. Converse, Worcester, Mass. Ball-cock valve.....	481,317	Aug. 23	2553	627	60	1110
Turner, William A., assignor to American Indicator Company, San Francisco, Cal. Street or station indicator.....	486,514	Nov. 22	2116	559	61	1049
Turner, William B., Boston, Mass., assignor to Turner-Beard Automatic Brake Company, New York, N. Y. Power-transmitting device for car-brakes.....	474,615	May 10	1179	299	59	874
Turner, William H., Indianapolis, Ind. Heating apparatus.....	487,653	Dec. 6	671	173	61	1454
Turner, William H., assignor to J. A. Turner, Indianapolis, Ind. Stove or warm-air furnace.....	483,187	Sept. 27	2061	520 521	60	1778
Turner, Willis H., Jackson, Mich. Newspaper-holder.....	486,139	Nov. 15	1546	408	61	921
Turney, Eugene T., Chicago, Ill. Electric signal for railways.....	471,296	Mar. 22	2566	652	58	1624
Turney, Frederick N., Nottingham, England. Process of and apparatus for degreasing leather.....	482,661	Sept. 13	1213	296 297	60	1586
Turpen, George S., Weatherford, Tex. Washing-machine.....	469,612	Feb. 23	2654	682	58	1069
Turpin, Perry B., administrator. (See Solor, Justo.).....						
Turpin, William J., Oakdale Station, Pa. Stove-mat.....	483,880	Oct. 4	533	134	61	110
Turton, Mordecai, Jerry City, Ohio. Pipe and rod adjuster for pumping mechanism for oil-wells.....	466,638	Jan. 5	520	135	58	100
Tuthill, Horace S., New York, N. Y. Rotatable delivery-wagon.....	470,022	Mar. 1	565	140	58	1209
Tuttle, Edwin N., Beverly, Mass. Whip-socket.....	484,067	Oct. 11	814	206	61	182
Tuttle, Gutie H., Shorter's Depot, Ala. Fire-place-blower.....	477,582	June 21	2146	533	59	1889
Tuttle, John H., and F. D. Cable, Toledo, Ohio. Bicycle.....	478,724	July 12	997	247	60	214
Tuttle, Lewis G., North Haven, Conn. Insect exterminator.....	471,779	Mar. 29	3296	841	58	1769
Tuttle, Richard T. (See Benedict, Milton E., assignor.).....						
Tuttle, William H., Detroit, Mich. Combination-chair.....	478,662	July 12	908	225	60	195
Tuxbury, George A., <i>et al.</i> (See Beckwith, Theodore A., assignor.).....						
Tverdal, Ole, assignor to United States Cash Register Company, Stoughton, Wis. Cash-register.....	486,306	Nov. 15	1797	472 473 474 475	61	972
Tweed, Ole, West Superior, Wis. Car-coupling.....	484,477	Oct. 18	1471	375	61	321
Tweedie, Michael, Billingshurst, assignor to E. Ray, London, England. Compound projectile for small-arms.....	481,081	Aug. 16	2128	530	60	1019
Twiss, Freeman L., and L. A. Barber, Groton, N. Y. Type-writer carriage.....	473,485	Apr. 26	2345	594	59	491
Twiss, Nelson W., New Haven, Conn. Steam-engine valve.....	473,486	Apr. 26	2347	595	59	494

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Twist Pipe Company. (See Thompson, Fred. W., assignor.)						
Twist, Sylvester A., Coldwater, Mich. Flour bin and sifter	466,706	Jan. 5	622	162	58	120
Twitchell, Herbert E. (See Burnett, William P., assignor.)						
Twitchell, Myron A., Merville, assignor of three-fifths to J. S. Wheeler, Sioux City, Iowa.						
Cartridge-crimping machine	484,868	Oct. 25	2108	543	61	465
Twombly, Orison. (See McKenney, George F., assignor.)						
Tyler, Albert M., Alexandria, Ohio. Gate	470,225	Mar. 8	894	221	58	1281
Tyler, Alfred H., and J. S. E. de Vesian, London, England. Apparatus for raising sunken vessels	455,398	Nov. 1	387	104 } 105 }	61	652
Tyler, Charles N., Buffalo, N. Y. Screw-top for cans	480,793	Aug. 16	1668	417	60	929
Tyler, Fred B., Chicago, Ill. Horse-restrainer	471,201	Mar. 22	2426	617	58	1597
Tyler, Harry L., assignor of two-thirds to G. W. and C. E. Drake, Corning, N. Y. Current-alternator	476,843	June 14	944	230	59	1639
Tyler, Morgan, et al. (See Miller, Russell C., assignor.)						
Tyler, Nathaniel D., Jericho, Ky. Earth-auger	471,320	Mar. 22	2601	660	58	1631
Tyler, Vernon A., Morris Park, N. Y. Thill-coupling	474,070	May 3	298	72	59	695
Tyler, Walter L. (See See and Tyler.)						
Tyler, William D., Denver, Colo. Belt-tightener	472,967	Apr. 12	1452	371	59	290
Tyler, William H., David City, Nebr. Earth-auger	469,427	Feb. 23	2374	609	58	1014
Tyler, William H., David City, Nebr. Calf-weaner	481,985	Sept. 6	96	25	60	1353
Tyler, William W. (See Bookwalter and Tyler.)						
Tyler, William W., assignor to James Löffel & Company, Springfield, Ohio. Water-wheel	480,753	Aug. 16	1607	403 } 404 }	60	917
Tym, John, North Bend, Nebr. Ant-hill cutter	473,799	Apr. 26	2848	715	59	590
Tynan, Joseph, Cohoes, N. Y. Belt	482,401	Sept. 13	811	195	60	1508
Tynan, Joseph E., Paterson, N. J. Spindle-bearing for spinning-machines	467,649	Jan. 26	2186	556	58	438
Tyner, George N., et al. (See Ball, James, assignor.)						
Tyner, George N., et al. (See Landfear, William R., assignor.)						
Tyner, James M. C., and S. S. Irving, Minneapolis, Minn. Trolley for electric railways	482,325	Sept. 6	679	162	60	1468
Typograph Company. (See Cash, Arthur W., assignor.)						
Tyson, Bryan, assignor of one-tenth to C. A. Metcalf, Washington, D. C. Amalgamator	473,533	Apr. 26	2420	614	59	507
Tyson, James R., Reading, Pa. Umbrella drip-cup	474,616	May 10	1180	300	59	874
Ubrig, Emil, Westend, near Berlin, Germany. Meat-chopper	484,525	Oct. 18	1543	391 } 392 }	61	336
Uchtmann, Weet R., New York, N. Y. Change receiver and transfer table	476,703	June 7	711	175	59	1578
Uckotter, Herman H. (See Brunsman and Uckotter.)						
Uechting, Ludwig, Berlin, Germany. Necktie-fastener	480,754	Aug. 16	1609	404	60	918
Uhl, William W. (See Airey and Uhl.)						
Uhlenhart, William L., Astoria, Oreg. Umbrella-rib	480,353	Aug. 9	974	245	60	779
Uhler, Francis M., Lincoln, Nebr. Pencil-sharpener	467,446	Jan. 19	1846	471	58	368
Uhlig, Franz, Topkowitz, near Bodenbach, Austria-Hungary. Lift or hoist for placing ships' masts	477,477	June 21	1986	493	59	1856
Uhlig, Franz, Topkowitz, near Badenbach, Austria-Hungary. Hauling-windlass	485,515	Nov. 1	550	146 } 147 }	61	685
Uhlig, Richard W., College Point, N. Y., assignor to S. R. Beckwith, East Orange, N. J. Automatic vending-machine	477,029	June 14	1215	302	59	1700
Uhri, Jacob. (See Knudtsen and Uhri.)						
Uhricht, Emil, Chicago, Ill. Pneumatic tire	473,034	Apr. 19	1576	401	59	326
Ullig, Charles, Martin's Ferry, Ohio. Manufacture of hollow glass articles	472,631	Apr. 12	964	250	59	197
Ullin, John O., Ludington, Mich. Cigar-case	486,004	Nov. 8	1309	348	61	857
Ullman, Morris, Washington, D. C. Base-ball game	476,334	June 7	170	41, 42	59	1469
Ullmann, George F., Brooklyn, N. Y. Roof	485,516	Nov. 1	551	147	61	685
Ullmann, Moritz, Stuttgart, Germany. Caliper-joint	485,339	Nov. 1	288	78	61	631
Ullmann, William, et al. (See Ward, William H., assignor.)						
Ulrey, William A., Pipesville, Ohio. Spring-motor	477,478	June 21	1988	493 } 494 }	59	1857
Ulrich, Allen D., Kokomo, Ind. Harness-saddle	468,848	Feb. 16	1468	374	58	831
Ulrich, Allen D., Kokomo, Ind. Horse-collar	480,000	Aug. 2	372	93	60	652
Ulrich, Max, assignor to A. G. Hill, Northampton, Mass. Steam-engine	484,069	Oct. 11	818	207	61	182
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Red azo dye	466,841	Jan. 12	864		58	174
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue-red azo dye	468,142	Feb. 2	356		58	593
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Violet azo dye	476,335	June 7	173		59	1470
Ulrich, Moritz, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Black azo dye	476,336	June 7	174		59	1470
Ulrich, Moritz, and R. Lauch, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Blue dye	476,337	June 7	175		59	1470
Ulrich, Moritz, and J. Bammann, assignors to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Azo coloring-matter	482,106	Sept. 6	301		60	1394
Umholtz, Charles W., Bristol, Va. Exhaust-nozzle	481,082	Aug. 16	2129	530	60	1019
Umholtz, Charles W., Bristol, Va. Exhaust-nozzle	487,137	Nov. 29	3156	809	61	1271
Umpfrey, Henry, and J. Weekes, Carleton Place, Canada. Sleigh	487,501	Dec. 6	444	114 } 115 }	61	1409
Unbehend, Jacob J., Syracuse, N. Y., assignor to Judson L. Thompson Manufacturing Company, Waltham, Mass. Riveting-machine	468,734	Feb. 9	1289	328	58	787
Unbehend, Jacob J., assignor to Judson L. Thomson Manufacturing Company, Waltham, Mass. Rivet	481,125	Aug. 16	2198	544	60	1031
Unbehend, Jacob J., assignor to Judson L. Thomson Manufacturing Company, Waltham, Mass. Rivet-holder	488,510	Dec. 20	2192	522	61	1774
Underkiercher, Christian A., Allegan, Mich. Tool for twisting wire	487,459	Dec. 6	380	99	61	1396
Underwood, Charles M., Hamilton, Canada. Motto-plate	482,662	Sept. 13	1216	297	60	1586
Underwood, George B., Chicago, Ill. Volatilizer	478,896	July 12	1265	313	60	265
Underwood, Harold G. (See Hilhorn, Louis B., assignor.)						
Underwood, John K., Geneva, N. Y. Astigmatoscope	476,704	June 7	713	175	59	1579
Underwood, Joseph B., Fayetteville, N. C. Cigarette-machine	470,269	Mar. 8	955	237 } 238 }	58	1293
Underwood, Robert A., Chattanooga, Tenn. Weather-board gage	473,098	Apr. 19	1673	425	59	343
Underwood, Thomas M., assignor of one-half to J. Rowan, Baldwin, Miss. Shears	482,857	Sept. 20	1526	379	60	1660
Underwood, William D., assignor of two-fifths to W. E. Partridge, Chicago, Ill. Harness-pad	481,289	Aug. 23	2509	617	60	1102
Underwood, William H. (See Sears, George, assignor.)						
Underwood, William H., and W. E. Clum, Woodland, Mich. Car-coupling	482,769	Sept. 20	1407	348	60	1635
Undy, George M., Philadelphia, Pa. Apparatus for dyeing	476,580	June 7	522	125	59	1541

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Unger, Charles W., assignor of one-half to J. H. Banks, Salt Lake City, Utah Ter. Gun-rest.	475,640	May 24	2790	707	59	1220
Unglaub, Robert O., Pendleton, near Manchester, England. Apparatus for rectifying glycerine.	481,879	Aug. 30	3465	850	60	1303
Union Belt Company. (See Chace, William H., assignor.)						
Union Chemical Company. (See Cutten, Elisha B., assignor.)						
Union Manufacturing and Plating Company. (See Edwards, William J., assignor.)						
Union Manufacturing Company. (See Macomber, Zebedee, assignor.)						
Union Metallic Cartridge Company. (See Gilbert and Thomas, assignors.)						
Union Metallic Cartridge Company. (See Hobbs and Richards, assignors.)						
Union Metallic Cartridge Company. (See Orcutt, Jerome, assignor.)						
Union Metallic Cartridge Company. (See Richards, Charles R., assignor.)						
Union Novelty Company. (See Fontaine, Eugene, assignor.)						
Union Paper Bag Machine Company. (See Stilwell, Charles B., assignor.)						
Union Special Sewing Machine Company. (See Fefel, Henry H., assignor.)						
Union Special Sewing Machine Company. (See McNeil, Chester, assignor.)						
Union Special Sewing Machine Company. (See Morrison, Edgar K., assignor.)						
Union Special Sewing Machine Company. (See Muther, Lorenz, assignor.)						
Union Special Sewing Machine Company. (See Woodward, Russel G., assignor.)						
Union Special Sewing Machine Company. (See Woodward and Timm, assignors.)						
Union Stock Car Company. (See Travis, Charles L., assignor.)						
Union Switch and Signal Company. (See Stupakoff, Simon H., assignor.)						
Union Switch and Signal Company. (See Turner, James J., assignor.)						
Union Switch and Signal Company. (See Young, John V., assignor.)						
Unique Table Company. (See Curtis, George W., assignor.)						
United Gas Improvement Company. (See Clark, Walton, assignor.)						
United Gas Improvement Company. (See Collins, Charles R., assignor.)						
United Gas Improvement Company. (See Collins and Knapp, assignors.)						
United Gas Improvement Company. (See Currie, Stanley C. C., assignor.)						
United States Aluminium Metal Company. (See Héroult, Paul, assignor.)						
United States Aluminium Metal Company. (See Héroult, Paul L. T., assignor.)						
United States Autograph Telegraph Company. (See Bridger, Henry C., assignor.)						
United States Butter Extractor Company. (See Andersson, Gustaf M., assignor.)						
United States Cash Register Company. (See Gilman, Willard H., assignor.)						
United States Cash Register Company. (See Tverdal, Ole, assignor.)						
United States Chemical Company. (See Shepard, Henry W., assignor.)						
United States Down Extractor Company. (See Mooney, Herman O., assignor.)						
United States Duro lithic Company. (See Enricht, Louis, assignor.)						
United States Postage Stamp Delivery Company. (See Pickard, Edward L., assignor.)						
United States Projectile Company. (See Bliss, Eliphalet W., assignor.)						
United States Smokeless Powder Company. (See Rodgers, Samuel, assignor.)						
United States Swing Treadle Company. (See Sleight, William E., assignor.)						
Universal Ball Bearing Wheel Company. (See Yates, Henry G., assignor.)						
Universal Brake Beam Company. (See Fielden, Thomas, assignor.)						
Universal Carbonating Company. (See Feigenspan, Christian, assignor.)						
Universal Carbonating Company. (See Stohaus and Wackenhuth, assignors.)						
Universal Fuel Company. (See Barrett, William N., assignor.)						
Universal Gas Construction Company. (See Moses, Frank D., assignor.)						
Universal Lock Company. (See Smith, Eugene C., assignor.)						
Universal Selling Machine Company. (See Fancher, Alton H., assignor.)						
Universal Water Heater Company. (See Rees, Thomas W., assignor.)						
Universal Weeder Company. (See Cate, William H. M., assignor.)						
Unwin, Philip I., and H. Howard, assignors to Lloyd & Lloyd, Halesowen, near Birmingham, England. Arc welding and heating apparatus	480,794	Aug. 16	1669	417	60	929
Utz, Henry H., New York, N. Y., assignor to National Type Writer Company, of Pennsylvania. Type-writing machine	472,836	Apr. 12	1257	322	59	251
Unzicker, Hermann, Chicago, Ill. Steam-engine.	475,365	May 24	2356	603 604	59	1137
Unzicker, Hermann, and T. Masel; said Masel assignor to Chicago Iron Works, Chicago, Ill. Valve-gear	485,360	Nov. 1	327	87, 88	61	639
Updegraff, Daniel, assignor of one-half to C. N. Shelton, Stafford, Kans. Washing-machine.	468,849	Feb. 16	1469	375	58	831
Updike, Edward J., Mishawaka, Ind. Planter	474,425	May 10	876	228	59	818
Upfill, James M., et al. (See Browne, James R., assignor.)						
Upington, John V., Lexington, Ky. Snlky	471,916	Mar. 29	3493	893	58	1809
Upp, Melville P., and J. C. Young, Kilbourne, Ill. Header.	468,375	Feb. 9	734	182	58	675
Upson, Waldo L., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Wick-raiser for central-draft lamps	473,681	Apr. 26	2672	673	59	556
Upson, Waldo L., assignor to Bradley & Hubbard Manufacturing Company, Meriden, Conn. Wick-raiser for central-draft lamps	481,741	Aug. 30	3242	789	60	1259
Upton, Charles S., New York, N. Y. Lamp-stove	472,594	Apr. 12	905	232	59	186
Upton, Charles S., New York, N. Y. Lamp	474,979	May 17	1760	446	59	1003
Upton, George W., Warren, Ohio. Fishing-fly	468,376	Feb. 9	735	182	58	676
Upton, Horace, and W. Kennard, Bar Harbor, Me. Clothes-tongs	478,382	July 5	500	121	60	99
Upton, William B., Kansas City, Mo. Cable take-up	471,446	Mar. 22	2796	713	58	1668
Urania-Uhren-und-Säulen-Commandit-Ges. Breslauer & Dr. Von Orth. (See Franke, Adolf, assignor.)						
Urbahn, Alwill, assignor to American Loop Fabric Company, Brooklyn, N. Y. Loom for weaving ornamental fabrics	474,882	May 17	1602	408 409 410	59	972
Urbahn, Alwill, assignor to American Loop Fabric Company, Brooklyn, N. Y. Woven fabric.	474,883	May 17	1604	410 206	59	973
Urbain, Eugene, Brooklyn, N. Y. Railway-signal	484,068	Oct. 11	815	207	61	182
Urbaneck, Johann, Frankfurt-on-the-Main, Germany. Implement for cutting glass.	482,601	Sept. 13	1135	274	60	1570
Urch, David, Portsmouth, N. H. Propeller for vessels	483,122	Sept. 20	1946	492 493 497	60	1745
Urdahl, Thomas, deceased; H. T. Lerdall, Madison, and M. Johnson, Mount Horeb, Wis., executors. Straw-binder	467,507	Jan. 26	1951	498 499	58	396
Uren, Andrew, Seattle, Wash. Snatch-block	471,755	Mar. 29	3253	829	58	1760
Uren, Richard, Ripley, assignor of one-half to M. Van Orden, Houghton, Mich. Safety appliance for elevators	488,137	Dec. 13	1484	374	61	1635
Uridge, George R., assignor of one-half to Detroit Plumbers Supply Company, Detroit, Mich. Flushing device for water-closets	466,985	Jan. 12	1104	279	58	219
Urie, John, Jr., Jersey City, N. J. Photographic-printing machine	478,663	July 12	910	226	60	196
Urquhart, John, Hamilton, Canada. Automatic inkstand.	470,226	Mar. 8	895	221	58	1282

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Urrutia, Claudio, Guatemala, Guatemala. Surveyor's target	486,202	Nov. 15	1630	431	61	938
Urry, Edwin C., and G. A. Farini, London, England. Multiple-expansion steam-engine	466,855	Jan. 12	886	227	58	178
Usher, Edward P., Grafton, Mass. Charging-table for electric railways	471,447	Mar. 22	2798	714	58	1668
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company, of West Virginia. Storage-battery	480,883	Aug. 16	1802	450	60	956
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company, of West Virginia. Battery-cell	480,884	Aug. 16	1804	451	60	957
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company, of West Virginia. Storage-battery	480,885	Aug. 16	1804	451	60	957
Usher, Edward P., Grafton, Mass., assignor to Hopedale Electric Company, of West Virginia. Battery-plate	480,887	Aug. 16	1807	451	60	957
Usher, Edward P., Grafton, and W. F. Draper, Hopedale Mass., assignors to Hopedale Electric Company, of West Virginia. Battery-plate	480,886	Aug. 16	1806	451	60	957
Utica Electrical Manufacturing and Supply Company. (See Bossert and Findlay, assignors.)						
Utley, Milton R. (See McMunn, Llewellyn D., assignor.)						
Utley, Milton R., assignor of one-third to F. P. Seavey, Minneapolis, Minn. Electric switch	484,380	Oct. 11	1308	334	61	279
Utley, Thomas, Liverpool, England. Ship's ventilator	484,348	Oct. 11	1260	321 322	61	269
Vaag, Anton B., Hillsborough, N. D. Adjustable hook for clamping barrel-heads	467,784	Jan. 26	2399	609	58	479
Vacher, Jerome, Paterson, N. J. Jacquard connection for looms	472,513	Apr. 5	793	203	59	151
Vacuum Brake Company. (See Gresham, James, assignor.)						
Vacuum Door Check Company. (See Shrawder, John S., assignor.)						
Vail, Charles E., Salt Lake City, Utah Ter. Coat-hook	486,187	Nov. 15	1608	427	61	934
Vail, Charles E., Salt Lake City, Utah Ter. Shoe-horn	487,860	Dec. 13	1029	257	61	1543
Vale, Charles L., Beloit, Wis. Petty account-book and holder	466,384	Jan. 5	118	33	58	25
Vale, Sannel, Walsall, England, assignor to G. T. Warwick, Springfield, Mass. Bicycle	472,005	Mar. 29	3615	923 924	58	1832
Valentine, Charles J., Newark, N. J. Automatic valve for steam-heaters	484,526	Oct. 18	1545	392	61	336
Valentine & Company. (See Rose, Frank H., assignor.) (Reissue.)						
Valentine, George S. (See Smith, Frederick I., assignor.)						
Valentine, Gordon B., Chicago, Ill. Jar-fastener	471,917	Mar. 29	3494	893	58	1809
Valentine, Gordon B., Chicago, Ill. Reclining-chair	478,247	July 5	301	73	60	60
Valentine, Joseph C., Watertown, N. Y. Road-cart	479,478	July 26	2235	561	60	477
Valentine, Milton H. (See Fisher, Andrew S., assignor.)						
Valentine, Waldo W., Washington, D. C. Vehicle-wheel	475,906	May 31	3232	817	59	1318
Van Alstyne, Pierre, et al. (See Reinhardt, James H., assignor.)						
Van Altena, John, Milwaukee, Wis. Tool for turning fruit-jar covers	484,070	Oct. 11	820	207	61	183
Van Altena, John G., Milwaukee, Wis. Fruit-jar holder	485,850	Nov. 8	1049	280	61	803
Van Auker, Byron E., assignor, by mesne assignments, to Van Auker Steam Specialty Company, Chicago, Ill. Steam-trap	478,037	June 28	2895	723	59	2051
Van Auker, Clarence E., Chicago, Ill. Valve	468,143	Feb. 2	357	88	58	594
Van Auker, Clarence E., Chicago, Ill. Valve	476,844	Dec. 14	946	230	59	1639
Van Auker, Clarence E., Chicago, Ill. Boiler-feeder	487,305	June 6	104	31	61	1342
Van Auker Steam Specialty Company. (See Van Auker, Byron E., assignor.)						
Van Balgooy, Johannes P., Weert, The Netherlands. Coating for ceilings and walls	467,271	Jan. 19	1585	-----	58	318
Van Benschoten, Adelbert L., Danbury, Conn. Hat-rack	484,886	Oct. 25	2133	548	61	469
Van Benthuyssen, Frank, Albany, N. Y. Roller-bearing	479,038	July 19	1498	372	60	321
Van Benthuyssen, Frank, Albany, N. Y. Reducible lining for journal-bearings	479,039	July 19	1499	373	60	321
Van Bibber, Andrew, Cincinnati, Ohio. Bicycle	477,583	June 21	2147	533	59	1889
Van Bibber, Andrew, Cincinnati, Ohio. Miter-tool	482,107	Sept. 6	302	71	60	1394
Van Broek, Wilhelm J., Cologne, Germany. Safe-lock	473,800	Apr. 26	2849	715	59	590
Van Brunt, Daniel C. (See Van Brunt, Willard A. and D. C.)						
Van Brunt, Willard A. and D. C., Horicon, Wis. Grain-drill	466,544	Jan. 5	372	93, 94	58	72
Van Buren, Jay D. (See Rogers and Van Buren.)						
Van Buren, Robert. (See Powers and Van Buren.)						
Van Cott, Edward F. (See Rothschild and Van Cott.)						
Van Coughnet, Charles B., Watertown, N. Y. Mechanical moving-power	483,881	Oct. 4	534	134	61	111
Van Depoele, Charles J., Chicago, Ill. Electric railway	467,448	Jan. 19	1848	472	58	368
Van Depoele, Charles J., Chicago, Ill. Electric generator	470,521	Mar. 8	1395	364	58	1374
Van Depoele, Charles J., Lynn, Mass. Controlling apparatus for electric motors	467,449	Jan. 19	1852	473	58	369
Van Depoele, Charles J., Lynn, Mass. Electro-magnetic reciprocating pumping-engine	467,450	Jan. 19	1853	473	58	369
Van Depoele, Charles J., Lynn, Mass. Reciprocating electric engine	467,451	Jan. 19	1855	473	58	369
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Controlling mechanism for reciprocating electric engines	479,960	Aug. 2	291	72, 73	60	637
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Feed mechanism for electric reciprocating engines	479,961	Aug. 2	295	73	60	638
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Reciprocating electric engine	479,962	Aug. 2	297	73, 74	60	638
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. System of supplying currents to reciprocating electric engines	479,963	Aug. 2	300	74	60	639
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. System of distributing electric currents	479,964	Aug. 2	301	74	60	639
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Reciprocating electric pile-driver	479,965	Aug. 2	303	74, 75	60	640
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Electrical transmission of power	479,966	Aug. 2	306	75	60	640
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. System of electrical distribution	488,928	Dec. 27	2759	681	61	1921
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Electric railway trolley	488,929	Dec. 27	2761	682	61	1922
Van Depoele, Charles J., deceased, Lynn; C. A. Coffin and A. Wahl, executors, and assignors to Thomson-Houston Electric Company, Boston, Mass. Electric locomotive	488,930	Dec. 27	2763	682	61	1922
Van Derveer, John R. (See Holmes, Daniel M., assignor.)						
Van Derzee, Cornelius, assignor of two-thirds to D. H. Mathias and J. H. Simonson, Albany, N. Y. Washing-machine	480,532	Aug. 9	1255	315 316	60	833
Van Densen, Charles H., Verona, Ill. Leaf-turner	473,246	Apr. 19	1940	488	59	393

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Van Dorn, James H., Cleveland, Ohio. Portable building	485,306	Nov. 1	223	63	61	618
Van Dyke, James E., and H. Stobaugh, assignors of one-third to E. M. Bowers, Clarks-ville, Tex. Cotton-press	488,641	Dec. 27	2311	572	61	1829
Van Dyke, John W., Brooklyn, N. Y. Steam-generator	474,508	May 10	1000	257	59	840
Van Ensley, Martin, McMinnville, Oreg. Hydraulic motor	482,976	Sept. 20	1723	435	60	1698
Van Etten, Scott. (See Kilburn and Van Etten.)						
Van Fleet, Fred, Williamsport, Pa. Type-cleaning device for type-writing machines	469,179	Feb. 16	1973	{ 504 505 }	58	931
Van Gelder, Pieter, Sowerby Bridge, England. Dust-collector	479,231	July 19	1797	450	60	376
Van Gelder, Pieter, Sowerby Bridge, England. Apparatus for separating dust from air	479,267	July 19	1851	{ 463 464 }	60	387
Van Gilder, William H., Perrysville, Ohio. Folding stool	473,534	Apr. 26	2427	{ 614 615 }	59	508
Van Haagen, Claus, Chester, Pa. Piano	469,876	Mar. 1	339	87	58	1167
Van Heers, L. Léopold. (See Chabaud, Van Heers, and Allard.)						
Van Heusen, John M., Albany, N. Y. Sterilizer for surgical bandages	488,725	Dec. 27	2414	607	61	1856
Van Hise, Charles H., New York, N. Y. Lamp	471,282	Mar. 22	2546	646	58	1620
Van Hoebenbergh, Henry, New York, N. Y. Unison apparatus for printing-telegraphs	472,237	Apr. 5	361	93	59	67
Van Horn, George, Wallis Run, Pa. Farm-gate	474,426	May 10	878	229	59	818
Van Houten, Frank H., Matteawan, N. Y., assignor to C. L. Goehring, Allegheny, Pa. Wood-molding machine	480,443	Aug. 9	1117	279	60	805
Van Houten, Frank H., Matteawan, N. Y., assignor to C. L. Goehring, Allegheny, Pa. Molding-machine	480,444	Aug. 9	1118	280	60	805
Van Houten, Frank H., Matteawan, assignor to Dutchess Tool Company, Fishkill-on-the-Hudson, N. Y. Rotary cutter-head	487,436	Dec. 6	346	89	61	1390
Van Kooij, Abram, Holland, Mich. Rafting logs	476,106	May 31	3544	891	59	1380
Van Liew, Cornelius. (See O'Dell and Van Liew.)						
Van Loozen, Fred H., Cleveland, Ohio. Feeding mechanism for printing-presses	474,884	May 17	1605	{ 410 411 }	59	973
Van Meter, M. S. (See Burkhead, Henry C., assignor.)						
Van Ness, James, Batavia, N. Y. Fence	480,154	Aug. 2	629	159	60	702
Van Norman, Charles E., Springfield, Mass. Work-clamping block for engravers	476,951	June 14	1128	271	59	1675
Van Norman, Hiram L. (See Mayhall, William A., assignor.)						
Van Nuis, Charles S. (See Sachs, Joseph, assignor.)						
Van Nuis, Charles S., New Brunswick, N. J. Lightning-arrester	478,383	July 5	501	{ 121 122 }	60	99
Van Olinda, Henry P. and J. D., Yonkers, N. Y. Coal or other bag	467,452	Jan. 19	1856	473	58	370
Van Olinda, John D. (See Van Olinda, Henry P. and J. D.)						
Van Oostrum, Otte, Portland, Oreg. Dam	476,706	June 7	717	176	59	1579
Van Orden, John M., New York, N. Y. Inhaler	472,238	Apr. 5	362	93	59	68
Van Orden, Matthew. (See Uren, Richard, assignor.)						
Van Ormer, Harry H., Edwardsburg, Mich. Wire-stretcher	476,338	June 7	176	42	59	1471
Van Patten, Frederick, Auburn, N. Y. Spring-tooth harrow	472,185	Apr. 5	275	72	59	52
Van Patten, John, West Troy, assignor of one-half to T. J. Sullivan, Albany, N. Y. Dip- per for dredges	469,728	Mar. 1	94	25, 26	58	1117
Van Patten, John, West Troy, assignor of one-half to W. E. Hagan, Troy, N. Y. Button- hook	473,035	Apr. 19	1379	402	59	326
Van Patten, John, West Troy, assignor of one-half to T. J. Sullivan, Albany, N. Y. Dip- per-dredger	473,535	Apr. 26	2428	615	59	509
Van Peirson, E., et al. (See Randall, Robert F., assignor.)						
Van Pelt, Ada H., assignor of one-half to C. L. Maxwell, Oakland, Cal. House-door let- ter-box	471,918	Mar. 29	3496	893	58	1809
Van Rensselaer, Gerdon W. (See Lowe and Van Rensselaer.)						
Van Roden, George C., Philadelphia, Pa. Calipers for bracelets	466,986	Jan. 12	1106	280	58	219
Van Ruymbeke, Joseph, assignor to National Chemical and Fertilizer Company, Chicago, Ill. Making nitrogenous fertilizers	471,306	Mar. 22	2532		58	1627
Van Sant, William S., Auburn, Cal. Coin-actuated vending-machine	480,639	Aug. 9	1428	356	60	867
Van Schack, Eugene. (See Sterry, George E., Jr., assignor.)						
Van Sicklen, Charles T., Englewood, Ill. Ice-cream freezer	483,028	Sept. 20	1811	459	60	1717
Van Tuyl, B. S. (See Kleinstiver, Abel, assignor.)						
Van Valkenburg, Ellis M., assignor to Acme Adjustable Pole Company, Racine, Wis. Vehicle-tongue	466,385	Jan. 5	119	34	58	25
Van Valkenburg, Ellis M., assignor to Acme Adjustable Pole Company, Racine, Wis. Vehicle-thills	466,386	Jan. 5	120	34	58	25
Van Valkenburg, Ellis M., assignor to Acme Adjustable Pole Company, Racine, Wis. Vehicle-tongue	466,387	Jan. 5	121	34	58	26
Van Valkenburg, Ellis M., assignor of one-half to Acme Adjustable Pole Company, Racine, Wis. Vehicle-pole	470,271	Mar. 8	964	239	58	1295
Van Valkenburg, Randall T., assignor, by mesne assignments, of one-half to G. P. Booth, Muskegon, Mich. Chemical fire-extinguisher can	467,453	Jan. 19	1857	474	58	370
Van Vleck, Lawrence, Cory, Pa. Butter-jar	469,729	Mar. 1	96	26	58	1117
Van Vliet, Warren R., East Stroudsburg, Pa. Till-lock	478,897	July 12	1266	313	60	265
Van Volkenburgh, Philip, et al. (See Thomas, Charles W., assignor.)						
Van Voorbis, William H., Spearville, Kans., assignor of one-third to W. S. Ritchie, Aspen, Colo. Potato-digger	476,763	June 7	800	197	59	1597
Van Vradenburg, Peter D., Binghamton, N. Y. Vehicle-starter	474,538	May 10	1053	{ 269 270 }	59	850
Van Vradenburg, Peter D., Binghamton, N. Y. Car brake and starter	486,140	Nov. 15	1547	{ 408 409 }	61	921
Van Wagenen, George, New York, N. Y. Combined shearing and punching machine	484,832	Oct. 25	2048	{ 524 525 }	61	453
Van Wagenen, A., et al. (See Ramsden and Ellis, assignors.)						
Van Wagoner, Benjamin B., Waldwick, N. J. Checkrein	488,642	Dec. 27	2313	573	61	1830
Van Why, Joseph M., assignor of one-half to J. McNary, Elmira, N. Y. Anchor for brick walls	473,273	Apr. 19	1984	497	59	402
Van Wie, Byron, assignor of five-sixths to W. F. Greene, Troy, and W. E. Johnson, New York, N. Y. Centrifugal machine	473,484	July 5	646	158	60	128
Van Winkle, Franklin, Paterson, N. J. Rotary transmitting-dynamometer	472,466	Apr. 5	713	182	59	135
Van Winkle, Isaac, Dysart, Iowa. Hub-attaching device	481,603	Aug. 30	3017	737	60	1215
Van Winkle, Norman, Eureka Springs, Ark. Railway-gate	471,040	Mar. 15	2170	558	58	1536
Vau Zile, Harry L. (See MacCormack and Van Zile.)						
Van Zile, Oscar E. (See MacCormack and Van Zile, assignors.)						
Vance, Daniel B., and H. J. Laurence, Woodbury, Tenn. Side-hill plow	473,487	Apr. 26	2349	596	59	495
Vance, Joseph A., Plymouth, Ohio. Surgical appliance	480,911	Aug. 16	1850	460	60	966

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Vance, Samuel J., Hunee, Mo. Dook-check	467,447	Jan. 19	1847	472	58	365
Vance, Thomas B., <i>et al.</i> (See Trawick, Joseph E., assignor.)						
Vandament, George A., Rnark, assignor of one-third to P. O. French, S. W. Morgan, and J. M. Freese, Sumner, Ill. Cutter-bar	481,318	Aug. 23	2555	627	60	1111
Vandecar, Israel D., Stockton, Cal. Voting-booth	475,641	May 24	2791	707	59	1221
Vandegrift, Drury E. (See Pettegrew, Swithen C., assignor.)						
Vandemark, Archibald B., New York, N. Y. Street-sweeper	483,702	Oct. 4	270	67	61	57
Vauden-Kerekhove, Armand, Brussels, Belgium. Electrode	478,664	July 12	913	226	60	196
Vanderbilt, Henry V., assignor to himself and S. A. Bunnell, Brooklyn, N. Y. Step-ladder	480,224	Aug. 2	754	190	60	725
Vanderbilt Sash Balance Company. (See Jenkinson, Samuel, assignor.)						
Vanderbilt, William H. (See Cary, Spencer C., assignor.)						
Vanderburg, Charles H., Florence, Oreg. Plow	482,884	Sept. 20	1583	398	60	1670
Vanderman, William, Willimantic, Conn. Combination die-stock and reamer	467,067	Jan. 12	1232	312	58	242
Vanderman, William, Willimantic, Conn. Pipe connection	471,247	Mar. 22	2493	632	58	1610
Vauderpool, Albion A., assignor of one-half to D. H. Barnett, Newark, N. J. Closed conduit for electric railways	487,654	Dec. 6	672	173	61	1454
Vanderveer, Walter R., McCool Junction, and C. F. Shedd, Fairfield, Nebr. Grain drier and ventilator	470,607	Mar. 8	1507	393	58	1399
Vanduzen, Ezra W., Newport, Ky. Pull-gong for street or other cars	467,486	Jan. 19	1909	489	58	381
Vanes, John, Brazil, Ind. Crane	473,682	Apr. 26	2673	673	59	557
Vanzell, Ezekiel, Atlantic City, N. J., assignor to D. U. Snyder, Philadelphia, Pa. Valve	470,270	Mar. 8	963	239	58	1295
Vanier, Francis N. and O., Amesbury, Mass. Two-seated carriage	482,858	Sept. 20	1527	379	60	1661
Vanier, Ovila. (See Vanier, Francis N. and O.)						
Vannauker, George N., Shicksbury, Pa. Folding umbrella	488,341	Dec. 20	1831	457	61	1718
Vanneman, William C., Anderson, Ind. Brick-machine	476,705	June 7	715	{ 175 176 }	59	1579
Vannette, Jasper, Tiffin, Ohio, assignor to Singer Manufacturing Company of New Jersey. Sewing-machine	480,298	Aug. 9	888	225	60	763
Vansant, William R., Philadelphia, Pa. Implement for withdrawing photograph-cards from album-leaves	486,170	Nov. 15	1589	421	61	930
Vanstone, Samuel, Providence, R. I. Protecting-thimble for steam or heating pipes	481,126	Aug. 16	2198	544	60	1031
Vanstone, Samuel, assignor to himself and F. A. Fairbrother, Jr., Providence, R. I. Insulation for electric wires	470,883	Mar. 15	1939	496	58	1491
Vant Woud, Victor C., Brooklyn, N. Y. Syringe	466,587	Jan. 5	441	113	58	85
Vant Woud, Victor C., Brooklyn, N. Y. Atomizer	474,035	May 3	240	57	59	684
Vanwart, Edwin, Port Madison, Wash. Combination-lock	487,138	Nov. 29	3156	809	61	1272
Varden, Maurice M. (See Hall, James B., assignor.)						
Varley, James A., Toronto, Canada. Combined broiler and toaster	483,882	Oct. 4	535	135	61	111
Varley, Richard, Jr., Englewood, N. J. Electric-contact protector	473,717	Apr. 26	2724	686	59	566
Varley, Richard, Jr., Englewood, N. J. Limiting-stop for armatures	476,845	June 14	948	230	59	1639
Varty, John. (See Bills, James A., assignor.)						
Vasaly, Stephen C., St. Paul, Minn. Type-writing machine	472,612	Apr. 12	937	241	59	192
Vassar Burglar Alarm Manufacturing Company. (See Vassar, Robert G., assignor.)						
Vassar, George, Jr., New York, N. Y. Steam-generator	487,382	Dec. 6	233	63	61	1367
Vassar, Robert G., New York, N. Y. Alarm-lock	478,071	June 28	2947	{ 736 737 }	59	2061
Vassar, Robert G., New York, N. Y., assignor to Vassar Burglar Alarm Manufacturing Company, of New Jersey. Burglar-alarm	474,980	May 17	1761	446	59	1003
Vasson, Raphael G. de, assignor to La Suberine, Paris, France. Plastic composition	479,967	Aug. 2	309	.....	60	641
Vastine, Carroll B. (See Corner, Robert J. G., assignor.)						
Vauchain, Samuel M., Philadelphia, Pa. Combined starting and blow-off valve	471,836	Mar. 29	3385	863	58	1787
Vaughan, David F., Haddonfield, N. J., assignor of one-half to M. W. Thomson, Altoona, Pa. Railway-frog	474,200	May 3	486	117	59	732
Vaughan, David M., <i>et al.</i> (See Westrup, Oliver F., assignor.)						
Vaughan, Frank, Elizabeth City, N. C. Car-coupling	466,639	Jan. 5	522	136	58	101
Vaughan, Fred W., San Francisco, Cal. Wheel-cultivator	476,707	June 7	718	177	59	1579
Vaughan, Louis H., and W. E. Evans, London, England. Type-writing machine	485,593	Nov. 1	672	178	61	712
Vaughn, Augustus W., Stuart, Iowa. Printing-press	479,579	July 26	2379	593	60	504
Vaughn, Charles H., Union, Iowa. Paint for tin, iron, woodwork, &c	466,812	Jan. 12	817	.....	58	165
Vaughn, James J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Vaughn, John H., <i>et al.</i> (See Morrison, Hamon, assignor.)						
Vawter, Charles D. (See Quinn, James W., assignor.)						
Vawter, William A. (See Stoelting, Christian H., assignor.)						
Vawter, William A. (See Weber, George W., assignor.)						
Vawter, William A., <i>et al.</i> (See Burton, Augustus G., assignor.)						
Vawter, William A., <i>et al.</i> (See Thuge, Johan A., assignor.)						
Vawter, William A., <i>et al.</i> (See Turk, Frederick M., assignor.)						
Vawter, William A., and R. J. Copeland, Chicago, Ill. Temporary holder	475,425	May 24	2454	625	59	1154
Vayre, Henri, San Francisco, Cal. Awning	483,950	Oct. 4	635	160	61	131
Veach, Benjamin F., Vienna, Ill. Roller-guide for hoop-pole-band saws	470,724	Mar. 15	1689	435	58	1443
Veasey, Sparks P. (See Haney and Owens, assignors.)						
Veeder, Irwin. (See Richards and Veeder.)						
Veeder, Irwin. (See Rowntree and Veeder.)						
Veeder, Irwin, trustee. (See Dunham, Charles H., assignor.)						
Veenschoten, William, Hornellsville, N. Y. Elevator	473,036	Apr. 19	1580	{ 402 403 }	59	327
Veit, Charles F. (See Renard, Victorien L. M., assignor.)						
Veitch, Richard M. (See Mitchell and Veitch.)						
Vellines, Benton H., assignor to Norfolk, Virginia, Peanut Company, Norfolk, Va. Centrifugal separator for nuts, grain, &c	466,730	Jan. 5	677	174	58	120
Velocity Manufacturing Company. (See Goodrich, Harry C., assignor.)						
Velten, Ludwig. (See Grant and Velten.)						
Venon, Albert P., Seattle, Wash. Musical instrument	473,981	May 3	150	35	59	666
Venker, John B., St. Louis, Mo. Electrically-heated hand-stamp	484,574	Oct. 18	1613	410	61	351
Venn, Isaac H., assignor of one-half to J. H. Carson, Yonkers, N. Y. Planing-machine	470,404	Mar. 8	1217	311	58	1340
Venn, Isaac H., Yonkers, N. Y., assignor, by mesne assignments, to National Company, of Illinois. Hydraulic elevator	476,581	June 7	530	{ 125 126 }	59	1542
Vensel, Jacob F., Tarentum, Pa. Force-fed lubricator	470,522	Mar. 8	1397	365	58	1375
Ventzki, August J., Graudenz, Germany. Feed-steaming apparatus for animals	485,399	Nov. 1	390	105	61	652
Verburg, Simon, assignor of one-half to W. H. Holden, Detroit, Mich. Portable measuring-faucet	472,775	Apr. 12	1174	300	59	235

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Verdin, Alois N. (See Heath and Verdin.)						
Verduin, Cornelius. (See Dalenberg and Verduin.)						
Verein für Zellstoffindustrie Actiengesellschaft. (See Maste, Hermann A. A., assignor.)						
Vereinigte Holzindustrie, Fabrik Frankenthal. (See Heep, Conrad, assignor.)						
Verhage, Henry. (See Derham, Samuel G., assignor.)						
Verhagen, Frank T., Spencer, Iowa. Fish or game carrier	486,649	Nov. 22	2339	611	61	1092
Verity, James H. (See Baker and Verity.)						
Vermenlen, John, New York, N. Y., assignor, by mesne assignments, to Oliver & Roberts Wire Company, Limited, Pittsburg, Pa. Spiral-spring-coiling machine	481,443	Aug. 23	2750	676	60	1148
Vermenlen, John, New York, N. Y., assignor, by mesne assignments, to Oliver & Roberts Wire Company, Limited, Pittsburg, Pa. Wire box-strap machine	481,444	Aug. 23	2751	677	60	1148
Vermont Farm Machine Company. (See Kimball, Perley L., assignor.)						
Vermont Farm Machine Company. (See Tabor, Lorin R., assignor.)						
Vernier, Julius J., Toledo, Ohio. Catamenial sack	467,963	Feb. 2	84	20	58	541
Vernon, Archer T., assignor of one-half to O. W. Carr and D. Peacock, Greensborough, N. C. Mosquito-canopy	485,117	Oct. 25	2498	642	61	543
Vernon, George O., assignor of one-half to H. W. Price, Albany, Oreg. Power mechanism for baling-presses	466,731	Jan. 5	678	174	58	129
Vernon, Miles, Brooklyn, N. Y. Movable index for letter-copy books	476,708	June 7	719	177	59	1580
Veroneo, George W., Ten Mile Hill, S. C. Rock-catcher	471,041	Mar. 15	2171	559	58	1536
Veroneo, George W., Ten Mile Hill, S. C. Rock-catcher. (Reissue)	11,293	Dec. 6	750	192	61	1469
Verrill, Edgar F., San Francisco, Cal. Copying-press	487,861	Dec. 13	1030	258	61	1543
Verrill, Edgar F., San Francisco, Cal. Copying-press	484,748	Oct. 18	1897	484	61	409
Verstraete, Edmond. (See Kling, Peter M., assignor.)						
Verstraete, Edmond. (See Koedding, William, assignor.)						
Verstraete, Edmond, assignor of one-half to P. M. Kling, St. Louis, Mo. Electric railway-brake	467,259	Jan. 19	1565	398	58	314
Very, Alpha O., Boston, Mass. Trimmer for sewing-machines	476,339	June 7	717	42	59	1471
Very, Alpha O., Boston, Mass. Feeding mechanism for sewing-machines	486,961	Nov. 29	2886	746	61	1218
Very, Theodore S., Boston, Mass. Toe-calk for horseshoes	481,336	Aug. 23	2584	634	60	1116
Vesian, John S. E. de. (See Tyler and de Vesian.)						
Vetter, Carl, Denver, Colo. Casing for cavities	471,629	Mar. 29	3050	776	58	1723
Vetterlein, John, North Plainfield, N. J. Wheel for cycles	476,433	June 7	732	74	59	1500
Vezin, Oscar, New York, N. Y. Refrigerator-car	482,703	Sept. 13	1288	316	60	1600
Vian, Benjamin, New York, N. Y. Dress-chart	487,801	Dec. 13	934	235	61	1524
Vibert, Charles W. (See Ellsworth, Erastus W., assignor.)						
Vicken, George P., Louisville, Ky. Earth-auger	470,725	Mar. 15	1691	436	58	1443
Vickers, Albert, Baltimore, Md. Arresting and extinguishing combustion in charcoal-kilns	477,875	June 28	2649	662	59	2002
Victor, Robert J. (See Schodsky, Max, assignor.)						
Victor, Robert J., New York, N. Y. Towing-machine	467,529	Jan. 26	1992	505	58	403
Victor, Robert J., New York, N. Y. Steering-gear for vessels	471,202	Mar. 22	2428	618	58	1598
Victor Safe and Lock Company. (See Baum, Jacob, assignor.)						
Viehoffer, Carl R., Berlin, Germany. Corset-fastening	472,087	Apr. 5	113	30	59	23
Viel, Arthur H., Fenton, Mich. Spring-bed	476,178	May 31	3667	927	59	1405
Vierengel, Matthew, Brooklyn, N. Y., assignor to C. B. Cottrell, Stonington, Conn. Cylinder printing-machine. (Reissue)	11,227	Mar. 1	789	195	58	1252
Vierengel, Matthew, Brooklyn, N. Y., assignor to C. B. Cottrell, Stonington, Conn. Cylinder printing-machine. (Reissue)	11,228	Mar. 1	791	195	58	1253
Vierling, Louis, et al. (See Rosa, Edgar C., assignor.)						
Vierling, Robert, et al. (See Rosa, Edgar C., assignor.)						
Viet, Emile T., Charleston, S. C. Stone-lifter	474,885	May 17	1610	411	59	974
Vieweg, Arno. (See Fischer, Gustav, assignor.)						
Vieweg, John N. (See Booz, Thomas J., assignor.)						
Viger, François E., Longueuil, Canada. Chisel for mortising-machines	469,360	Feb. 23	2267	582	58	994
Vignère, Henri, San Diego, Cal. Time-value-operating mechanism	470,272	Mar. 8	965	239	58	1295
Villamor, Isidoro, deceased; H. Serrell, New York, N. Y., administrator. Machine for preparing fiber	482,205	Sept. 6	465	112	60	1426
Villero, Eugen, Schramberg, Germany. Stone-crusher	469,288	Feb. 23	2164	555	58	973
Vincent, D. Howard. (See Rowell, Benton C., assignor.)						
Vincenz, Theodore J., Orange, N. J. Appliance for holding paper sheets in quantity	473,099	Apr. 19	1675	425	59	343
Vineing, Henry E., Roseville, N. J., assignor to Electric Secret Service Company, New York, N. Y. Electrical regulation	480,393	Aug. 9	1040	261	60	791
Vineing, Henry E., Roseville, N. J., assignor of one-half to R. S. Walker, New York, N. Y. Means for controlling the operation of mechanisms	483,272	Sept. 27	2222	558	60	1808
Vineyard, Gordon C. (See Root and Vineyard.)						
Vining, George, Hartford, Conn. Valve	478,665	July 12	914	226	60	197
Vining, George, assignor to T. M. Parker, Hartford, Conn. Printing machine	474,108	May 3	353	84	59	705
Vinson, Leaven J. H., Titusville, Fla. Screw	481,445	Aug. 23	2753	677	60	1148
Vinson, Michael E. and R. B., Rosston, Ark. Cotton-scraper	470,457	Mar. 8	1308	337	58	1357
Vinson, Robert B. (See Vinson, Michael E. and R. B.)						
Vinton, Clarence D., Stoneham, Mass. Curtain	471,321	Mar. 29	2601	660	58	1631
Vinton, John H., Boston, Mass. Method of and apparatus for charging soda-water	485,244	Nov. 1	135	41	61	601
Vinyard, Charles O., Navajo Springs, Ariz. Ter. Nut-lock	469,613	Feb. 23	2654	682	58	1069
Viol, Reinhard, Frankfurt-on-the-Main, Germany. Device for removing corns	485,726	Nov. 8	886	238	61	771
Violet, Richard J. G. (See Willing and Violet.)						
Violett, Ashford W., Jr., assignor of two-thirds to R. H. Webb and F. W. Turk, Bardwell, Ky. Wood-sawing machine	485,755	Nov. 8	922	247	61	778
Violett, William H., Grand Junction, Colo. Harness	468,213	Feb. 2	460	114	58	615
Violett, William H., Grand Junction, Colo. Car-coupling	481,446	Aug. 23	2754	677	60	1149
Virgil, Almon K., New York, N. Y. Exercising-keyboard	479,339	July 19	1954	488	60	408
Virgil, Almon K., New York, N. Y. Exercising-keyboard for musicians	479,340	July 19	1959	489	60	409
Virgile, Edouard de, assignor to A. Bonnet, New York, N. Y. Toy or puzzle	486,141	Nov. 15	1548	409	61	922
Viser, William M., Clarksville, Tenn. Tablet for use in letter-writing	477,087	June 14	1348	328	59	1720
Vivian, John, et al. (See Bell, George, assignor.)						
Vivien, Jean, Philadelphia, Pa. Convertible cornet	478,666	July 12	915	227	60	197
Voegtly, Frank L. (See Schroeffer and Voegtly.)						
Voelkle, Andreas, New York, N. Y. Street-sweeping machine	482,663	Sept. 13	1218	297	60	1586
Vogan, George L. (See Vogan, John H. and G. L.)						
Vogan, John H. and G. L., New Castle, Pa. Sanding device for street-cars	481,535	Aug. 23	2903	712	60	1179

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Vogel & Brothers, William. (See Vogel, Henry J., assignor.)						
Vogel Cable Construction Company. (See Morison and Vogel, assignors.)						
Vogel Cable Construction Company. (See Vogel and McIntosh, assignors.)						
Vogel, Carl, Stuttgart, Germany. Self marking and indicating target.	474,109	May 3	355	85	59	705
Vogel, Charles. (See Morison and Vogel.)						
Vogel, Charles, San Francisco, Cal. Cable-railway grip.	478,773	July 12	1081	269	60	230
Vogel, Charles, Fort Lee, N. J. Speed-gear for velocipedes.	479,177	July 19	1716	430	60	361
Vogel, Charles, San Anselmo, Cal. Grip for cable railways.	483,775	Oct. 4	382	95	61	80
Vogel, Charles, San Anselmo, Cal., and C. McIntosh, Tacoma, Wash., assignors to Vogel Cable Construction Company, of Colorado. Grip for cable railways.	483,774	Oct. 4	379	94	61	79
Vogel, Gustav, Orange Valley, N. J. Propelling mechanism for row-boats.	479,924	Aug. 2	231	58	60	627
Vogel, Henry J., assignor to W. Vogel & Brothers, Brooklyn, N. Y. Breast or top for metallic vessels.	473,274	Apr. 19	1983	437	59	402
Vogel, John L. (See Young and Vogel.)						
Vogel, John W. (See Netschert, John G., assignor.)						
Vogel, Preston S. (See Young and Vogel.)						
Vogeler, Jerome L., Baltimore, Md. Bottle.	470,458	Mar. 8	1309	337	58	1357
Vogelsang, Alexander, Brooklyn, N. Y. Propulsion of vessels by hydraulic reaction.	469,328	Feb. 23	2222	570	58	985
Voght, William. (See Chaplin, Joseph, assignor.)						
Vogler, William, Somerville, Mass. Electric cable.	468,585	Feb. 9	1066	272	58	741
Vogler, William, Somerville, assignor to C. A. Moras, Boston, Mass. Dress-form.	479,232	July 19	1798	450	60	377
Vogt, August, Willow Point, Tex. Fruit-jar.	473,100	Apr. 19	1676	425	59	344
Vogt, August G., Boerne, assignor of one-third to L. W. Madarasz and W. G. Kingsbury, San Antonio, Tex. Car-coupling.	488,857	Dec. 27	2651	656	61	1898
Vogt, Caesar, Posen, Germany. Microphone.	476,582	June 7	534	127	59	1543
Vogt, Caesar, Posen, Germany. Magnetic telephone.	476,583	June 7	535	127	59	1543
Vogt, Frank A., Anderson, Ind. Can-opener.	486,307	Nov. 15	1805	475	61	973
Vogt, Theodore G. P., Passaic, N. J. Land and water velocipede.	477,160	June 14	1453	357	59	1740
Vohringer, Frederick, Louisville, Ky. Manufacturing sheet-metal articles.	475,642	May 24	2793	708	59	1221
Voight, Henry G., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Cylinder locks and keys.	480,299	Aug. 9	889	225	60	761
Voigt, A. D., et al. (See Hartman, Henry, assignor.)						
Voigt, Ferdinand F., Chicago, Ill. Screw-threading machine.	485,245	Nov. 1	137	41	61	601
Voisard, Emile P., Chicago, Ill. Ice-cream freezer.	483,029	Sept. 20	1813	460	60	1717
Vojacek, Ladislav. (See Rivnáč and Vojacek.)						
Volk, Herman C., and E. Weiland, Buffalo, N. Y. Device for opening letters.	471,283	Mar. 22	2547	647	58	1620
Volk, John, et al. (See Ward, William H., assignor.)						
Völker, Otto. (See Mueller and Stader, assignors.)						
Volkmann, John H. (See Adriance and Volkman.)						
Volkmann, John H., New York, N. Y. Coin conveyer and tester for automatic vending-machines.	483,188	Sept. 27	2063	521	60	1779
Volkman, Paul, assignor to Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Making piperazin.	482,108	Sept. 6	304		60	1395
Vollrath, Carl A. W., Shelbygan, Wis. Producing enameled iron ware.	488,683	Dec. 27	2385		61	1841
Vollten, Theodor, Washington, D. C. Sash-cord fastener.	472,565	Apr. 12	807	223	59	179
Volstorff, Theodor, Berlin, Germany. Rotary pulp-strainer.	483,030	Sept. 20	1814	460	60	1717
Volz, Adam. (See Volz, John, A., and H.)						
Volz, Henry. (See Volz, John, A., and H.)						
Volz, John, A., and H., Baltimore, Md. Portable tower-platform fire-escape.	487,039	Nov. 29	3003	773	61	1240
Vondersaar, Wendel, Indianapolis, Ind. Rowlock.	468,960	Feb. 16	1653	422	58	866
Vongerichten, Eduard, assignor to Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Making diamido-diphenylmethan bases.	471,659	Mar. 29	3089		58	1731
Voorhees, Charles. (See Voorhees, Richard D., P., and C.)						
Voorhees, Philip. (See Voorhees, Richard D., P., and C.)						
Voorhees, Richard D., P., and C., Flora, Ind. Ironing-table.	488,858	Dec. 27	2653	657	61	1839
Vorce, Albert F., Frankfort, Mich. Music-leaf turner.	486,573	Nov. 22	2206	580	61	1065
Vorwick, Joseph W., Monmouth, Ill. Running-gear for vehicles.	466,813	Jan. 12	818	210	58	165
Vose, Charles W., Chatham, Mass. Ink-holder for pens.	486,623	Nov. 22	2295	599	61	1083
Vose, Harry A. (See Glenn, William F., assignor.)						
Vose, Harry A., Natick, assignor of one-sixth to W. F. Glenn, Lexington, Mass. Overhead-truck lifter and shifter.	470,851	Mar. 15	1893	485	58	1482
Voss, William H., et al. (See Strayer, George D., assignor.)						
Voss, William H., East Stroudsburg, Pa. Extensible step for cars.	481,658	Aug. 30	3095	754	60	1330
Votey, Edwin S., Detroit, Mich. Pipe-organ.	468,509	Feb. 9	945	241	58	717
Votey, Edwin S., and W. D. Wood, Detroit, Mich. Wind-chest for pipe-organs.	475,831	May 31	3110	787	59	1294
Votey, Edwin S., and W. D. Wood, Detroit, Mich. Fresh-wind box for pipe-organs.	475,832	May 31	3112	788	59	1294
Vought, Jennie T. (See Straut, Hooper B., assignor.)						
Vradenburg, Elijah. (See Cook, Joseph E., assignor.)						
Vreeland, Warren, Nutley, N. J. Weed-extermimator.	480,300	Aug. 9	891	226	60	764
Vulcan Company. (See Leavitt, Frank M., assignor.)						
Vulcan Iron Works. (See Koefoed, Charles J., assignor.)						
Vulcan Iron Works. (See McIntire, Bartlett, assignor.)						
W. F. and John Barnes Company. (See Barnes, Benjamin F., assignor.)						
W. F. and John Barnes Company. (See Barnes, William F., assignor.)						
W. S. Reed Toy Company. (See Gilman, Willard H., assignor.)						
W. S. Reed Toy Company. (See Reed, William S., assignor.)						
W. W. Kimball Company. (See Hedgeland, Frederick W., assignor.)						
Wachendorf, Carl, assignor to R. Koepf & Co., Oestrich, Germany. Double salts of fluoride of antimony and sulphate of ammonia.	479,925	Aug. 2	233		60	627
Wachs, William, Covington, Ky. Baking pan.	472,595	Apr. 12	906	232	59	186
Wächter, Ludwig. (See Welleba and Wächter.)						
Wackenbuth, Frederick C. (See Stobaens and Wackenbuth.)						
Wacker, Albert, Nuremberg, Germany. Measuring-box.	468,961	Feb. 16	1654	423	58	867
Waddell, Montgomery, J. B. Entz, New York, and W. A. Phillips, Brooklyn, N. Y. Method of and apparatus for deoxidizing metals.	475,260	May 17	2188	558	59	1087
Waddell, Thomas W. (See McAlister and Waddell.)						
Wade, L. R., et al. (See Jackson and Reiger, assignors.)						
Wade, Leroy M., et al. (See Barton, Charles N., assignor.)						
Wade, William, Louisville, assignor of one-half to H. M. Morrow and W. N. Williams, Omaha, Nebr. Composition for bricks.	468,404	Feb. 9	783		58	685

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Di'g.	Vol.	Page.
Wadsworth, Alfred, Warsaw, N. Y. Sawing-machine	483,315	Sept. 27	2284	{ 574 575	60	1819
Wadsworth, George H., and W. Sheesley, Findlay, Ohio. Adjusting apparatus for oil-wells.	482,818	Sept. 20	1466	{ 364 365	60	1648
Wadsworth, Joseph, Paterson, N. J. Swivel-loom	466,866	Jan. 12	908	{ 232 233	58	182
Wadsworth, Lester J., assignor of one-half to E. Buck, Marshall, Mich. Addressing-machine	467,319	Jan. 19	1654	421	58	331
Wadsworth, William, <i>et al.</i> (See Prescott, George A., assignor.)						
Wadsworth, William, Fall River, Mass. Machine for punching leather loom-pickers	480,419	Aug. 9	1082	271	60	798
Waeber, Gustavus A., New York, N. Y. Sheet-metal can	474,427	May 10	879	229	59	818
Waeber, Gustavus A., and A. Kleinfeldt, New York, N. Y. Sheet-metal vessel	466,993	Jan. 12	1114	281	58	220
Waeber, Gustavus A., and A. Kleinfeldt, New York, N. Y. Sheet-metal vessel	466,994	Jan. 12	1115	282	58	220
Waechter, Bruno. (See Weigel and Waechter.)						
Waffenfabrik Manser. (See Manser, Paul, assignor.)						
Wagandt, Charles L., assignor of one-half to Keen & Hagerty, Baltimore, Md. Soldering apparatus	467,694	Jan. 26	2259	574	58	452
Wagandt, Charles L., assignor to Keen & Hagerty, Baltimore, Md. Baking-plate for pies, &c.	476,340	June 7	178	42	59	1471
Wagandt, Charles L., assignor of one-half to Keen & Hagerty, Baltimore, Md. Soldering apparatus	477,090	June 14	1351	328	59	1721
Wagenführ, Charles, Brooklyn, N. Y. Button-die	475,476	May 21	2536	646	59	1170
Wages, Edgar, and S. H. Armstrong, Canton, Ill. Draft-equalizer	471,297	Mar. 22	2570	652	58	1625
Wages, Edgar, and S. H. Armstrong, Canton, Ill. Cultivator	483,031	Sept. 20	1816	461	60	1718
Wagg, S. R., <i>et al.</i> (See Goodrick, Edward W., assignor.)						
Waggoner, Edward P., assignor of one-half to Pierce, Butler & Pierce Manufacturing Company, Syracuse, N. Y. Sectional heater	474,311	May 3	675	{ 174 175	59	767
Waggoner, James D. (See Hodnett and Waggoner.)						
Waggoner, James G., Columbus, Ind. Car-coupling	486,516	Nov. 22	2120	559	61	1050
Waggoner, William H., Patterson, Ind. Rotary cultivator	467,068	Jan. 12	1233	312	58	242
Wagler, John A., New York, N. Y. Web for bookbinding, &c.	474,509	May 10	1002	258	59	841
Wagler, Joseph. (See Dreesman and Wagler.)						
Wagner, Adam C., Philadelphia, Pa. Mashing apparatus	478,667	July 12	916	227	60	197
Wagner, Alvin, <i>et al.</i> (See Otto, Peter, assignor.)						
Wagner, August, assignor to Schaum & Uhlinger, Philadelphia, Pa. Swivel-loom	473,563	Apr. 26	2479	627	59	520
Wagner, August, assignor to Schaum & Uhlinger, Philadelphia, Pa. Swivel-loom	488,511	Dec. 20	2103	522	61	1774
Wagner, August, assignor to Schaum & Uhlinger, Philadelphia, Pa. Swivel-loom	488,512	Dec. 20	2104	522	61	1775
Wagner, August, assignor to Schaum & Uhlinger, Philadelphia, Pa. Swivel-loom	488,512	Dec. 20	2104	522	61	1775
Wagner, Aushert H., Chicago, Ill. Shafting-hanger	482,287	Sept. 6	599	142	60	1452
Wagner, Caspar M., Chicago, Ill. Folding cot	469,759	Mar. 1	144	37, 38	58	1128
Wagner, Caspar M., Chicago, Ill. Folding bed	479,861	Aug. 2	123	31	60	608
Wagner, Caspar M., Chicago, Ill. Folding bed	480,795	Aug. 16	1670	{ 417 418	60	929
Wagner, Chapin, Vernon, Ind. Plow	486,515	Nov. 22	2118	559	61	1050
Wagner, Curt, Oederan, Germany. Elastic tire	482,819	Sept. 20	1466	365	60	1648
Wagner Electric Manufacturing Company. (See Wagner and Schwedtmann, assignors.)						
Wagner, Ezra B. (See Bolenbaugh and Wagner.)						
Wagner, Franz X. (See Barron, Wagner, and Densmore.)						
Wagner, Franz X. (See Fleckenstein, Cornelius, assignor.)						
Wagner, George F., Philadelphia, Pa. Sod-cutter	485,441	Nov. 1	447	120	61	663
Wagner, Henry, Cincinnati, Ohio. Traveling-bag	470,227	Mar. 8	896	221	58	1282
Wagner, Herbert A., and F. Schwedtmann, assignors to Wagner Electric Manufacturing Company, St. Louis, Mo. Electric machine	474,787	May 10	1444	366	59	928
Wagner, Jacob, Brooklyn, N. Y. Sad-iron	474,704	May 10	1315	335	59	902
Wagner, Jacob, Sidney, Ohio. Valve-operating mechanism	484,265	Oct. 11	1131	289	61	244
Wagner, John, and G. B. Sunderland, Marietta, Ohio. Horseshoeing-rack	481,083	Aug. 16	2130	530	60	1019
Wagner, John F., Brooklyn, N. Y. Grate	466,440	Jan. 5	523	136	58	101
Wagner Manufacturing Company. (See Bingham, Robert O., assignor.)						
Wagner, Oscar, assignor of one-half to C. Reusch, Dayton, Ohio. Window	472,239	Apr. 5	363	93	59	68
Wagner, Peter, New York, N. Y. Electric bell	487,437	Dec. 6	347	89, 90	61	1390
Wagner, Samuel K., Latrobe, Pa. Gas-mixer	481,604	Aug. 30	3017	737	60	1215
Wagner, William. (See Williams, Charles J., assignor.)						
Wagner, William, Washington, D. C. Apparatus for loading cartridges	481,127	Aug. 16	2200	{ 544 545	60	1031
Wagor, Samuel D., Winterset, Iowa. Burial apparatus	479,904	Aug. 2	193	48	60	620
Wahl, Albert, <i>et al.</i> , executors. (See Van Depoele, Charles J.)						
Wahl, George F., <i>et al.</i> (See Haas, Jacob A., assignor.)						
Wahlstrom, John A., Salem, Oreg. Flour-reel machine	484,478	Oct. 18	1472	375	61	321
Waibel, Carl, Neustadt-on-the-Hardt, Bavaria, Germany. Process of and machine for manufacturing wadding from cellulose and cotton	483,590	Oct. 4	114	27	61	24
Waide, Daniel, San Francisco, Cal. Bookbinding	481,349	Oct. 11	1261	322	61	269
Wainwright, Edward W. (See Nickel and Wainwright.)						
Wainwright, Jacob T., Chicago, Ill. Reducing unsmelted ores	482,213	Sept. 6	478	115	60	1429
Wainwright, Jacob T., Pittsburgh, Pa. Working heat-regenerators	483,752	Oct. 4	343	86	61	72
Wainwright, William, San Francisco, Cal. Spray-rod	473,037	Apr. 19	1586	403	59	327
Wait, Frona E., <i>et al.</i> (See Christy, James C., assignor.)						
Wait, Philip H., Sandy Hill, N. Y. Machine for disintegrating jute, &c.	485,246	Nov. 1	141	42	61	602
Wait, Wesley, Newburg, N. Y. Floating structure for water-velocipedes	468,850	Feb. 16	1470	375	58	831
Waite, Annie L., administratrix. (See Bangs and Waite.)						
Waite, Arthur L. (See Bangs and Waite.)						
Waite, Charles N., Newton, Mass. Diaphragm for electrical cells	469,428	Feb. 23	2375	.....	58	1015
Waite, George R., assignor to Provident Gas Process Company, Philadelphia, Pa. Gas apparatus	469,180	Feb. 16	1975	505	58	931
Waite, Gilman. (See Stevens, Asher B., assignor.)						
Waite, Henry E. (See Ethridge and Waite.)						
Waite, Henry E., <i>et al.</i> (See Ethridge, Martin V. B., assignor.)						
Waite, Henry E., New York, N. Y. Electric-bath apparatus	477,975	June 28	2791	699	59	2032
Wakefield, George W., Waterman, Ill. Grain-weighing machine	481,084	Aug. 16	2131	531	60	1019
Wakefield, Thomas, Ely, Minn. Elevator for mining-cars	473,275	Apr. 19	1983	{ 497 498	59	402
Wakefield, William O., Lynn, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Journal-box	469,730	Mar. 1	98	26	58	1118
Wakefield, William O., assignor to F. W. Webster and E. W. Rice, Jr., Lynn, Mass. Bi-cycle	483,273	Sept. 27	2224	{ 558 559	60	1808
Wakeman, Charles E., Pontiac, Mich. Device for centering knitting-machine cylinders	479,862	Aug. 2	130	32	60	608

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. 56	Vol.	Page.
Walbridge, Henry L., Springfield, Mass. Cash-carrier.....	467,666	Jan. 26	2210	{ 563 564 }	58	443
Walcott, W. Stuart. (See Hastings, Matthew E., assignor.)						
Walden, Joseph, Orange, N. J. Lace-fastening hook.....	485,247	Nov. 1	142	42	61	602
Waldo, George E., Manitowoc, Wis. Privy-seat cover.....	466,388	Jan. 5	122	34	58	26
Waldron, Charles F., Boston, Mass. Electric battery.....	478,485	July 5	647	159	60	129
Waldron, Charles L., Round Pond, Me. Plate or pan lifter.....	481,986	Sept. 6	98	25	60	1354
Waldron, Charles W., Lewiston, Me. Quoin.....	481,605	Aug. 30	3018	738	60	1216
Waldron, Edward, Philadelphia, Pa. Rotary engine.....	479,479	July 26	2236	{ 561 562 }	60	477
Waldron, Edward, Philadelphia, Pa. Clutch.....	480,796	Aug. 16	1672	418	60	930
Waldron, George E., <i>et al.</i> (See Gibbons, John, assignor.)						
Wales, Simeon W., North Abington, Mass. Protector for shoe-uppers.....	486,171	Nov. 15	1590	421	61	930
Walfard, Armand, Rheims, France. Treatment of sparkling wine.....	485,248	Nov. 1	143	42	61	602
Walke, Henry A., Columbus, Ohio. Fountain-pen.....	467,785	Jan. 26	2400	610	58	480
Walker, Alexander, assignor of one-half to W. Thompson, What Cheer, Iowa. Gear-wheel.....	479,233	July 19	1800	451	60	377
Walker, Benjamin J. (See Kies, Harry E., assignor.)						
Walker, Byron A. (See Lovell and Walker.)						
Walker, Charles B., Trinidad, Colo. Oro-concentrator.....	480,301	Aug. 9	892	226	60	764
Walker, Charles W., Strang, Nebr. Type-writing machine.....	470,633	Mar. 8	1549	404	58	1407
Walker, Charles W., Strang, Nebr. Type-writing machine.....	487,802	Dec. 13	935	236	61	1524
Walker, Charley B. (See Parker and Walker.)						
Walker, Douglas, Liberty, Ill. Sliding gate.....	480,155	Aug. 2	630	159	60	703
Walker, Edward A., Philadelphia, Pa. Belt-shifter.....	472,745	Apr. 12	1133	291	59	227
Walker, Edward A., Philadelphia, Pa. Planing-machine.....	475,004	May 17	1801	457	59	1010
Walker, Edward A., Canajoharie, N. Y. Baling-machine.....	485,824	Nov. 8	1009	{ 270 271 272 }	61	795
Walker, Edwin, and J. Shaw, Heckmondwike, England. Pipe for the conveyance of liquids or gases.....	483,274	Sept. 27	2225	559	60	1808
Walker, Emma, Jersey City, N. J. Drawers.....	471,919	Mar. 29	3498	894	58	1810
Walker, Frank. (See Walker, Joseph J., W. H., and F.)						
Walker, Frank, Los Angeles, Cal. Automatic flushing apparatus.....	468,979	Feb. 16	1696	432	58	875
Walker, Frederick A., Evanston, assignor to S. H. Sinclair Company, Chicago, Ill. Iron-ing-machine clamp.....	486,650	Nov. 22	2340	{ 611 612 }	61	1092
Walker, Frederick H., Philadelphia, Pa. House-door letter-box.....	477,091	June 14	1352	329	59	1721
Walker, Frederick J., Milton, Pa. Pencil-sharpener.....	484,071	Oct. 11	821	208	61	183
Walker, George A., <i>et al.</i> (See Westgate, Joseph D., assignor.)						
Walker, George D., Cleveland, Ohio. Crib attachment for beds.....	472,647	Apr. 12	983	254	59	200
Walker, George H., Cincinnati, Ohio. Beer-faucet.....	471,630	Mar. 29	3051	777	58	1724
Walker, George R., <i>et al.</i> (See O'Donnell, Michael J., assignor.)						
Walker, George W., Philadelphia, Pa. Take-up arrester for looms.....	470,961	Mar. 15	2052	525	58	1513
Walker, George W., Tama, Iowa. Grate-bar and shaker attachment for furnaces.....	476,584	June 7	536	{ 127 128 }	59	1543
Walker, Henry, Worcester, Mass. Child's folding bed.....	471,203	Mar. 22	2430	618	58	1598
Walker, James C., Waco, Tex. Air-ship.....	467,069	Jan. 12	1235	{ 312 313 }	58	243
Walker, James C., Waco, Tex. Water-wheel.....	467,840	Jan. 26	2492	{ 631 632 }	58	497
Walker, James C., Waco, Tex. Hydraulic propulsion of vessels.....	480,533	Aug. 9	1258	316	60	834
Walker, James D., <i>et al.</i> (See Mikesell, Azariah H., assignor.)						
Walker, James E., assignor of two-thirds to L. Griffith and C. F. Hunt, Detroit, Mich. Car-coupling.....	479,926	Aug. 2	235	58	60	627
Walker, James M. C. (See Chenette, Joseph E., assignor.)						
Walker, James S., Denver, Colo. Coin-case.....	485,778	Nov. 8	950	255	61	784
Walker, James T., Palmyra, N. Y. Photographic camera.....	467,454	Jan. 19	1858	474	58	370
Walker, John, Cleveland, Ohio. Winding-drum for cable railways.....	469,338	Feb. 23	2234	573	58	987
Walker, John, Cleveland, Ohio. Power-transmitting device.....	469,491	Feb. 23	2477	635	58	1032
Walker, John, Cleveland, Ohio. Device for operating sliding sleeves.....	474,428	May 10	881	229	59	818
Walker, John, Cleveland, Ohio. Clutch.....	474,429	May 10	882	230	59	819
Walker, John P., <i>et al.</i> (See Fox, Thomas, assignor.)						
Walker, Joseph J., W. H., and F. St. Helier's, England. Recording money-till.....	475,643	May 24	2794	708	59	1221
Walker, Lewis C., Indianapolis, Ind. Sash-fastener.....	472,088	Apr. 5	114	31	59	23
Walker, Lewis C., Indianapolis, Ind. Sash-fastener. (Reissue).....	11,287	Nov. 22	2653	693	61	1157
Walker, Louis A., Brooklyn, assignor to himself as trustee, and C. S. Mitchell, New York, N. Y. Bag-fastener.....	476,219	May 31	3742	945	59	1418
Walker, Nelson A., Chicago, Ill. Buttercup-cutter.....	486,917	Nov. 29	2820	730	61	1205
Walker, Oakley S., Worcester, Mass. Grinding-machine.....	441,380	Aug. 23	2647	649	60	1128
Walker, Robert L., Boston, Mass. Smoke-consuming furnace.....	479,100	July 19	1591	398	60	338
Walker, Robert S. (See Vineing, Henry E., assignor.)						
Walker, Robert W., and J. W. Peifer, assignors to C. P. Boies, Windsor, Ill. Knife.....	472,006	Mar. 29	3617	924	58	1832
Walker, Sarah L., Bloomville, Ohio. Lamp-stove.....	483,591	Oct. 4	115	28	61	24
Walker, Thomas B., <i>et al.</i> (See Landin, Peter J., assignor.)						
Walker, W. & H. (See Forster, Charles, assignor.)						
Walker, W. & H. (See Forster, Thomas V., assignor.)						
Walker, Walter, London, England. Process of and apparatus for making silicates and hydrochloric acid.....	474,539	May 10	1054	270	59	850
Walker, William, Sydney, New South Wales. Tube-expander.....	476,107	May 31	3545	892	59	1381
Walker, William C. (See Conway, Edward C., assignor.)						
Walker, William H. (See Walker, Joseph J., W. H., and F.)						
Walker, William J., St. Louis, Mo. Pipe-wrench.....	482,109	Sept. 6	305	72	60	1395
Walker, William J., assignor of one-half to T. H. Wurmb, St. Louis, Mo. Wrench.....	470,626	Mar. 8	1539	401	58	1404
Walker, William T., Clarksville, Tex. Puzzle.....	478,668	July 12	918	228	60	197
Walker, William V., Moravia, N. Y. Water-purifier and boiler-cleaner.....	477,615	June 21	2211	549	59	1901
Walker, William W., <i>et al.</i> (See Harden, William H., assignor.)						
Walkup, Andrew E., Omaha, Nebr. Court-file cover.....	471,660	Mar. 29	3090	786	58	1731
Walkup, Andrew E., Omaha, Nebr. Court-file-cover fastener.....	486,962	Nov. 29	2888	746	61	1218
Wall, Charles L., Philadelphia, Pa., assignor of one-half to J. G. Wall, Camden, N. J. Mortising-chisel.....	482,704	Sept. 13	1290	316	60	1601
Wall, Charles W., assignor of two-thirds to E. E. Fitch and W. P. Kirst, Buffalo, N. Y. Combined ash pan and sifter.....	484,621	Oct. 18	1689	429	61	366
Wall, Jacob G. (See Wall, Charles L., assignor.)						
Wall, John, and J. J. Mack, Terre Haute, Ind. Railway-frog.....	474,705	May 10	1316	335	59	902

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wall, Joseph, Seaforth, England. Signal-lantern.....	485,071	Oct. 25	2434	{ 625 626 }	61	529
Wall, Michael V. (See West, Harley E., assignor.)						
Wall, Robert C., Philadelphia, Pa. Luggage-carrier for bicycles.....	467,729	Jan. 26	2322	{ 589 590 }	58	464
Wall, William E., assignor of one-half to S. H. Garner, Grenada, Miss. Car-coupling.....	468,449	Feb. 9	841	212	58	697
Wallace, Amos, Little Rock, Iowa. Windmill.....	473,982	May 3	152	36	59	667
Wallace, Casper D., Bridgeport, Conn., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine.....	474,981	May 17	1764	447	59	1003
Wallace, David C., and T. J. Parker, Blue Springs, Mo. Wire-stretcher.....	471,260	Mar. 22	2543	638	58	1614
Wallace, Eugene, Minneapolis, Minn. Street-sweeping machine.....	485,727	Nov. 8	887	238	61	771
Wallace, George E., Belfast, Me. Apparatus or machine for cleaning bottles.....	482,110	Sept. 6	306	72	60	1395
Wallace, John B., and J. W. Stemm, assignors of one-half to C. A. Allen and A. W. Ball, Galion, Ohio. Antifriction lubricating compound.....	487,203	Nov. 29	3260	.....	61	1291
Wallace, John S., Belfast, Ireland. Charge-indicator for gas-guns.....	480,156	Aug. 2	631	160	60	703
Wallace, Monroe E., <i>et al.</i> (See Hoffman, Austin D., assignor.)						
Wallace, Robert J., and L. A. Henrich, Denver, Colo. Coin-holder.....	487,438	Dec. 6	350	90	61	1391
Wallace & Sons. (See Bohner, Joseph E., assignor.)						
Wallace, Thomas V., Monongahela City, Pa. Harness-snap.....	482,885	Sept. 20	1584	398	60	1670
Wallace, Victor A., <i>et al.</i> (See Lindley, Zachary M., assignor.)						
Wallace, William T., Beloit, Wis. Hay-rack.....	477,161	June 14	1455	357	59	1741
Wallace, William W., and R. C. Penfield, assignors to J. W. Penfield & Son, Willoughby, Ohio. Machine for re-pressing bricks.....	480,912	Aug. 16	1850	461	60	966
Wallace, William W., and R. C. Penfield, assignors to J. W. Penfield & Son, Willoughby, Ohio. Brick-sanding machine.....	482,705	Sept. 13	1291	316	60	1601
Wallace, William W., and R. C. Penfield, assignors to J. W. Penfield & Son, Willoughby, Ohio. Sanding apparatus.....	483,088	Sept. 20	1896	479	60	1734
Walle, Carl G., Brooklyn, N. Y. Slide-valve.....	478,829	July 12	1184	293	60	249
Walleiser, Ludovica, Dresden, Germany. Inhaling and disinfecting device.....	477,342	June 21	1772	434	59	1815
Waller, Elwyn, and C. A. Sniffin, New York, N. Y. Making white lead.....	471,780	Mar. 29	3298	841	58	1769
Waller, Elwyn, and C. A. Sniffin, New York, N. Y. Making white lead.....	488,374	Dec. 20	1890	.....	61	1731
Waller, John E., and E. Manville, London, England. Conduit system for electric railways.....	469,828	Mar. 1	261	67, 68	58	1152
Wallgren, Ernest F., assignor of one-half to A. H. Engström, Philadelphia, Pa. Governor for marine engines.....	471,725	Mar. 29	3208	817	58	1752
Wallick, Washington, Philadelphia, Pa. Buttonhole attachment for sewing-machines.....	467,841	Jan. 26	2493	632	58	498
Wallin, Joseph, Boston, Mass. Calendar.....	488,461	Dec. 20	2021	505	61	1758
Walling, William P., Santa Monica, Cal. Elevated track or tramway.....	477,718	June 28	2388	596	59	1954
Wallis, Charles, and R. Mader, Bay City, Mich. Combined cane and steel.....	482,214	Sept. 6	481	115	60	1429
Wallis, Fuller W., Wolfe City, Tex. Car-coupling.....	470,228	Mar. 8	898	292	58	1282
Wallis, Howard R., Muncy, Pa. Nut-lock.....	472,413	Apr. 5	634	162	59	1119
Walls, Cyrus N., Taylorville, Ill. Feeding attachment for paper-folders.....	475,644	May 24	2796	708	59	1221
Walpole, William R. (See King and Walpole.)						
Walsh, Clarence L., <i>et al.</i> (See Lawing, Samuel N., assignor.)						
Walsh, Edward, Jr., St. Louis, Mo. Apparatus for rolling plate-glass.....	487,803	Dec. 13	936	{ 236 237 }	61	1525
Walsh, Francis A., Milwaukee, Wis. Sheet-metal-shearing machine.....	468,586	Feb. 9	1067	272	58	741
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel.....	468,587	Feb. 9	1068	273	58	741
Walsh, Francis A., Milwaukee, Wis. Sheet-metal vessel.....	485,851	Nov. 8	1051	280	61	804
Walsh, James J., Paris, Tex. Support for electric lights.....	471,837	Mar. 29	3387	864	58	1787
Walsh, John, assignor of one-half to J. F. Grether, Cleveland, Ohio. Trolley-protector.....	481,517	Aug. 23	2863	704	60	1171
Walsh, John E., New York, N. Y. Hoisting apparatus.....	488,044	Dec. 13	1340	332	61	1605
Walsh, Maurice J., <i>et al.</i> (See Beckwith, Theodore A., assignor.)						
Walsh, Owen. (See Dillman, William C., assignor.)						
Walsh, Patrick R., assignor of one-half to M. Campbell, Rochester, N. Y. Bicycle-seat spring.....	469,192	Feb. 16	1999	510	58	935
Walsh, Robert F., Peoria, Ill. Water-heater.....	480,913	Aug. 16	1851	461	60	966
Walsh, Thomas J., Pritchburg, Pa. Railway-switch.....	473,801	Apr. 26	2649	716	59	591
Walsh, William D., and J. A. Dowling, Duluth, Minn. Submarine grapple.....	480,640	Aug. 9	1430	356	60	868
Walsh, William E., assignor of one-half to W. B. Craig, San Francisco, Cal. Means for transmitting power.....	487,805	Dec. 13	939	237	61	1525
Walshe, Henry T., and M. Sallenger, Boston, Mass. Street-sprinkler.....	487,804	Dec. 13	937	237	61	1525
Walt, John. (See Russell and Walt.)						
Walter A. Wood Mowing and Reaping Machine Company <i>et al.</i> (See Lowry, George A., assignor.)						
Walter, Charles E. (See Walter, Henry G. and C. F.)						
Walter, George, Duluth, Minn. Dust-collector.....	474,490	May 10	973	251	59	835
Walter, George, Thief River Falls, Minn. Dust-collector.....	474,491	May 10	974	251	59	835
Walter, Henry E., London, England. Electro-magnetic brake.....	467,243	Jan. 19	1542	393	58	310
Walter, Henry G. and C. F., Scranton, Pa. Cash register and indicator.....	485,307	Nov. 1	226	64	61	619
Walter, John. (See Marvick and Walter.)						
Walter, Lucas. (See Blankensop, Peter, Jr., assignor.)						
Walter, Stephen A., Moline, Ill. Dish washing machine.....	466,877	Jan. 12	935	239	58	187
Walter, Stephen A., Moline, Ill. Dish-washing machine.....	482,706	Sept. 13	1292	{ 316 317 }	60	1601
Walter, William, Saltsburg, Pa. Churn.....	475,097	May 17	1946	493	59	1038
Walters, Charles L., Seabright, N. J. Shutter-fastener.....	482,111	Sept. 6	307	72	60	1395
Walters, David, and L. L. Morris, Cleveland, Ohio. Machine for removing oil from tin plates.....	471,284	Mar. 22	2548	647	58	1620
Walters, Martin L., Findlay, Ohio. Sliding gate.....	480,755	Aug. 16	1610	404	60	918
Walters, Thomas F., Brooklyn, assignor to Stix & L'Allemand, New York, N. Y. Support for tilting vessels.....	474,886	May 17	1611	411	59	974
Walters, William, assignor of one-fourth to G. D. Gariand, Chicago, Ill. Furnace.....	479,771	July 26	2704	674	60	565
Walters, William J., <i>et al.</i> (See Wright, Napoleon B., assignor.)						
Walther, Charles F., assignor to S. S. Jewett & Co., Buffalo, N. Y. Non-conducting lining for stoves or heaters.....	472,414	Apr. 5	635	162	59	1119
Walton, Albert H., trustee. (See Cochran, Samuel D., assignor.)						
Walton, Frederick C. (See Longval, Oliver, assignor.)						
Walton, Henry D. (See Brown, Walton, and Rich.)						
Walton, Jacob G., Davilla, Tex. Horse-power.....	486,142	Nov. 15	1549	409	61	922
Walton, James, assignor of two-thirds to J. F. Mitchell, La Plata, Mo., and G. D. Hutchison, Fort Madison, Iowa. Automatic railway stock and cattle guard.....	481,447	Aug. 23	2756	678	60	1149
Walton, James P., Danville, Va. Shelving for stores.....	469,289	Feb. 23	2165	{ 555 556 }	58	973
Walton, Samuel H., and J. H. Smith, Belton, Tex. Vehicle-step.....	477,719	June 28	2389	597	59	1955
Wandel, Christian, Rentlingen, Germany. Rotary strainer.....	472,089	Apr. 5	115	31	59	23

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Wandel, Christian, Reutlingen, Germany. Strainer for chemical wood pulp	478,179	July 5	171	44, 45	60	36
Wandell, Timothy. (See Wilcox, Hallenbeck, and Wandell.)						
Wands, John C., St. Louis, Mo. Grain-door for railway-cars	477,092	June 14	1354	329	59	1721
Wands, John C., St. Louis, Mo. Car-roof	483,032	Sept. 20	1817	461	60	1718
Wangler, Joseph F., St. Louis, Mo. Boiler furnace	470,726	Mar. 15	1692	436	58	1444
Wangler, Joseph F., St. Louis, Mo. Downdraft-furnace for steam-boilers	487,896	Dec. 13	1083	271	61	1553
Wankey, Lewis F., assignor of one-half to J. W. Fairman, Kansas City, Mo. Nut-lock	478,725	July 12	998	247	60	215
Wantling, Isaac, and J. T. Johnson, Peoria, Ill. Coal-cutting machine	475,833	May 31	3114	789	59	1295
Ward, Alexander F., assignor to W. L. Mahon, Detroit, Mich. Machine for pointing and tapping hoops	484,126	Oct. 11	891	227 228	61	197
Ward, Anthony, assignor to New York Condensed Milk Company, New York, N. Y. Can-opener	470,087	Mar. 1	666	164	58	1228
Ward, Barton B., New York, N. Y. Alternating-current arc lamp	473,536	Apr. 26	2430	615	59	509
Ward, Barton B., New York, N. Y. Electric-lighting system	484,479	Oct. 18	1474	375	61	322
Ward, Barton B., New York, N. Y. Hanger-board for electric-arc lamps	484,480	Oct. 18	1476	376	61	322
Ward, Barton B., New York, N. Y., assignor, by mesne assignments, to Scott Electrical Manufacturing Company, of New Jersey. Electric search-light	472,721	Apr. 12	1099	282 283	59	220
Ward, Daniel, Peoria, Ill. Tongue-support	475,366	May 24	2358	604	59	1137
Ward, Daniel O., Newark, N. J. Nut-lock washer	468,488	Feb. 9	915	232	58	711
Ward, Daniel O., assignor to Standard Nut Lock Company, Newark, N. J. Nut-lock	468,754	Feb. 9	1320	334	58	792
Ward, Edward L., Santa Rosa, Cal. Plow	481,708	Aug. 30	3172	775	60	1246
Ward, Elmer E., Colorado Springs, Colo. Lid-holder for pans or vessels	483,408	Sept. 27	2420	608	60	1845
Ward, Flavius N., Springfield, Mo. Car-coupling	487,357	Dec. 6	198	55	61	1360
Ward, Frank K., Washington, D. C. Milk or fruit preserving jar and sealed stopper therefor	471,448	Mar. 22	2799	714	58	1669
Ward, George F., et al. (See Foy, Thomas, assignor.)						
Ward, George G., Camden, N. J. Vehicle-wheel	471,781	Mar. 29	3301	841 842	58	1770
Ward, Henry C., Chippewa Lake, Mich. Folding umbrella	480,482	Aug. 9	1184	297	60	819
Ward, Herbert E., Newark, N. J. Sweat-band for hats	474,540	May 10	1056	270	59	850
Ward, John D., Phelps, N. Y. Thermometer-case	482,050	Sept. 6	209	50	60	1376
Ward, John H., Trevorton, Pa. Music-leaf turner	473,202	Apr. 26	2851	716	59	591
Ward, John W. (See Hunter, Andrew, assignor.)						
Ward, Joseph G., Irvington, N. J. Name-plate for hats	476,937	June 14	1104	266	59	1670
Ward, Josiah O., Orange, N. J. Hemp-brake	474,273	May 3	596	148	59	753
Ward, Josiah O., Orange, N. J. Hemp-brake	480,354	Aug. 9	974	245	60	779
Ward, Josiah O., Orange, N. J. Hemp-brake	488,232	Dec. 20	1657	413	61	1685
Ward, Oring S., Los Gatos, Cal. Animal-trap	486,856	Jan. 12	887	227	58	178
Ward, Paul, and E. M. Gregory, London, England. Electric fuse or detonator	480,797	Aug. 16	1674	418	60	930
Ward, Peter, Rye, N. Y. Foot-rest	467,070	Jan. 12	1237	313	58	243
Ward, Seth, Princeton, Ind. Back-band hook	483,662	Oct. 4	212	52	61	43
Ward, Susan E., Phelps, N. Y. Thermometer-scale	472,415	Apr. 5	636	162	59	119
Ward, Wilfred, Buda, Ill. Car-wheel	482,503	Sept. 13	980	237	60	1540
Ward, William H., assignor of one-half to J. P. Lewis, Topeka, Kans. Axle-lubricator						
Ward, William H., Topeka, Kans., assignor, by mesne assignments, to W. B. Ferguson, J. Weyerhaeuser, J. Volk, J. Ohlweiler, G. Stengle, G. E. Lambert, Rock Island, Ill., E. Lange, Davenport, Iowa, W. Uilmann, Moline, and A. A. Chapman, Galesburg, Ill. Axle-lubricator	483,624	Oct. 4	161	40	61	33
Ward, William S., and H. F. Lancashire, Nottingham, assignors to I. L. Berridge, Leicester, England. Circular-knitting machine	488,100	Dec. 13	1428	356 357	61	1624
Wardell, Joshua M., Cadillac, Mich. Electro-therapeutic process and apparatus	487,655	Dec. 6	674	173	61	1455
Wardell, William H., Long Branch, N. J. Wheelbarrow	469,614	Feb. 23	2655	682	58	1069
Warden, Henry, Philadelphia, Pa. Gas-engine	486,143	Nov. 15	1550	409 410 411	61	922
Warden, Henry, Philadelphia, Pa. Boiler-tube expander	488,589	Dec. 27	2233	553	61	1815
Warden, William G. (See Tonkin, John J., assignor.)						
Warder, Bushnell & Glessner Company. (See Bauer, Charles A., assignor.)						
Warder, Bushnell & Glessner Company. (See Kane, Maurice, assignor.)						
Warder, Bushnell & Glessner Company. (See Stark, Andrew, assignor.)						
Warder, Bushnell & Glessner Company et al. (See Lowry, George A., assignor.)						
Wardhaugh, Richard E., Jacksonville, Ill., assignor to Edward P. Allis & Company, Milwaukee, Wis. Dust-collector	470,523	Mar. 8	1398	365	58	1375
Wardhaugh, Richard E., Jacksonville, Ill., assignor to Edward P. Allis & Company, Milwaukee, Wis. Dust-collector	470,524	Mar. 8	1399	365	58	1375
Wardhaugh, Richard E., Jacksonville, Ill., assignor of one-half to W. W. Allis, Milwaukee, Wis. Electric dust-collector	470,608	Mar. 8	1509	394	58	1399
Wardman, Palmer, East Saginaw, Mich. Rail-cleaning attachment for cars	476,909	June 14	1056	255	59	1660
Wardwell, Fred S., Duluth, assignor of one-half to Northern Car Company, Robbinsdale, Minn. Attachment for street-rail brooms	467,213	Jan. 19	1489	381	58	300
Wardwell, Simon W., Jr., Boston, Mass. Thread-controlling device for sewing-machines	482,215	Sept. 6	483	115 116	60	1429
Wardwell, Simon W., Jr., Boston, assignor of one-half to F. Messberg, Attleborough, Mass. Knife-sharpener	469,615	Feb. 23	2657	682	58	1070
Wardwell, Simon W., Jr., Boston, assignor to J. R. Leeson, Newton, Mass. Apparatus for winding cops or balls	480,157	Aug. 2	633	160 161	60	703
Wardwell, Simon W., Jr., Boston, assignor to J. R. Leeson, Newton, Mass. Winding cops or balls	480,158	Aug. 2	637	161 162	60	704
Wardwell, Simon W., Jr., Boston, assignor to J. R. Leeson, Newton, Mass. Cop	486,745	Nov. 22	2485	648 649	61	1122
Ware Automatic Heat Generator and Regulator Company. (See Tapley, Walter H., assignor.)						
Ware, Francis B., Bridgeton, N. J. Sad-iron stand	466,588	Jan. 5	442	113	58	85
Warenskjold, Axel, San Diego, Cal. Nut-lock	481,214	Aug. 23	2361	582	60	1076
Warfield, Louis. (See Thomas, William M., assignor.)						
Waring, Daniel, et al. (See Selkirk, Alexander, assignor.)						
Waring, Daniel S., et al. (See Selkirk, Alexander, assignor.)						
Waring Hat Manufacturing Company. (See Segschneider, Gustav, assignor.)						
Waring, John, Manchester, Conn. Rheostat	479,101	July 19	1593	399	60	338
Waring, John, Manchester, Conn. Resistance-box	487,306	Dec. 6	107	31	61	1343
Waring, William G., Silver City, New Mexico. Refining silver sulphides	475,907	May 31	3235	818	59	1318
Warne, Ammzett A., assignor of one-third to A. Howell, Freeland, Ohio. Railway-tie	466,732	Jan. 5	680	174	58	129
Warner, Alfred A., et al. (See Cooper, Leslie A., assignor.)						
Warner, Benjamin F., Blair, Nebr. Combined mop-tub and mop-wringer	480,303	Aug. 9	895	227	60	765
Warner, Charles G., Syracuse, N. Y. Detachable sleigh-runner	480,302	Aug. 9	894	227	60	765
Warner, De Ver H., Bridgeport, Conn. Stocking-supporter	468,074	Feb. 2	250	61	58	573

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Draw.	Vol.	Page.
Warner, De Ver H., Bridgeport, Conn. Corset	469,616	Feb. 23	2658	683	58	1070
Warner, Edward T., and J. F. Curry, assignors to Charles Warner Company, Wilmington, Del. Making mortar	473,860	Apr. 26	2946	743	59	609
Warner, Ernest P. (See Scribner and Warner.)						
Warner, Ernest P., Chicago, Ill. Dynamometer	480,981	Aug. 16	1968	492	60	988
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Electric switch	473,435	Apr. 19	2249	566 567	59	454
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Field-magnet frame for dynamo-electric machines	480,049	Aug. 2	469	119	60	671
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Duplex-arc lamp	480,050	Aug. 2	470	120	60	672
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Carbon-holder	482,820	Sept. 20	1468	365	60	1648
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Armature-winding for dynamo-electric machines	483,729	Oct. 4	306	76, 77	61	64
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Electric switch	486,241	Nov. 15	1693	448	61	950
Warner, Ernest P., assignor to Western Electric Company, Chicago, Ill. Connection for commutators and armature-wires	487,307	Dec. 6	108	32	61	1343
Warner, George R., and L. J. Allen, Woodbury, Conn. Rope-holder	476,969	June 14	1156	279	59	1680
Warner, George B., and L. J. Allen, Woodbury, Conn. Car-starter	479,127	July 19	1637	409	60	346
Warner, George H., Hartford, Conn. Furnace for burning garbage	468,851	Feb. 16	1471	375 376	58	832
Warner, George H., Hartford, Conn. Furnace for burning garbage, &c.	468,852	Feb. 16	1473	376	58	832
Warner, Henry F. (See Warner, William B. and H. F.)						
Warner, Isaac M., Bronson, Mich. Vehicle-hub	473,596	Apr. 26	2545	641	59	532
Warner, Jacob B. (See Britton, Louis H., assignor.)						
Warner, James, East Somerville, Mass. Skate	480,051	Aug. 2	472	120	60	672
Warner, James C., assignor to Western Electric Company, Chicago, Ill. Electric-annunciator drop	477,616	June 21	2212	549	59	1901
Warner, John P., assignor to A. F. Navarre, Washington, D. C. Heater and purifier for feed-water	480,534	Aug. 9	1259	316	60	834
Warner Manufacturing Company. (See Hoefer, Emil A., assignor.)						
Warner Manufacturing Company. (See Painter, Robert F., assignor.)						
Warner, Warren E., Rochester, N. Y. Mold for casting can-openers	488,590	Dec. 27	2237	553 554	61	1816
Warner, William B. and H. F., Monticello, Iowa. Speed-governor attachment	479,040	July 19	1501	373	60	321
Warnock, Frank H. (See Mount and Warnock.)						
Warren, Alfred D., Worcester, Mass. Spectacle eye-shield	466,896	Jan. 12	964	246	58	193
Warren, Benjamin F., Brooklyn, N. Y. Box for holding cigarettes, &c.	488,910	Dec. 27	2737	675	61	1916
Warren, Charles A., San Francisco, Cal. Excavator	471,920	Mar. 29	3499	894	58	1810
Warren, Edrick C., assignor of one-half to G. D. Roper, Rockford, Ill. Gas-stove	485,852	Nov. 8	1052	281	61	804
Warren, Frank H., Lynn, assignor to G. H. P. Flagg, Boston, Mass. Inseam-trimming machine	488,591	Dec. 27	2238	554	61	1816
Warren, George E., Detroit, Mich. Railway signaling-lantern	476,585	June 7	536	128	59	1343
Warren, Governor D., Coal Gate, Indian Ter. Mine-door	483,883	Oct. 4	536	135	61	111
Warren, Henry C., Boston, Mass. Machine for molding articles from plastic compounds	483,663	Oct. 4	213	53	61	44
Warren, Henry J., Buffalo, N. Y. Method of and apparatus for reducing natural or artificial bituminous rock	470,159	Mar. 1	774	191	58	1248
Warren, James J., et al. (See Howe, John C., assignor.)						
Warren, Joel R., Kalamazoo, Mich. Sulky-plow	472,240	Apr. 5	364	94	59	68
Warren, John, and W. O. Johnson, Peede's, Tex. Cotton-sack carrier	471,042	Mar. 15	2172	559	58	1536
Warren, John M., et al. (See Howe, John C., assignor.)						
Warrington, Curtis H., West Chester, Pa. Plow attachment	482,602	Sept. 13	1135	274	60	1571
Warrington, Thomas F., Philadelphia, Pa. Stop-motion device for revolving-box looms	475,477	May 24	2537	646	59	1170
Warth, Albin, Stapleton, N. Y. Bowling-alley	469,071	Feb. 16	1830	468	58	902
Warth, Albin, Stapleton, N. Y. Cloth-cutting machine	469,072	Feb. 16	1832	469	58	902
Warth, Albin, Stapleton, N. Y. Cloth-cutting machine	469,073	Feb. 16	1834	469	58	903
Warth, Albin, Stapleton, N. Y. Cloth-cutting machine	469,074	Feb. 16	1835	469 470	58	903
Warth, Albin, Stapleton, N. Y. Bowling-alley	470,023	Mar. 1	567	141	58	1209
Warthen, Franklin F., Baltimore, Md. Apparatus for making fried oysters	481,337	Aug. 23	2585	635	60	1116
Warwick, George T. (See Vale, Samuel, assignor.)						
Warwick, George T., Springfield, Mass. Velocipede	467,695	Jan. 26	2261	574 575	58	452
Washburn, Alvin K., Bridgewater, assignor to Swain & Fuller Manufacturing Company, Boston, Mass. Leather-skiving machine	486,813	Nov. 22	2599	677	61	1145
Washburn, Christian, Bridgewater, Mass. Hammock-swinging apparatus	483,753	Oct. 4	345	86	61	72
Washburn, F. E., et al. (See Washburn, William E., assignor.)						
Washburn, F. S., et al. (See Washburn, William E., assignor.)						
Washburn, George A., assignor, by mesne assignments, to Ford-Washburn Storelectro Company, Cleveland, Ohio. Storage-battery	488,233	Dec. 20	1658	414	61	1685
Washburn, George W., Danbury, Conn. Water-heater	478,486	July 5	648	159	60	129
Washburn, Lorenzo S., New Orleans, La. Drag-saw	475,098	May 17	1947	493	59	1039
Washburn & Moen Manufacturing Company. (See Bassett, Charles W., assignor.)						
Washburn & Moen Manufacturing Company. (See Lenox, Edwin S., assignor.)						
Washburn & Moen Manufacturing Company. (See Snedeker, Charles T., assignor.)						
Washburn, Nathan, Boston, Mass. Method of and apparatus for manufacturing cast-iron car-wheels	467,214	Jan. 19	1490	381	58	309
Washburn, Samuel N., Little Falls, Wash. Potato-digger	485,118	Oct. 25	2500	642	61	544
Washburn, William E., assignor of two-thirds to F. S. and F. E. Washburn, Cedar Rapids, Iowa. Voltaic pile	482,444	Sept. 13	883	213	60	1520
Washer, William H., Grand Rapids, Mich. Folding table	486,517	Nov. 22	2120	560	61	1050
Washington, Samuel, Harpurhey, assignor to himself, J. C. Sequeira, Manchester, and T. A. Scholes, Eccles, England. Feeding and weighing apparatus	488,101	Dec. 13	1429	357 358 359	61	1624
Wasmuth, Wilhelm, Warsaw, Ky. Fruit-gatherer	477,479	June 21	1990	494	59	1857
Wassermann, Georg, Hottingen, assignor to G. Bäuerlein-Germann, Unterstrass, Zurich, Switzerland. Machine for filling sausage-guts	475,367	May 24	2360	604 605	59	1138
Wasson, James M., Peoria, Ill. Filter	481,606	Aug. 30	3019	738	60	1216
Wasson, Jehiel, Friendship, N. Y. Cattle-stanchion	481,987	Sept. 6	99	25	60	1354
Waterbury Brass Company. (See Wooster, Frederick J., assignor.)						
Waterbury Buckle Company. (See Stovell, James, assignor.)						
Waterbury Button Company. (See Goodwin, Charles H., assignor.)						
Waterbury Farrel Foundry and Machine Company. (See Campbell, Andrew C., assignor.)						
Waterbury Farrel Foundry and Machine Company. (See Lewis, Edward F., assignor.)						
Waterbury Machine Company. (See Lamb and Campbell, assignors.)						
Waterbury Watch Company. (See Klahn, Emil, assignor.)						
Waterhouse, Addison G., Hartford, Conn. Electric-arc lamp	468,711	Feb. 9	1258	320	58	780

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Waterhouse, Addison G., Hartford, Conn. Lightning-arrester.....	475,645	May 24	2797	709	59	1921
Waterhouse, Addison G., Hartford, Conn. Electric meter.....	483,189	Sept. 27	2665	521	60	1779
Waterhouse, Charles B., assignor of one-half to J. H. Philpott, Rising City, Nebr. Pad-screw for harness.....	466,389	Jan. 5	124	35	58	26
Waterhouse, Thomas, Cornish, Me. Roll-carriage.....	486,203	Nov. 15	1632	432	61	938
Waterman, Clarence R. (See Fowler, Benjamin F., assignor.)						
Waterman, John H., Detroit, Mich. Boiler.....	434,350	Oct. 11	1262	322	61	269
Waterman, Lewis E., assignor to Deere & Company, Moline, Ill. Planter.....	480,304	Aug. 9	897	{ 227 228 }	{ 60 60 }	{ 765 765 }
Waters, Benjamin E., assignor to Waters Electric Company, Brockton, Mass. Time-switch for electric circuits.....	478,180	July 5	172	45	60	37
Waters Electric Company. (See Waters, Benjamin E., assignor.)						
Waters, Frank J., assignor of one-half to G. Howe, Providence, R. I. Valve-gear for engines.....	478,973	July 12	1387	{ 342 343 }	{ 60 60 }	{ 288 288 }
Waters, Frank J., assignor of one-half to G. Howe, Providence, R. I. Cut-off piston-valve.....	482,707	Sept. 13	1295	317	60	1602
Waters, Frank J., assignor of one-half to G. Howe, Providence, R. I. Engine-governor.....	485,361	Nov. 1	330	88	61	640
Waters, Frank M., assignor to Farmers Friend Manufacturing Company, Dayton, Ohio. Clutch.....	467,598	Jan. 26	2117	537	58	426
Waters, Frank M., assignor to Farmer's Friend Manufacturing Company, Dayton, Ohio. Lawn-mower clutch.....	477,030	June 14	1247	302	59	1706
Waters, George W., Kansas, Ill. Wheat scouter and separator.....	467,325	Jan. 19	1661	424	58	332
Watkins, Charles E., Harvard, Mass. Brooder.....	483,409	Sept. 27	2421	608	60	1846
Watkins, F. E., et al. (See Rose, Robert, assignor.) (Reissue.)						
Watkins, Frank W., New Bedford, Mass. Trousers-stretcher.....	488,234	Dec. 20	1660	414	61	1686
Watkins, Gardner A., assignor to Heywood Bros. & Co., Gardner, Mass. Lock for baby-carriages.....	482,708	Sept. 13	1296	317	60	1602
Watkins, James T., and W. C. Bayless, Mossy Creek, Tenn. Buggy-top.....	472,154	Apr. 5	223	59	59	42
Watkins, Richard, assignor of one-half to W. H. Devlin, Sacramento, Cal. Automatic repeater.....	474,706	May 10	1318	336	59	902
Watrons, Charles R. (See Palmer and Watrons.)						
Watrous, Charles R., Old Mystic, and J. S. Palmer, Litchfield, Conn. Animal-trap.....	471,796	Mar. 29	3212	817	58	1753
Watrous, Thomas A., assignor of one-half to W. D. Reynolds, Elmira, N. Y. Thill-coupling.....	467,024	Jan. 12	1163	295	58	229
Watrous, Thomas A., assignor of one-half to D. and S. W. Bevier, Elmira, N. Y. Thill-coupling.....	469,106	Feb. 16	1875	480	58	911
Watson, Abram P., Lake City, Minn. Pneumatic chair.....	484,072	Oct. 11	822	208	61	183
Watson, Arthur H., and F. E. Antonini, London, England. Electrically-heated curling-iron.....	475,169	May 17	2059	516	59	1059
Watson, Charles S., Philadelphia, Pa. Puzzle.....	466,589	Jan. 5	443	114	58	85
Watson, Charles W., deceased; M. Atchinson, Oakland, Cal., administratrix. Gas-burning heater.....	474,895	May 17	1625	415	59	977
Watson, Clarence L., Attleborough, Mass. Book-mark.....	472,632	Apr. 12	965	250	59	197
Watson, Edward, Grand Rapids, Mich. Composition for retarding the solidification of calcined gypsum.....	472,322	Apr. 5	493		59	93
Watson, George, Culpepper, Ala. Plow attachment.....	481,215	Aug. 23	2362	582	60	1076
Watson, George A., Toronto, Canada, assignor of fifty-one one-hundredths to W. H. Laird, New York, N. Y. Apparatus for beating.....	481,216	Aug. 23	2363	{ 582 583 }	{ 60 60 }	{ 1076 1076 }
Watson, George W., Boston, Mass. Shoe-fastening.....	484,381	Oct. 11	1309	335	61	279
Watson, Henry, et al. (See Abbott, Charles J., assignor.)						
Watson, James A., Washington, D. C. Type-writing machine.....	477,236	June 21	1604	393	59	1782
Watson, James A., Washington, D. C. Type-writing machine.....	477,237	June 21	1606	393	59	1783
Watson, James T., St. Louis, Mo. Bath-tub.....	476,950	June 14	1127	271	59	1675
Watson, James W., Achor, Ohio. Knife-grinder for mowing-machines.....	470,905	Mar. 15	1967	503	58	1497
Watson, Lannes L., Carbondale, Ill. Saw-swage.....	468,470	Feb. 9	875	223	58	704
Watson, Lee P., Fairmont, W. Va. Plotter.....	479,198	July 19	1748	438	60	367
Watson, Leonard. (See Thurston, Edwin L., assignor.)						
Watson, Lewis H., Newark, N. J. Ironing-machine.....	484,925	Oct. 25	2213	570	61	485
Watson, Nelson M., assignor of three-fourths to A. H. and W. B. Heath and S. A. Millard, Detroit, Mich. Electrical annunciator.....	471,966	Mar. 29	3589	{ 916 917 }	{ 58 58 }	{ 1826 1826 }
Watson, Nelson M., assignor of three-fourths to A. H. and W. B. Heath and S. A. Millard, Detroit, Mich. Electrical annunciator.....	471,987	Mar. 29	3591	917	58	1827
Watson, Robert. (See Smith, Marks, and Watson.)						
Watson, Robert, Brooklyn, N. Y. Electric elevator.....	469,361	Feb. 23	2267	582	58	994
Watson, Roger B., Denver, Colo. Piano.....	471,218	Mar. 22	2494	633	58	1610
Watson, Samuel. (See Cardwell and Watson.)						
Watson, Thomas A., Braintree, Mass. Velocipede-pedal.....	471,921	Mar. 29	3500	894	58	1810
Watson, Thomas G., Paris, Canada. Attachment for varnish or similar bottles.....	487,502	Dec. 6	445	115	61	1409
Watson, William D., Rochdale, England. Machine for raising the pile of woven fabrics.....	485,400	Nov. 1	391	{ 105 106 }	{ 61 61 }	{ 652 652 }
Watson, William L. (See Longmore and Watson.)						
Watt, Allan, Rocky Mount, N. C. Clothes-pin.....	479,685	July 26	2545	634	60	535
Watt, Mary B., et al. (See Brazier, Edwin, assignor.)						
Watt, Robert, Akron, Ohio. Puzzle.....	486,308	Nov. 15	1805	476	61	974
Watt, William, Boston, Mass., assignor to Thompson & Norris Company, Brooklyn, N. Y. Display-box.....	467,964	Feb. 2	85	20	58	541
Watt, William P., Winston, N. C. Tobacco-box clamp.....	468,272	Feb. 2	561	138	58	632
Wattles, Cyra B., Elizabeth, N. J., assignor of one-half to Daimler Motor Company, Long Island City, N. Y. Screw-propeller.....	484,382	Oct. 11	1310	335	61	279
Wattles, Hiram J., Rochester, N. Y. Heating apparatus.....	470,727	Mar. 15	1693	{ 436 437 }	{ 58 58 }	{ 1444 1444 }
Wattles, Luther H. (See Corliss and Wattles.)						
Watts, Albert. (See Chase, Henry A., assignor.)						
Watts, David H., Philadelphia, Pa. Portable grate.....	483,410	Sept. 27	2422	609	60	1846
Watts, Isaiah P. (See Butts, Frank E., assignor.)						
Watts, Julius R., assignor of one-half to E. W. McNollough, Springfield, Ill. Miner's lamp.....	478,467	July 5	650	159	60	129
Watts, Philip, Newcastle-on-Tyne, England. Apparatus for steering vessels.....	468,377	Feb. 9	736	183	58	676
Watson, William G., Tappan, assignor of one-half to J. B. Stewart, Haverstraw, N. Y. Railway signal system.....	475,955	May 31	3310	835	59	1333
Wangh, Edward, Brooklyn, N. Y. Furnace attachment.....	469,877	Mar. 1	340	87	58	1167
Wangh, Eugene. (See Nation, Edmund C., assignor.)						
Wangh, John E. (See Bernauer, Albert, assignor.)						
Wankenhose Company. (See Howard, William H., assignor.)						
Way, Frank K. (See Blount and Way.)						
Way, Frank K., Dayton, Ohio, assignor to Domestic Water Purifier Company, Chicago, Ill. Liquid-purifying device.....	479,381	July 19	2042	510	60	426

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Way, Harry A., Burlington, Vt. Screen-frame.....	487,656	Dec. 6	675	174	61	1455
Wayland, Columbus A., Middlesborough, Ky. Bench-dog.....	487,106	Nov. 29	3112	798	61	1263
Wayman, John, Ford City, Pa. Boiler.....	474,887	May 17	1612	412	59	974
Wayne Oil Tank Company. (See Becker, John J., assignor.)						
Wayne, Thomas L. (See Ohmer and Wayne.)						
Wayne, William J., Decatur, Ill. Sulky.....	475,991	May 31	3365	848	59	1344
Waynick, Jefferson W., Chariton, Iowa. Washing-machine.....	479,863	Aug. 2	131	32	60	608
Wayson, Samuel W., assignor to Detroit Plumbers' Supply Company, Detroit, Mich. Heating and ventilating apparatus.....	481,085	Aug. 16	2133	531	60	1020
Wead, Andrew M. (See Smith and Wead.)						
Wead, Andrew M., assignor to K. A. Smith and W. N. Pomcroy, Kalamazoo, Mich. Horse-power.....	473,683	Apr. 26	2674	{ 673 674 }	{ 59 }	557
Wead, Charles K., Malone, N. Y., assignor to J. W. Brooks, trustee, Cambridge, Mass. Nail-arranging device.....	477,093	June 14	1355	330	59	1722
Weart, E. A., et al. (See Boice, John W., assignor.)						
Weary, Frank O., and G. W. Kramer, Akron, Ohio. Bolt for prison-doors.....	478,146	July 5	109	28	60	24
Weatherhead, Edward H., assignor to Cleveland Faucet Company, Cleveland, Ohio. Pump.....	484,383	Oct. 11	1313	336	61	279
Weatherholl, George W., Birmingham, England. Petroleum or similar engine.....	480,535	Aug. 9	1260	{ 316 317 }	{ 60 }	834
Weatherill, Henry G., Elgin, Ill. Rein-holder.....	473,684	Apr. 26	2675	674	59	557
Weatherly, Wilson E., Raleigh, N. C. Combined coal-bucket and stool.....	469,107	Feb. 16	1876	480	58	911
Weatherman, James P., Highlandville, Mo. Grub-plow.....	485,308	Nov. 1	230	64	61	619
Weaver, Alice F., et al. (See Slawson, John C., assignor.)						
Weaver, Ephraim E., and G. B. Manypenny, Philadelphia, assignors of one-fourth to J. W. Comfort, W. S. Ambler, Jenkintown, and J. Cunningham, Jr., Philadelphia, Pa. Incandescent electric lamp.....	476,501	June 7	420	98	59	1519
Weaver, George D. (See MacKellar and Weaver.)						
Weaver, George L., Dayton, Ohio. Axle-lubricator.....	482,770	Sept. 20	1408	348	60	1635
Weaver, George W., Greensburg, Pa. Carburetor and purifier.....	476,709	June 7	720	177	59	1580
Weaver, Henry M., Mansfield, Ohio. Needle for grain-binders.....	470,852	Mar. 15	1894	485	58	1442
Weaver, Joel W., et al. (See Anderson, Henry C., assignor.)						
Weaver, John L., and H. Brencke, Jr., Georgetown, Tex. Attachment for motive-power machines.....	477,391	June 21	1854	456	59	1830
Weaver, Julius M., Ashland, Mass. Yarn-clearer.....	477,031	June 14	1248	302	59	1700
Weaver, Lewis M., and Z. C. Leiser, Lock Haven, Pa. Combined ruler, gage, and circle-scriber.....	482,886	Sept. 20	1588	398	60	1670
Weaver, Robert D., Washington, D. C. Centrifugal machine.....	475,225	May 17	2133	540	59	1076
Weaver, Solomon F., Downs, Kans. Feed-box.....	487,308	Dec. 6	109	32	61	1343
Weaver, William, Westport, assignor to himself, W. A. Curtis, A. C. Wheeler, D. Hitchcock, and C. Lapham, Norwalk, Conn. Car-starter.....	488,462	Dec. 20	2023	505	61	1758
Webb, Alfred E., assignor to Economic Advertising Company, Limited, London, England. Machine for inserting labels in soap cakes.....	480,642	Aug. 9	1435	{ 357 358 }	{ 60 }	869
Webb, Andrew B., et al. (See Webb, Samuel D., assignor.)						
Webb, Arthur P., Hoboken, N. J. Elevator.....	475,834	May 31	3116	789	59	1295
Webb, Charles O., Longmont, Colo. Process of and apparatus for treating wheat.....	482,068	Sept. 6	236	57	60	1381
Webb, Edward, Reading, assignor to N. Curtis, Boston, Mass. Fluid-pressure regulator.....	479,234	July 19	1801	451	60	377
Webb, Frederic E., Boston, Mass. Carriage-axle.....	476,108	May 31	3547	892	59	1381
Webb, George B., New York, N. Y. Check-perforating machine.....	473,647	Apr. 26	2620	661	59	547
Webb, George B., Kingston, N. C. Ice-shaving machine.....	487,339	Dec. 6	162	46	61	1353
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	470,273	Mar. 8	966	{ 239 240 }	{ 58 }	1296
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	471,710	Mar. 29	3177	811	58	1747
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	478,147	July 5	111	29	60	25
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	480,305	Aug. 9	901	228	60	766
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	480,306	Aug. 9	905	229	60	766
Webb, George B., assignor to Remington Standard Type Writer Manufacturing Company, New York, N. Y. Type-writing machine.....	480,641	Aug. 9	1431	{ 356 357 }	{ 60 }	868
Webb, George B., New York, and L. N. Chapin, Brooklyn, assignors to Remington Standard Typewriter Manufacturing Company, New York, N. Y. Type-writing machine and ribbon-holder thereof.....	473,718	Apr. 26	2726	686	59	566
Webb, George H., Pawtucket, R. I. Center piece for the grates of forge-furnaces.....	488,235	Dec. 20	1660	414	61	1686
Webb, Henry C., Russiaville, Ind. Saw attachment.....	483,971	Oct. 4	677	169	61	140
Webb, Henry C., Croydon, assignor to S. Falk, London, England. Extinguishing mechanism for central-draft lamps.....	466,545	Jan. 5	375	94, 95	58	73
Webb, Henry G., Lafayette, Ala. Plow.....	471,922	Mar. 29	3501	894	58	1810
Webb, John N. (See Harriman, John E., Jr., assignor.)						
Webb, Martin V., et al. (See Webb, Samuel D., assignor.)						
Webb, Robert H., et al. (See Cross, Thomas A., assignor.)						
Webb, Robert H., et al. (See Violett, Ashford W., Jr., assignor.)						
Webb, Robert M., Brooklyn, N. Y. Paper piano-cover.....	471,043	Mar. 15	2174	559	58	1537
Webb, Rodolphus L., New Britain, Conn. Faucet.....	469,901	Mar. 1	376	94	58	1173
Webb, Samuel D. (See Lumley, Webb, and Jacobs.)						
Webb, Samuel D., assignor of nineteen twenty-fourths to A. B. and M. V. Webb and P. A. Darnielle, Washington, D. C. Device for extracting corks.....	474,788	May 10	1446	{ 366 367 }	{ 59 }	928
Webb, Scott A., Columbus, Ohio. Street-curb-ing block.....	477,721	June 28	2391	597	59	1955
Webb, Thomas, et al. (See Heartfield, Henry, assignor.)						
Webb, Wallace, et al. (See Cross, Thomas A., assignor.)						
Webb, Watson T., Salt Lake City, Utah Ter. Combined eccentric, counterbalancing-collar, and shaper-guard.....	474,274	May 3	597	148	59	753
Webb, Watson T., Salt Lake City, Utah Ter. Counterbalancing-collar.....	483,411	Sept. 27	2423	609	60	1846
Webb, Wilkins J., Hillsborough, Ill. Railway-gate and danger-signal.....	476,846	June 14	949	231	59	1640
Webb, William H., et al. (See Newell, James L., assignor.)						
Webb, William J., Sabine Pass, Tex. Trunk-strap fastener.....	485,671	Nov. 8	797	212	61	752
Webb, William S. (See Nichols, William, assignor.)						
Webber, Frederick. (See Brennan and Webber.)						
Webber, George H. (See Pomeroy and Webber.)						
Webber, Henry O. (See Head, John, assignor.)						
Webber, Samuel S. (See Spilsbury and Webber.)						
Webber, Wesley, Pittsburg, Pa. Deep-well-drilling apparatus.....	471,580	Mar. 29	2976	{ 758 759 }	{ 58 }	1711

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & Cr.	Vol.	Page.
Webber, William O., Erie, Pa. Steam-engine governor.....	466,475	Jan. 5	266	67	58	51
Webber, William O., Erie, Pa. Steam-engine governor.....	477,344	June 21	1775	434	59	1815
Webber, William O., Erie, Pa. Steam-separator.....	486,144	Nov. 15	1553	411	61	923
Weber, Adolph, assignor of two-thirds to T. S. Christie and B. Noble, Detroit, Mich. Valve.....	477,392	June 21	1854	456	59	1831
Weber, Adolph, assignor of one-half to T. S. Christie and B. Noble, Detroit, Mich. Valve.....	477,720	June 28	2390	597	59	1955
Weber, Annie H. (See Weber, George A., assignor.)						
Weber, August, Schenectady, assignor to Edison General Electric Company, New York, N. Y. Clamp for arc-lamp carbons.....	482,535	Sept. 13	1037	251	60	1551
Weber, Charles S., San José, Cal. Stringing pianos.....	482,512	Sept. 13	991	240	60	1543
Weber, Edward F., Reading, Pa. Shears.....	477,343	June 21	1774	434	59	1815
Weber, George, New York, N. Y. Reclining-chair.....	488,911	Dec. 27	2738	675	61	1916
Weber, George A., New York, N. Y. Rail-fastening.....	472,090	Apr. 5	116	32	59	23
Weber, George A., assignor to A. H. Weber, New York, N. Y. Roller and roller-bearing.....	487,884	Dec. 13	1066	267	61	1549
Weber, George W., assignor to W. A. Wawter, Chicago, Ill. Paper bag or envelope.....	482,512	Dec. 27	2532	628	61	1874
Weber, Gottlieb, Brooklyn, N. Y. Scuttle and skylight.....	477,876	June 23	2651	663	59	2003
Weber, Henry, Chicago, Ill. Transom-lifter.....	477,032	June 14	1249	303	59	1700
Weber, Henry C., Chicago, Ill. Finishing device for water-closets.....	486,994	Nov. 29	2938	757	61	1228
Weber, John R. (See Allen and Weber.)						
Weber, Peter, Schenectady, N. Y. Adjustable reamer.....	470,962	Mar. 15	2053	525	58	1513
Weber, Peter, Schenectady, N. Y. Friction-clutch.....	482,491	Sept. 13	954	233	60	1534
Weber, Peter, Schenectady, N. Y. Friction-clutch.....	483,370	Sept. 27	2358	592	60	1831
Weber, Theodore A., assignor to E. W. Broadbent, New York, N. Y. Sewing-machine.....	469,458	Feb. 23	2420	620	58	1024
Webster, Augustus D., assignor of two-thirds to F. A. Webster and J. S. Condell, Jr., Springfield, Ill. Stand for window-shutters.....	482,771	Sept. 20	1409	348	60	1635
Webster, Camp & Lane Machine Company. (See Haberlin, Herman, assignor.)						
Webster, Charles S., Marysville, Kans. Fracture apparatus.....	485,672	Nov. 8	798	213	61	752
Webster, Edwin S. (See Stone and Webster.)						
Webster, Ella S. (See Putnam, Theodore A. B., assignor.)						
Webster, F. W., et al. (See Wakefield, William O., assignor.)						
Webster, Frank A., et al. (See Webster, Augustus D., assignor.)						
Webster, Fredrick M., Somerville, Mass. Washing-machine.....	477,112	June 14	1457	357	59	1742
Webster, Harold A., Haverhill, assignor to J. W. Brooks, trustee, Cambridge, Mass. Heel-nailing machine.....	468,279	Feb. 2	567	140 141 142	58	634
Webster, Harold A., Haverhill, assignor to J. W. Brooks, trustee, Cambridge, Mass. Attaching heels to boots or shoes.....	483,293	Sept. 27	2253	567	60	1814
Webster, Jerome J., Somerville, Mass., assignor, by mesne assignments, to Boston Cash Register Company, Portland, Me. Cash register and indicator.....	484,887	Oct. 25	2134	549 550	61	470
Webster, Jerome J., and W. H. Saunders, assignors to Boston Cash Register Company, Northampton, Mass. Cash-registering and check-making machine.....	479,341	July 19	1961	489 490	60	409
Webster, Lawrence J., Boston, Mass., assignor to Bouvé, Crawford & Company, of Massachusetts. Illuminating-sign.....	468,185	Feb. 2	425	105	58	607
Webster, Lewis T., Northfield, Mass. Hydraulic ram.....	484,266	Oct. 11	1132	289	61	244
Webster, Pillsbury A. (See Hannum, Henry A., assignor.)						
Webster, Walter R., Pine Grove, Cal. Device for automatically closing the covers of water-closets or other receptacles.....	475,170	May 17	2051	516	59	1059
Webster, Warren, Philadelphia, Pa. Feed-water heater.....	475,992	May 31	3366	849	59	1344
Webster, William, et al. (See Noteman, Alonzo, assignor.)						
Webster, William R., Philadelphia, Pa. Riveting machine or hammer.....	466,476	Jan. 5	268	67	58	51
Weck, Albert. (See Bülzingslôwen, Bruno von, assignor.)						
Weckauf, Hermann J., Rheyd, Germany. Color-grinding machine.....	477,722	June 28	2393	597 598	59	1955
Wecker, Henry, Offenbach-on-the-Main, Germany. Carriage-axle.....	480,798	Aug. 16	1675	419	60	931
Wedgwood, William, San Francisco, Cal. Can-capping machine.....	470,368	Mar. 8	1157	296	58	1329
Wedlake, James K. (See Jones and Wedlake.)						
Weed, Clinton A., Racine, Wis. Heater for stock-tanks.....	487,806	Dec. 13	941	238	61	1525
Weed, Henry T. (See McKenna and Weed.)						
Weedfald, Ovidius K., et al. (See Berg, Peter V. P., assignor.)						
Weekes, James. (See Umphrey and Weekes.)						
Weeks, Amanda L., New York, N. Y. Abdominal belt for corsets.....	477,976	June 28	2792	699	59	2032
Weeks, Ben H., Chicago, Ill. Identification device.....	481,448	Aug. 23	2757	678	60	1149
Weeks, Charles A. (See Foehl and Weeks.)						
Weeks, Clayton, and J. E. Bush, Hobart, N. Y. Car-coupling.....	482,566	Sept. 13	1086	263	60	1561
Weeks, Frank B., Columbia, Tex. Support for wire fences.....	469,492	Feb. 23	2478	636	58	1034
Weeks, George, Oakland, Cal. Rail-joint.....	487,340	Dec. 6	165	46, 47	61	1353
Weeks, George C., Boston, Mass. Shutter-fastener.....	473,648	Apr. 26	2623	661	59	547
Weeks, John, assignor to R. H. Dudgeon, New York, N. Y. Hydraulic apparatus.....	468,104	Feb. 2	294	71, 72	58	581
Weeks, John, assignor to R. H. Dudgeon, New York, N. Y. Horizontal hydraulic jack.....	478,530	July 5	725	177	60	143
Weeks, Nelson, Jr., Long Island City, N. Y. Electric search-light.....	469,050	Feb. 16	1802	461	58	897
Weems, Frank H., Quincy, Ill. Dampening-machine.....	488,102	Dec. 13	1431	358	61	1624
Weese, Durwood A., Belleville, Canada. Brace or tie for hollow walls.....	471,204	Mar. 22	2431	619	58	1599
Wegener, Carl, assignor of one-half to P. Baumert, Berlin, Germany. Firing apparatus for use with coal-dust.....	475,715	May 24	2902	735 736	59	1241
Wegener, O. F. (See Cosman, Nathan, assignor.)						
Wegg, David S. (See Peirce, Charles L., assignor.)						
Wegner, Dêlef F., and A. A. Beltman, Tower City, N. D. Wagon-brake.....	488,489	Dec. 20	2069	514	61	1768
Wehr, John W., Jr., et al. (See Cartwright, Edward, assignor.)						
Wehr, Frank M., et al. (See Overpeck, Isaac E., assignor.)						
Wehrle, Robert, St. Louis, Mo. Means for operating rock-fans.....	471,581	Mar. 29	2979	759 760	58	1712
Wehrschmidt, John, Cleveland, Ohio. Gas-engine.....	484,168	Oct. 11	966	248 249	61	211
Wehrstedt, Alfred von, Vienna, Austria-Hungary. Cartridge-magazine with loading-frame ejector.....	468,394	Feb. 9	765	190 191	58	682
Weichert, Frederick J. (See Leber, Victor, assignor.)						
Weidaw, Frank T., Syracuse, N. Y. Hose-clamp.....	473,537	Apr. 26	2432	616	59	510
Weidner, Phillip, Sailor Springs, Ill. Running-gear for vehicles.....	485,673	Nov. 8	799	213	61	753
Weizand, Gustavus G., Des Moines, Iowa. Ribbon-needle.....	481,338	Aug. 23	2586	635	60	1116
Weigel, Eduard, Greifenberg, Germany. Stand for beer glasses, &c.....	482,603	Sept. 13	1137	274	60	1571
Weigel, Robert, and B. Waechter, New York, N. Y. Barrel-heater.....	484,073	Oct. 11	823	208	61	183
Weightman, David B., Grand Rapids, Mich. Wardrobe.....	485,309	Nov. 1	231	64	61	620
Weightman, Walter S. (See Dale and Weightman.)						
Weil, Abraham, Brunswick, Germany. Swimming or diving suit.....	476,341	June 7	179	43	59	1471

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Weiland, Edward. (See Volk and Weiland.)						
Weiler, Anton, assignor to W. A. L. Weiler, Auburn, and G. Weiler, Utica, N. Y. Tool-heater	479,686	July 26	2545	634	60	535
Weiler, Gerhard, <i>et al.</i> (See Weiler, Anton, assignor.)						
Weiler, W. Albertine L., <i>et al.</i> (See Weiler, Anton, assignor.)						
Weiman, Frederick C., assignor of one-half to W. H. Leech, Pittsburg, Pa. Washing-machine	472,937	Apr. 12	1406	359	59	281
Weimer, John A., <i>et al.</i> (See Galvin, James A., assignor.)						
Wein, John H., assignor of seven-tenths to H. and F. A. Fligelman and S. S. Singer, Helena, Mont. Safety-pin	488,931	Dec. 27	2766	683	61	1923
Weinberg, Arthur, Mainkur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Blue dye	469,329	Feb. 23	2223	.....	58	985
Weinberg, Arthur, assignor to L. Cassella & Co., Frankfort-on-the-Main, Germany. Manufacture of blue dye	472,091	Apr. 5	116	.....	59	24
Weinedel, Charles, Louisville, Ky. Child's seat for bicycles	469,760	Mar. 1	146	38	58	1128
Weinedel, Charles, assignor of one-half to F. A. Inder Stroth, Louisville, Ky. Automatic bottle stopper and cover	481,644	Aug. 30	3071	750	60	1226
Weinman, Joseph C., Blair, Neb. Combined collar and hame fastener	482,492	Sept. 13	963	234	60	1537
Weinmann, Ernest, and F. Lindhorst, St. Louis, Mo. Protecting-plate for spoke-sockets	486,995	Nov. 29	2940	758	61	1228
Weinrich, Moriz, St. Louis, Mo. Cleaning and washing raw sugar	474,585	May 10	1129	288	59	865
Weinrich, Moriz, St. Louis, Mo. Purifying and manufacturing saccharine solutions	475,025	May 17	1832	.....	59	1017
Weinstein, Edward, <i>et al.</i> (See Coates, John F., assignor.)						
Weinstein, Leo J., <i>et al.</i> (See Coates, John F., assignor.)						
Weiny, Roderick H., New York, N. Y. Telegraphic repeater	479,178	July 19	1718	431	60	361
Weir, Fredric C. (See Harden, Edward W., assignor.)						
Weir, Fredric C. (See Harden and Conway, assignors.)						
Weir, Fredric C., and H. B. Furness, Cincinnati, Ohio; said Furness assignor to said Weir. Filter	471,496	Mar. 22	2866	730	58	1682
Weir, Robert. (See Maffett and Weir.)						
Weir, Robert, assignor of one-half to H. O. Lange, Muskegon, Mich. Lever for steam-valves	475,908	May 31	3237	818	59	1319
Weir, Thomas J., Cincinnati, Ohio. Hearse attachment	469,617	Feb. 23	2659	684	58	1070
Weis, Frank N. (See Weis, William C. and F. N.)						
Weis, Samuel W. (See Weis, Simon and S. W.)						
Weis, Simon and S. W., New Orleans, La. Ripening cotton-bolls	470,771	Mar. 15	1762	.....	58	1457
Weis, William C. and F. N., assignors of two-thirds to W. H. Birkenhauer and H. W. Koelker, Toledo, Ohio. Game-counter	486,918	Nov. 29	2821	730	61	1205
Weisel, Peter, Milwaukee, Wis. Air-compressor	467,389	Jan. 19	1757	449	58	350
Weishaupt, Frederick W. H., Washington, D. C. Bridle for paint-brushes	468,405	Feb. 9	785	194	58	686
Weishaupt, Frederick W. H., Washington, D. C. Machine for the manufacture of bridles for paint-brushes	467,309	Dec. 6	111	{ 32 33 34 }	{ 61 61 61 }	{ 1344 1344 1344 }
Weiskopf, Dennis. (See Derham, Samuel G., assignor.)						
Weiskopf, Henry E., <i>et al.</i> (See Pearce, James, assignor.)						
Weiskopf, Samuel. (See Phillips, Edwin G., assignor.)						
Weiss, Carl W., Brooklyn, N. Y. Method of and apparatus for casting	470,525	Mar. 8	1400	{ 365 366 }	{ 58 58 }	{ 1376 1376 }
Weiss, Carl W., Brooklyn, N. Y. Gas-engine	473,685	Apr. 26	2676	674	59	557
Weiss, Carl W., Brooklyn, assignor to Kruse Cash Register Company, New York, N. Y. Cash register and indicator	469,063	Feb. 16	1737	{ 442 443 }	{ 58 58 }	{ 883 883 }
Weiss, Carl W., Brooklyn, N. Y., assignor to Kruse Cash Register Company. Check printing and adding machine	481,709	Aug. 30	3173	{ 775 776 }	{ 60 60 }	{ 1246 1246 }
Weisse, Charles, Boston, Mass. Work-box	470,728	Mar. 15	1694	437	58	1444
Weiss, George H., Jersey City, N. J., and E. N. Dickerson, Jr., New York, N. Y. Purifying coconut-oil	468,498	Feb. 9	930	.....	58	714
Weiss, Joseph. (See Gross and Beck, assignors.)						
Weiss, Louis T., Brooklyn, N. Y. Speed-indicator	486,651	Nov. 22	2341	612	61	1092
Weiss, Moritz, Brooklyn, assignor of one-half to C. Kruse, New York, N. Y. Time-stamp	473,598	Apr. 26	2547	642	59	533
Weissenborn, Albert G., Jersey City, N. J., assignor to American Lead Pencil Company, New York, N. Y. Varnishing frame or holder	482,664	Sept. 13	1920	298	60	1586
Weissenborn, Oscar A., Jersey City, N. J. Blackboard	483,371	Sept. 27	2365	593	60	1835
Weissenhanner, Achille, Paris, France. Jar	483,033	Sept. 20	1818	462	60	1718
Weitz, George G., Medford, Mass. Revolution-register	470,526	Mar. 8	1403	366	58	1376
Weitzel, Herbert L., Oakland, Cal. Auxiliary steering-gear	488,746	Dec. 27	2474	615	61	1862
Welch, Abraham T., Washington, D. C. Can-opener	470,024	Mar. 1	568	141	58	1209
Welch, Clementine E. (See Free love and Welch.)						
Welch, Daniel H., Astoria, Oreg. Propeller-blade	469,618	Feb. 23	2661	684	58	1071
Welch, David. (See Lee, George H., assignor.)						
Welch, E. B., <i>et al.</i> (See Robinson, Thomas C., assignor.)						
Welch, Everett C., Friedens, Pa. Car-coupling	481,449	Aug. 23	2758	678	60	1149
Welch, Frank E., Trinity College, N. C. Door-check	475,368	May 24	2361	605	59	1138
Welch, Henry T. (See Bailey and Welch.)						
Welch, James F., assignor to Glen Cove Machine Company, Limited, Brooklyn, N. Y. Worm-gear	486,204	Nov. 15	1632	432	61	938
Welch, James H., Pittsburg, Pa. Furnace plant	486,310	Nov. 15	1807	476	61	974
Welch, James K., and G. Brownen, London, England. Siphon-bottle	469,878	Mar. 1	341	87	58	1167
Welch, James S., Fort Elliott, Tex. Blotter-holder	473,983	Mar. 3	153	36	59	667
Welch, John S. (See Hinkley and Welch.)						
Welch, Orrin T., Topeka, Kans. Thill-coupling	471,690	Mar. 29	3143	801	58	1741
Welch, Robert K., assignor of one-half to G. E. Schlegelmilch, Philadelphia, Pa. Pipe-welding machine	478,669	July 12	919	228	60	197
Welch, Robert K., assignor of one-half to G. E. Schlegelmilch, Philadelphia, Pa. Pipe-flanging machine	478,670	July 12	921	229	60	198
Welch, Kasia W., assignor of two-thirds to W. A. Dunn and L. D. Passano, Baltimore, Md. Grain-scouring machine	480,942	Aug. 16	1891	473	60	974
Welch, Samuel F., assignor to Western Wheeled Scraper Company, Aurora, Ill. Sand-box and axle-collar	471,365	Mar. 22	2671	679	58	1645
Welch, Thomas, assignor of one-half to G. E. Breck, Paw Paw, Mich. Car-coupling	488,159	Dec. 13	1528	383	61	1644
Weldon, Henry J., Helena, Mont. Dress-stay	469,619	Feb. 23	2662	684	58	1071
Welisch, Herman, San Diego, Cal. Adjustable pick-point	470,833	Mar. 15	1295	485	58	1482
Welker, Louis, Williamsport, Pa. Fastening for table-legs	480,536	Aug. 9	1262	317	60	835
Wellborn, Samuel H., Centre Point, Texas. Trace-carrier	479,160	July 19	1685	421	60	356
Wellcome, Henry S., <i>et al.</i> (See Slater, Stanley R., assignor.)						
Welleba, Franz, Sr. and Jr., and L. Wächter, Vienna, Austria-Hungary. Advertising-clock	479,687	July 26	2547	{ 634 635 }	{ 60 60 }	{ 535 535 }

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & C.	Vol.	Page.
Weller, Chester A., assignor of one-half to J. Gibney, Ossining, N. Y. Pill-machine	467,071	Jan. 12	1238	{ 314 315 }	58	243
Weller, Chester A., assignor of four-fifths to J. Gibney, S. Lent, and C. H. Aely, Sing Sing, and C. T. Titus, Scarborough, N. Y. Apparatus for setting torpedo-signals	470,729	Mar. 15	1695	437	58	1444
Weller, Emma J., Waterbury, Conn. Seam-iron	468,554	Feb. 9	1026	261	58	733
Weller, George L., assignor to P. Foster and E. K. Mussey, Elyria, Ohio. Splitting rock	475,647	May 24	2800	709	59	1222
Weller, George L., assignor to P. Foster and E. K. Mussey, Elyria, Ohio. Rock-drilling tool	479,041	July 19	1503	373	60	322
Weller, Giles W., Baker City, Oreg. Rock-crushing machine	485,517	Nov. 1	552	{ 147 148 }	61	685
Weller, Gustavus A., assignor of one-half to C. L. Diesterweg, La Salle, Ill. Vending-machine	479,688	July 26	2552	635	60	536
Weller, James C., Defiance, Ohio. Grain drier or moistener	474,568	May 10	1105	282	59	861
Weller, Joel H., Boyertown, Pa. Alarm-bell for doors	480,001	Aug. 2	373	93	60	652
Weller, John, Funkstown, Md. Thrashing-machine	474,275	May 3	597	149	59	753
Wellhausen, Frederick W., Amite City, La. Plow	466,477	Jan. 5	269	68	58	51
Welling, Robert, Covington, Ky. Cesspool-valve	477,977	June 28	2793	700	59	2032
Welling, William M., New York, N. Y. Brush or mirror back	467,268	Jan. 19	1582	403	58	317
Wellman, Willard F., Belfast, Me., assignor to F. C. Pitcher, Medford, Mass. Antifriction-bearing	475,835	May 31	3117	789	59	1295
Wells, Arthur J., Syracuse, N. Y. File-case	466,969	Jan. 12	1072	272	58	212
Wells, Arthur J., Syracuse, N. Y. Partition	477,829	June 28	2567	643	59	1987
Wells, Calvin. (See Jordan, Llewellyn E., assignor.)						
Wells, Charles T., Ohio Falls, Ind. Door-check	476,910	June 14	1060	256	59	1661
Wells, Frederick L., Aurora, Ill. Lantern	475,646	May 24	2799	709	59	1222
Wells, Frederick L., Chicago, Ill., assignor to Automatic Interchangeable Car Coupling Company, of California. Car-coupling	471,702	Mar. 29	3161	806	58	1744
Wells, Gardner F. (See Miller and Wells.)						
Wells, George, Chester, Ark. Cultivator	467,570	Jan. 26	2075	524	58	418
Wells, George H., Jr., assignor of one-half to S. Bloch, Lake Charles, La. Animal-trap	469,429	Feb. 23	2376	609	58	1015
Wells, George H., Jr., assignor of one-half to S. Bloch, Lake Charles, La. Animal-trap	486,005	Nov. 8	1310	349	61	857
Wells, Harlan P., assignor of one-half to O. Morrill, Amesbury, Mass. Carriage	480,307	Aug. 9	908	229	60	767
Wells, Harlan P., and O. Morrill, Amesbury, Mass. Carriage	471,157	Mar. 22	2362	604	58	1585
Wells, John C. (See Bevin and Wells.)						
Wells, John C., East Hampton, Conn. Bell	483,332	Sept. 27	2311	581	60	1824
Wells, John C., assignor to Bevin Brothers Manufacturing Company, East Hampton, Conn. Gong-signal	470,025	Mar. 1	569	{ 141 142 }	58	1209
Wells, John S., et al. (See Shapley, James E., assignor.)						
Wells, Lorenzo D., Morrisonville, Ill. Straw-stacker	482,513	Sept. 13	992	240	60	1543
Wells, Matthew. (See Myers, Charles, assignor.)						
Wells, Nathan W., et al. (See Dickey, Foster, assignor.)						
Wells, Osborn, Newberry, S. C. Car-coupling	467,326	Jan. 19	1663	424	58	333
Wells, Osborn, Newberry, S. C. Car-coupling	467,327	Jan. 19	1666	425	58	333
Wells, Philip R., Detroit, Mich. Spring-hoe for seed-drills	474,430	May 10	884	230	59	819
Wells, Samuel J., et al. (See Marvick, Frederick N., assignor.)						
Wells, William E. (See Pedersen, Johannes S., assignor.)						
Wells, William E., New York, N. Y. Dental mallet	472,686	Apr. 12	1038	268	59	209
Wells, William F., Cleburne, assignor of one-fifth to L. R. Marston, Johnson county, Tex. Paper-perforating device	471,923	Mar. 29	3502	895	58	1811
Wellsford, C. M. (See Citizen, Samuel P., assignor.)						
Wellstein, Joseph, and M. E. Maxfield, Milwaukee, Wis. Pneumatic tire	481,681	Aug. 30	3131	764	60	1238
Wellstood, William, Jersey City, N. J., and F. J. Nichols, New York, N. Y.; said Nichols assignor to said Wellstood. Fac-simile of engraved steel-plates	474,888	May 17	1613		59	975
Welmer, John E., Hiawatha, Kans. Pinking device	483,884	Oct. 4	537	136	61	112
Welsbach Incandescent Gas Light Company. (See Stephens and Holmes, assignors.)						
Welsby, John. (See Bell and Welsby.)						
Welsch, Franklin P., Omaha, Nebr. Device for raising or lowering suspended electric lights	488,298	Dec. 20	1757	442	61	1704
Welsch, Thomas W., Wilmerding, Pa. Packing	480,643	Aug. 9	1436	358	60	869
Welter, Isaac C., Luzerne, Pa. Hoisting device	470,730	Mar. 15	1697	438	58	1445
Wetmer, Charles, Campbelltown, Pa. Mail-bag	466,814	Jan. 12	819	210	58	166
Wetton, Edwin D., assignor to Scovill Manufacturing Company, Waterbury, Conn. Machine for setting lacing-studs	477,852	June 28	2606	{ 552 553 }	59	1994
Wetty, Almond R., Shreve, Ohio. Picket-wiring fence-machine	481,086	Aug. 16	2134	531	60	1020
Wetty, George S., Warren, Ill. Gate-hanger	467,455	Jan. 19	1859	474	58	370
Welz, Franz, Klostergrab, Austria-Hungary. Manufacture of rose or orange stained glass	479,689	July 26	2553		60	536
Wendel, Hugo R., Harrisburg, Pa. Fly-paper holder	468,273	Feb. 2	563	138	58	633
Wendell, John H., North Topeka, Kans. Cultivator	487,807	Dec. 13	941	238	61	1525
Wendell, Fred C., Brooklyn, N. Y. Ironing-machine	466,815	Jan. 12	820	211	58	166
Wendell, Henry A. (See Wendell, Isaac P. and H. A.)						
Wendell, Isaac P. and H. A., assignors of one-third to W. R. Murphey, Philadelphia, Pa. Axle-lubricator	483,333	Sept. 27	2311	581	60	1825
Wendell, Menzo E. (See Wiles and Wendell.)						
Wendell, Menzo E., Troy, N. Y. Mangle	487,872	Dec. 13	1050	263	61	1546
Wendt, Henry D., Hoboken, N. J. Combined grate-bar and feed-water heater	478,726	July 12	999	243	60	215
Wenigmann, Ernest, New York, N. Y. Portable mosquito-net	473,599	Apr. 26	2548	642	59	533
Wenigmann, Ernest, New York, N. Y. Chamber-vessel	474,617	May 10	1181	300	59	875
Wenigmann, Ernest, New York, N. Y. Ice-pick	477,919	June 28	2714	679	59	2015
Wenman, Joseph E., East Liverpool, Ohio. Medical and surgical cabinet	478,830	July 12	1185	{ 293 294 }	60	250
Wennberg, John, Fertile, Minn. Sled-brake	482,029	Sept. 6	177	42	60	1369
Wenning, Edward. (See Bartholomew, George E., assignor.)						
Wenstrau, Swan P., and E. R. Blood, assignors to M. P. Blood, Ludlow, Pa. Making lamp-black	478,268	July 5	332	80	60	67
Wentworth, Richmond A., Hope, Me. Lamp-burner	481,607	Aug. 30	3020	738	60	1216
Wentworth, William C., Dexter, Me. Whiffletree-hook	486,551	Nov. 22	2164	572	61	1058
Wentz, Joseph H., Baraga, Mich. Scraper for band-saw pulleys	478,148	July 5	115	29	60	26
Wentz, William F., assignor of one-half to O. G. Hoerster, Newark, N. J. Telegraphy	468,755	Feb. 9	1321	334	58	793
Wentzel, Philippe, and H. Bletzer, Boston, Mass. Car-fender	487,547	Dec. 6	514	133	61	1422
Werle, Albert W., New Haven, Conn. Coach-binge	475,993	May 31	3367	849	59	1344
Werlé, William, Cleveland, Ohio. Pressure-regulator	472,241	Apr. 5	365	94	59	68
Werline Electrical Specialty Company. (See Werline, Henry E., assignor.)						
Werline, Henry E., Lancaster, assignor to Werline Electrical Specialty Company, York, Pa. Incandescent-electric-lamp socket	478,149	July 5	116	29	60	26
Werling, Joseph, and J. F. Agnew, Minneapolis, Minn. Trolley-catcher	487,808	Dec. 13	943	238	61	1526
Werner, August, Brooklyn, N. Y. Vessel	486,006	Nov. 8	1311	349	61	857

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Werner, Franz P., Munich, Germany. Producing an imitation of brocade or gold cloth.	482,604	Sept. 13	1138	-----	60	1571
Werner, George W., Lancaster, Pa. Gun-lock.	468,853	Feb. 16	1475	377	58	832
Werner, Hermann. (See Pfeiderer and Werner.)						
Werner, John A., et al. (See Graff, Edward E., assignor.)						
Werner, John H. (See Botsford, Frederick G., assignor.)						
Werner, Michael, Allegheny, Pa. Car-coupling.	487,590	Dec. 6	570	146	61	1435
Werneth, Francis J., Baltimore, Md. Umbrella-holder for bicycles.	472,282	Apr. 5	429	110	59	80
Wernicke, Otto H. L., Minneapolis, Minn. Sectional stock-case.	487,460	Dec. 6	381	99	61	1396
Werth, Rudolph. (See Schubert and Werth.)						
Wertheimer, Lewis J., et al. (See Monday, Robert, assignor.)						
Wertsbaenger, Judson S., assignor of one-half to W. L. Logan, Fort Wayne, Ind. Hair-curler.	473,101	Apr. 19	1677	425	59	344
Werzinger, Karl, Baden-Baden, Germany. Stove.	469,380	Feb. 23	2302	592	58	1001
Wesel, Ferdinand, New York, N. Y. Machine for cutting printers' rules and leads.	484,984	Oct. 25	2299	593	61	502
Weser, John A., New York, N. Y. Music-rack for musical-instrument cases.	475,369	May 24	2363	605	59	1138
Weser, John A., New York, N. Y. Music-rack for musical-instrument cases.	484,481	Oct. 18	1477	376	61	322
Wesslau, Bror H., Charlottenburg, assignor to Siemens & Halske, Berlin, Germany. Anti-inductive conductor.	475,648	May 24	2801	709	59	1222
West, Augustine C., Wakefield, Mass. Lamp.	477,480	June 21	1991	494	59	1857
West, C. G., et al. (See West, William A., assignor.)						
West, Charles C. (See Callaway and West.)						
West, Charles H. (See McCardell, West, and McDonald.)						
West, Derrick S., assignor of three-fourths to J. W. Drew, Boston, Mass., and C. H. Fish, Manchester, N. H. Breech-loading firearm.	478,727	July 12	1001	248	60	215
West, Derrick S., assignor of three-fourths to J. W. Drew, Boston, Mass., and C. H. Fish, Manchester, N. H. Magazine breech-loading gun.	478,728	July 12	1007	249	60	216
West, Derrick S., Boston, Mass., assignor of three-fourths to C. H. Fish, Manchester, N. H., and J. W. Drew, Boston, Mass. Magazine-firearm.	478,729	July 12	1013	249	60	217
West, Elbridge G., assignor of one-half to A. C. Robison, Canandaigua, N. Y. Metallic-vessel seam.	469,761	Mar. 1	147	38	58	1129
West, Forrest W., Philadelphia, Pa. Bottle-stopper and measuring device.	476,342	June 7	181	43	59	1471
West, Harley E., assignor of one-fourth to M. V. Wall, Toledo, Ohio. Metal wheel.	483,703	Oct. 4	273	67	61	57
West, James, et al. (See Boyer, Joseph, assignor.)						
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Envelope-making machine.	479,042	July 19	1503	374	60	322
West, James, assignor of one-half to S. Cupples, St. Louis, Mo. Manufacture of paper bags.	487,862	Dec. 13	1032	258	61	1543
West, Robert H. (See Lemon, Eli J., assignor.)						
West, Robert S. (See Irish, William E., assignor.)						
West, Simeon L., Washington, D. C. Apparatus for purifying, sterilizing, and filtering drinking-water.	471,261	Mar. 22	2514	638	58	1614
West, Simeon L., Washington, D. C. Filter.	488,621	Dec. 27	2276	565	61	1824
West, W. H., et al. (See West, William A., assignor.)						
West, William A., assignor of two-thirds to W. H. and C. G. West, Bellefontaine, Ohio. Telephone.	470,634	Mar. 8	1551	404	58	1407
West, William F., Slatersville, R. I. Friction-collar for spindles on long-chain quilling-frames.	478,269	July 5	332	80	60	67
West, William S., Temple, Ga. Cotton-seed planter.	485,518	Nov. 1	553	148	61	686
Westaway, Walter C. (See Beard and Westaway.)						
Westaway, Walter C., Decorah, Iowa. Lubricator for windmills.	471,408	Mar. 22	2738	699	58	1658
Westaway, Walter C., Decorah, Iowa. Elastic pump-rod.	480,756	Aug. 16	1611	404	60	918
Westaway, Walter C., assignor to Decorah Windmill Company, Decorah, Iowa. Machine for rolling sheet metal into curved forms.	471,407	Mar. 22	2736	699	58	1657
Westaway, Walter C., and L. W. Beard, assignors to Decorah Windmill Company, Decorah, Iowa. Windmill.	471,406	Mar. 22	2735	698	58	1657
Westberg, Charles A., Chicago, Ill. Latch.	476,434	June 7	325	74	59	1500
Westcott Chuck Company. (See Westcott, James H., assignor.)						
Westcott, Emma. (See Ross and Westcott.)						
Westcott, James H., assignor of one-half to Westcott Chuck Company, Oneida, N. Y. Lathe-chuck.	470,369	Mar. 8	1158	296	58	1330
Westcott, James H., assignor of one-half to Westcott Chuck Company, Oneida, N. Y. Lathe-chuck.	470,370	Mar. 8	1160	297	58	1330
Westen, William H., Traverse City, Mich. Hopple.	487,863	Dec. 13	1034	258	61	1543
Westerbeck, Frederick, St. Louis, Mo. Reinforced shipping-can.	485,119	Oct. 25	2502	643	61	544
Westerdahl, Anton R. (See Keil and Westerdahl.)						
Westfield, Eugene T., New York, N. Y. Street-sprinkler.	474,465	May 10	939	242	59	828
Westerman, Theodore, Newark, N. J. Apple cutter and corer.	471,158	Mar. 22	2363	604	58	1585
Westerman, William H., Barnhart's Mills, Pa. Low-water alarm.	468,390	Feb. 9	759	188	58	680
Westermann, Albert, et al. (See Hoz, Adolf, assignor.)						
Western Electric Company. (See Bell, Oro A., assignor.)						
Western Electric Company. (See Carty, John J., assignor.)						
Western Electric Company. (See Clark, Martin M., assignor.)						
Western Electric Company. (See Goodridge, William M., assignor.)						
Western Electric Company. (See McCulloch, Alfred H., assignor.)						
Western Electric Company. (See McQuarrie, James L., assignor.)						
Western Electric Company. (See Moseley, Walker, assignor.)						
Western Electric Company. (See O'Connell, Joseph J., assignor.)						
Western Electric Company. (See Patterson, William R., assignor.)						
Western Electric Company. (See Rudd, Charles H., assignor.)						
Western Electric Company. (See Scribner, Charles E., assignor.)						
Western Electric Company. (See Scribner and Warner, assignors.)						
Western Electric Company. (See Seely, John A., assignor.)						
Western Electric Company. (See Taintor, Giles, assignor.)						
Western Electric Company. (See Warner, Ernest P., assignor.)						
Western Electric Company. (See Warner, James C., assignor.)						
Western Patent Company. (See Lewis and Petraeus, assignors.)						
Western Paving and Supply Company. (See Perkins, Amos H., assignor.)						
Western Publishing House. (See Keen, Edwin R., assignor.)						
Western Union Telegraph Company. (See Edison, Thomas A., assignor.)						
Western Union Telegraph Company. (See Hurd, John B., assignor.)						
Western Wheel Scraper Company. (See McKnight, Thomas R., assignor.)						
Western Wheeled Scraper Company. (See Welch, Samuel F., assignor.)						
Westervelt, Bertha, Newark, N. J. Curling-tool.	468,445	Feb. 9	837	211	58	696
Westervelt, Edmund C., South Bend, Ind. Plow.	469,075	Feb. 16	1837	470	58	903

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Westervelt, Edmund C., and C. W. Clapp, South Bend, Ind. Wheel-plow	473,803	Apr. 26	2852	{ 716 717 }	59	591
Westervelt, George C., South Bend, Ind. Plow-point	477,723	June 28	2394	598	59	1956
Westervelt, George C., South Bend, Ind. Plow-coltter	484,127	Oct. 11	893	238	61	198
Westervelt, George C., South Bend, Ind. Side-hill plow	484,128	Oct. 11	894	229	61	198
Westervelt, George C., South Bend, Ind. Plow	484,129	Oct. 11	896	229	61	198
Westervelt, Jesse, Butler, N. J. Faucet	473,600	Apr. 26	2549	642	59	530
Westfall, Samuel, Thayer, Mo. Rotary engine	470,405	Mar. 8	1218	311	58	1340
Westgate, Joseph D., Worcester, assignor of two-thirds to G. A. Walker, Boston, Mass. Friction-clutch	479,684	July 26	2543	633	60	535
Westgate, Joseph D., assignor to C. H. Woodcock, Worcester, and G. A. Walker, Boston, Mass. Mechanical movement	477,191	June 14	1506	369	59	1752
Westing, John R. (See Hurley and Westing.)						
Westinghouse Air Brake Company. (See Higham, Charles C., assignor.)						
Westinghouse Air Brake Company. (See Hogan, Thomas J., assignor.)						
Westinghouse Air Brake Company. (See Jackson, Amariah W., assignor.)						
Westinghouse Air Brake Company. (See Westinghouse, Henry H., assignor.)						
Westinghouse, Church, Kerr & Company. (See Roney, William R., assignor.)						
Westinghouse, Church, Kerr & Company. (See Woodbridge, Samuel H., assignor.)						
Westinghouse Company. (See Barnes, Dana A., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Lamme, Benjamin G., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Scott and Wurts, assignors.)						
Westinghouse Electric and Manufacturing Company. (See Shallenberger, Oliver B., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Stanley, William, Jr., assignor.)						
Westinghouse Electric and Manufacturing Company. (See Wurts, Alexander, assignor.)						
Westinghouse, George, Jr., assignor to Standard Car Heating and Ventilating Company, Pittsburg, Pa. Apparatus for heating cars	466,590	Jan. 5	444	{ 114 115 }	58	86
Westinghouse, H. H. (See Parke, Robert A., assignor.)						
Westinghouse, Henry H., assignor to Westinghouse Air Brake Company, Pittsburg, Pa. Triple valve for automatic air-brakes	475,099	May 17	1948	494	59	1039
Westmacott, Alexander G. E., and J. P. Hutchinson, Newtown, Pa. Railway	468,608	Feb. 9	1097	279	55	747
Westmacott, Alexander G. E., and J. P. Hutchinson, Newtown, Pa. Metallic railway-tie	471,582	Mar. 29	2984	760	58	1712
Westmacott, Alexander G. E., and J. P. Hutchinson, Newtown, Pa. Railway-track fastening	471,583	Mar. 29	2985	760	58	1712
Weston, Charles W. (See Legg and Weston.)						
Weston, Charles W., San Francisco, Cal. Fruit-box	474,276	May 3	599	149	59	754
Weston, Edward, Newark, N. J. Movable coil for electrical measuring-instruments	470,340	Mar. 8	1109	223	58	1320
Weston, Edward, Newark, N. J. Electrical measuring-instrument	470,341	Mar. 8	1110	224	58	1320
Weston, Edward, Newark, N. J. Electrical measuring instrument	473,538	Apr. 26	2433	616	59	510
Weston, Edward, Newark, N. J. Electrical measuring instrument	473,539	Apr. 26	2434	616	59	510
Weston, Edward, Newark, N. J. Electrical measuring-instrument. (Reissue)	11,250	June 28	2954	738	59	2062
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,888	Aug. 16	1809	452	60	958
Weston, Edward, Newark, N. J. Apparatus for retarding or dampening the motion of moving bodies in electrical instruments	480,889	Aug. 16	1810	452	60	958
Weston, Edward, Newark, N. J. Electric time-indicating apparatus	480,890	Aug. 16	1812	452	60	958
Weston, Edward, Newark, N. J. Temperature-regulating device for electrical circuits	480,891	Aug. 16	1815	453	60	959
Weston, Edward, Newark, N. J. Rheostat	480,892	Aug. 16	1817	453	60	959
Weston, Edward, Newark, N. J. Rheostat	480,893	Aug. 16	1819	454	60	960
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,894	Aug. 16	1822	454	60	960
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,895	Aug. 16	1823	454	60	961
Weston, Edward, Newark, N. J. Electrical measuring-instrument	484,896	Aug. 16	1825	{ 454 455 }	60	961
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,897	Aug. 16	1829	455	60	961
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,898	Aug. 16	1831	456	60	962
Weston, Edward, Newark, N. J. Electrical measuring-instrument	480,899	Aug. 16	1832	456	60	962
Weston, Edward, Newark, N. J. Adapter or plug for incandescent-lamp circuits	480,900	Aug. 16	1835	457	60	963
Weston, Edward, Newark, N. J. Electrical measuring-instrument	486,689	Nov. 22	2398	626	61	1104
Weston Engine Company. (See Longenecker, Charles K., assignor.)						
Weston, Frank C., Bangor, Me. Cyclometer	481,608	Aug. 30	3021	738	60	1216
Weston, John A., Providence, R. I. Automatic latch for extension-ladders	477,393	June 21	1856	456	59	1831
Weston, John A., Providence, R. I. Extension-ladder hook	477,877	June 28	2652	663	59	2003
Weston, John A., Providence, R. I. Latch for extension-ladders	478,384	July 5	503	122	60	99
Weston, Thomas A., assignor to Yale & Towne Manufacturing Company, Stamford, Conn. Worm-wheel mechanism	486,814	Nov. 22	2601	677	61	1145
Weston & Wells Manufacturing Company. (See Cobb, Dewey A., assignor.)						
Westover, Charles H. and G. D. Grand Rapids, Mich. Safety-gate	471,738	Mar. 29	3231	822	58	1756
Westover, Cynthia M., New York, N. Y. Dumping-cart	468,588	Feb. 9	1069	273	58	741
Westover, George D. (See Westover, Charles H. and G. D.)						
Westover, Rollin B. L., Rutland, Vt. Roofing and siding screw or fastening	481,724	Aug. 30	3209	784	60	1252
Westphal, Henry, Chicago, Ill. Coin-controlled umbrella-stand	486,145	Nov. 15	1554	{ 411 412 413 }	61	923
Westphalen, Rudolf G., Vienna, Austria-Hungary. Metallic covering-plate	483,243	Sept. 27	2145		60	1795
Westrup, Alexander. (See Gilman, Lowell J., assignor.)						
Westrup, Oliver F., Liverpool, England. Paper-file	484,267	Oct. 11	1135	{ 289 290 }	61	245
Westrup, Oliver F., assignor of one-half to M. Higginson and D. M. Vaughan, Liverpool, England. Binding device for periodicals, newspapers, &c	484,268	Oct. 11	1138	290	61	245
Westwood, Charles J., and H. Rigby, Millwall, England. Hinged expansion-gear for bridges	480,863	Aug. 16	1777	444	60	951
Westwood, Frederick, Birmingham, England. Crank for velocipedes	476,911	June 14	1060	255	59	1661
Westwood, Frederick, and W. H. Butler, Birmingham, England. Wheel for velocipedes	486,146	Nov. 15	1558	413	61	924
Westwood, John T., assignor to Wheeling Novelty Manufacturing Company, Wheeling, W. Va. Refrigerator and elevating cupboard	478,898	July 12	1268	313	60	266
Wetherill, William C., Joplin, Mo. Reduction of complex ores	484,269	Oct. 11	1139		61	245
Wetherill, William H., Philadelphia, Pa. White-lead corroding-pit	478,488	July 5	651	159	60	130
Wetmore, Frank E. (See Arnold and Wetmore.)						
Wetmore, Jerome W., Erie, Pa. Wagon-tongue support	475,836	May 31	3118	790	59	1296
Wetmore, Jerome W., Erie, Pa. Vehicle-spring	482,933	Sept. 20	1649	415	60	1684
Wetter, Joseph. (See Bartusch, Oswald, assignor.)						
Wetter, Joseph. (See Reinhardt, James H., assignor.)						
Wetter, Joseph. (See Sanders, Frank, assignor.)						
Wetterbahn, Eduard, St. Louis, Mo. Mechanic's square	484,575	Oct. 18	1614	410	61	351
Wetzel, Lewis C., Scottdale, Pa. Die-plate	481,450	Aug. 23	2759	679	60	1150

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Wever, Newton M., and D. D. Blount, Bartow, Fla. Ratchet railway-track wrench	471,765	Mar. 29	3265	833	58	1763
Weyburn, Elbert D., <i>et al.</i> (See Robertson William, assignor.)						
Weyburn, Elbert D., assignor to Weyburn Special Machine Company, Chicago, Ill. Power-transmitting device	481,988	Sept. 6	101	25	60	1354
Weyburn Special Machine Company. (See Weyburn, Elbert D., assignor.)						
Weyer, David A., <i>et al.</i> (See Young, Charles H., assignor.)						
Weyerhaeuser, John, <i>et al.</i> (See Ward, William H., assignor.)						
Weymouth, Richard W., and H. T. Fulton, Pueblo, Colo. Car-coupling	487,341	Dec. 6	167	47	61	1353
Whaler, Clarence V. W., Toledo, Ohio. Umbrella-support	467,761	Jan. 26	2368	601	58	473
Whaley, Barnett B., Brooklyn, N. Y. Toy pistol	474,707	May 10	1319	336	59	903
Whalley, Joshua. (See Baynes and Whalley.)						
Whallon, Clement V., assignor of one-half to I. N. Booker, North Star, Ohio. Animal-poke	483,190	Sept. 27	2066	522	60	1779
Wharton, John C., and J. W. Braid, Nashville, Tenn. Electric signaling device for fire-hose	479,540	July 26	2324	581	60	495
Wharton, Joseph G., Harrisburg, Pa. Brake-shoe	478,671	July 12	922	229	60	198
Wharton Railroad Switch Company. (See Henderson, John W., assignor.)						
Wharton, Richard, assignor of two-thirds to G. F. and J. B. Patterson, Philadelphia, Pa. Loom-picker	481,339	Aug. 23	2587	635	60	1116
Wharton, William, Jr., Philadelphia, Pa. Railway-chair	483,592	Oct. 4	116	28	61	24
Wharton, William, Jr., assignor to William Wharton, Jr., and Company, Incorporated, Philadelphia, Pa. Combined chair and fish-plate joint for railways	468,162	Feb. 2	326	95	58	599
Whearty, James. (See Keeling, Squire, assignor.)						
Wheat, Edmond C., assignor of three-eighths to J. A. Best, Colmesneil, Tex. Motor	478,774	July 12	1084	269	60	231
Wheat, James H., Dayton, Ohio. Steam-engine valve	486,148	Nov. 15	1560	{ 413 414 }	61	924
Wheatley, Harry D., Union City, Ind., assignor of one-half to G. Lambert & Son, Ohio City, Ohio. Door-latch	477,790	June 28	2501	626	59	1975
Wheatley, Thomas, Syracuse, N. Y. Oil-cup for bicycles	472,837	Apr. 12	1258	322	50	251
Wheaton, Abram W., Newark, N. J. Spring-clamp for children's trays	469,798	Mar. 1	213	55	58	1143
Wheaton, Milton A., San Francisco, Cal. Can-heading machine	477,584	June 21	2149	{ 334 335 }	59	1890
Wheaton, Orson E., Grundy Centre, Iowa. Seal-lock	487,591	Dec. 6	571	146	61	1435
Wheaton, William K., Springfield, Mass. Sewing-machine	487,383	Dec. 6	234	63	61	1367
Wheelan, Fairfax H., Santa Barbara, Cal. Separator	468,066	Feb. 2	240	58	58	570
Wheelan, Fairfax H., Santa Barbara, Cal. Separator	474,930	May 17	1671	427	59	986
Wheeler, Arthur C., <i>et al.</i> (See Weaver, William, assignor.)						
Wheeler, Benjamin L. (See Ellis, Edward E., assignor.)						
Wheeler, Charles E., Cleveland, Ohio. Label-holder	485,310	Nov. 1	231	64, 65	61	620
Wheeler, Charles L., Jr., Bradford, Pa. Stopper for inkstands	482,051	Sept. 6	210	50	60	1376
Wheeler, Clarence L., assignor of one-half to J. W. Clark, Marion, Ind. Melting-furnace	475,070	May 17	1899	482	59	1030
Wheeler, Cyrenus, Jr., Auburn, N. Y. Clothes-wringer	471,924	Mar. 29	3504	895	58	1811
Wheeler, David C., and W. W. Sperry, said Sperry assignor to D. Wheeler, Bridgeport, Conn. Nut-cracker	483,334	Sept. 27	2313	581	60	1825
Wheeler, Dwight. (See Wheeler and Sperry, assignors.)						
Wheeler, Earl A., Sharon, Pa. Boiler-furnace	471,449	Mar. 22	2800	714	58	1669
Wheeler, Earl G., <i>et al.</i> (See Ladd, Daniel E., assignor.)						
Wheeler, Earl G., Amsterdam, N. Y. Satchel-strap	471,159	Mar. 22	2364	604	58	1565
Wheeler, Earl G., Amsterdam, N. Y. Shawl-strap	474,071	May 3	299	73	59	695
Wheeler, Edward G. (See Clawson and Wheeler.)						
Wheeler, Edward J. (See Lawrence, Alfred C., assignor.)						
Wheeler, Frank, Meriden, Conn. Clutch and stop mechanism for presses	470,797	Mar. 15	1804	{ 463 464 }	58	1465
Wheeler, George A., New York, N. Y. Elevator	479,864	Aug. 2	132	32, 33	60	608
Wheeler, Helen D., Chicago, Ill. Music-holder	473,540	Apr. 26	2435	616	59	510
Wheeler, Holland, Lawrence, Kans. Siphon	474,889	May 17	1614	412	59	975
Wheeler, Jarns, <i>et al.</i> (See Ladd, Daniel E., assignor.)						
Wheeler, John H., Saugatuck, Mich. Multiplex musical instrument	481,451	Aug. 23	2760	679	60	1150
Wheeler, Joseph N. (See Appleby, Reuben L., assignor.)						
Wheeler, Joseph S. (See Twitchell, Myron A., assignor.)						
Wheeler, Milo L. G., North Yakima, Wash. Force-pump and water-elevator	484,169	Oct. 11	972	249	61	213
Wheeler Novelty Company. (See Wheeler, Orrin A., assignor.)						
Wheeler, Orrin A., assignor to Wheeler Novelty Company, Chicago, Ill. Puzzle	466,925	Jan. 12	1009	258	58	201
Wheeler, Reuben A., Sioux City, Iowa. Cake-griddle	484,482	Oct. 18	1479	377	61	323
Wheeler, Schuyler S., assignor to Crocker-Wheeler Electric Company, New York, N. Y. Electrical spool	480,681	Aug. 9	1498	373	60	880
Wheeler, William B., Madison, Wis. Mixing-machine	472,092	Apr. 5	117	32	59	24
Wheeler & Wilson Manufacturing Company. (See Dial, Wilbur F., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Dimond, George H., assignor.)						
Wheeler & Wilson Manufacturing Company. (See Thomas, Carlyle W., assignor.)						
Wheeling Corrugating Company. (See Ewing, Edwin C., assignor.)						
Wheeling Corrugating Company. (See Ewing and Packer, assignors.)						
Wheeling Corrugating Company. (See Packer, John H., assignor.)						
Wheeling Novelty Manufacturing Company. (See Westwood, John T., assignor.)						
Wheelock & Brigham. (See Chamberlain, Orange M., assignor.)						
Wheelock, E. M., <i>et al.</i> (See Wheelock, Willis W., assignor.)						
Wheelock, Jerome, Worcester, Mass. Mechanism for controlling cut-off valves for engines	467,867	Jan. 26	2537	{ 643 644 }	58	505
Wheelock, Jerome, Worcester, Mass. Valve-gear for engines	467,868	Jan. 26	2539	644	58	505
Wheelock, Willis W., assignor to E. M. Wheelock and H. B. Hustvedt, Decorah, Iowa. Weed and root puller	473,490	Apr. 26	3003	757	59	620
Whelan, Andrew, assignor of one-half to F. S. Feindt, South Orange, N. J. Hose-coupling	476,711	June 7	722	178	59	1580
Whelan, Martin O. (See Traves and Whelan.)						
Whelan, Robert and R. A., Chicago, Ill. Furnace-grate	474,931	May 17	1673	{ 427 428 }	59	987
Whelan, Robert A. (See Whelan, Robert and R. A.)						
Whelless, Malone, Nashville, Tenn. Electric railway	468,163	Feb. 2	387	96	58	599
Whelless, Malone, Nashville, Tenn. Electric railway	468,164	Feb. 2	387	96	58	599
Whelless, Malone, Nashville, Tenn. Electric railway	468,165	Feb. 2	388	96	58	600
Whelless, Malone, Nashville, Tenn. Conduit electric trolley	468,166	Feb. 2	389	96	58	600
Whelpley, James A., assignor to Keen Manufacturing Company, Keene, N. H. Hack-saw frame	487,358	Dec. 6	200	55	61	1360
Wherry, Robert, Iroquois, Canada. Combined milk aerator and cooler	467,965	Feb. 2	86	21	58	541
Wherry, William B., and W. F. Smith, Overton, Tex. Cotton cleaner and condenser	476,710	June 7	721	177	59	1580

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Whiffen-Lake Lasting Machine Company. (See O'Neill, James F., assignor.)						
Whigham, William. (See Campbell and Whigham.)						
Whinfield, John H. R., and J. Horne, London, England. Gun carriage or mounting	478,899	July 12	1269	{ 314 315 316	60	266
Whipple, Alice A., Providence, R. I. Apparatus for sanding railway-tracks	484,926	Oct. 25	2214	571	61	486
Whipple, Caroline A., London, England. Needle employed in the manufacture of felted fabrics	469,762	Mar. 1	148	38	58	1129
Whipple, Charles E., Severy, Kans. Sash-balance	473,169	Apr. 19	1801	454	59	367
Whipple, Charles S. (See Good and Whipple.)						
Whipple, Eugene D., Creston, Iowa. Car-coupling	485,249	Nov. 1	143	43	61	603
Whipple, Henry J. P., New Haven, Conn. Knob attachment	473,988	May 3	160	38	59	669
Whipple, Jerome, Toledo, Ohio. Umbrella-holder for bicycles	467,360	Jan. 19	1719	{ 439 440	58	343
Whipple, Nathan F., Pawtucket, R. I. Tea or coffee strainer	470,026	Mar. 1	572	142	58	1209
Whipple, Orin P., Council Bluffs, Iowa. Post-auger	469,290	Feb. 23	2168	556	58	973
Whitaker, Herschel, Detroit, Mich. Fishing-rod	486,802	Nov. 22	2581	672	61	1141
Whitaker, Richard, assignor to Empire Machine and Tool Company, New Brunswick, N. J. Stop-motion device	471,044	Mar. 15	2175	560	58	1537
Whitaker, Richard, assignor to Empire Machine and Tool Company, New Brunswick, N. J. Crimping-machine	471,925	Mar. 29	3505	895	58	1811
Whitaker, Samuel T. (See Herzberg and Whitaker.)						
Whitaker, Samuel T. (See Herzberg, Whitaker, and Lanier.)						
Whitcomb, Charles E. (See Reed, Nathan F., assignor.)						
Whitcomb, Daniel F., et al. (See Cole, John J., assignor.)						
Whitcomb, Eugene S., Orange, Vt. Whiffletree-hook	467,667	Jan. 26	2214	564	58	444
Whitcomb, Howard S., Chicago, Ill. Umbrella	473,649	Apr. 26	2624	661	59	547
Whitcomb, James A., Columbus, Nehr. Wagon-brake	477,979	June 28	2796	{ 700 701	59	2033
Whitcomb, Truman H., et al. (See June, Marcus M., assignor.)						
White, Albert. (See Parker, Charles F., assignor.)						
White, Albert, Lowell, Mass. Vise	469,493	Feb. 23	2479	636	58	1034
White, Albert M., Waterbury, assignor of one-half to N. S. Perkins, New London, Conn. Leader for fish-lines	473,038	Apr. 19	1587	403	59	327
White, Alfred L., Suisun, Cal. Water-elevator	467,072	Jan. 12	1247	{ 315 316	58	245
White, Amanda J., Wilkes-Barré, Pa. Mining-machine	474,110	May 3	356	85	59	706
White, Anthony C., assignor to American Bell Telephone Company, Boston, Mass. Telephone	485,311	Nov. 1	234	65	61	620
White, Arthur S., Grand Rapids, Mich. Combined folding-bed case and wardrobe	473,984	May 3	154	36	59	667
White, Benjamin F., Monroe, La. Extension-cam	477,978	June 28	2793	700	59	2033
White, Bruce C., Chicago, Ill. Brick-machine	488,622	Dec. 27	2277	{ 565 566	61	1824
White, Bruce C., Chicago, Ill. Steam-heater for brick-presses	488,623	Dec. 27	2286	566	61	1825
White, Clermont A., Marcellus, Mich. Machine for addressing mail-matter	488,912	Dec. 27	2740	676	61	1917
White, Daniel. (See Sage, Alfred C., assignor.)						
White, Edward D., Hartford, Conn. Spokeshave	923,294	Sept. 27	2255	567	60	1814
White, Edward H. (See Parker, William D., assignor.)						
White, Frank, Pomona, Cal. Soap-hook	475,971	May 31	3336	841	59	1338
White, Fred. G., et al. (See Richardson, Theodore M., assignor.)						
White, Frederick L., Milwaukee, Wis., assignor of one-half to A. J. Pickett, Chicago, Ill. Heating by metal bath	487,310	Dec. 6	115	34, 35	61	1344
White, George, New York, N. Y. Compositor's case	476,847	June 14	951	231	59	1640
White, George A. (See Stone, Henrie D., assignor.)						
White, George H., administrator. (See White, George W.)						
White, George W., deceased; G. H. White, San Francisco, Cal., administrator. Door for catch-basins of street-sewers	472,567	Apr. 12	870	224	59	180
White, George W. H., et al. (See Sands, John, assignor.)						
White, Harry, et al. (See Sands, John, assignor.)						
White, Harry K., Annapolis, Md. Match-safe	467,869	Jan. 26	2540	644	58	506
White, Harry K., U. S. Navy, assignor to White Magazine Rifle Company, Alexandria, Va. Recoil-operated magazine-firearm	488,409	Dec. 20	1936	{ 485 486	61	1740
White, Helen. (See White, William, assignor.)						
White, Henry, Bellville, Ohio. Road-locomotive	480,757	Aug. 16	1612	405	60	919
White, Henry P., Kalamazoo, Mich. Circuit-controller	466,519	Jan. 5	339	84	58	65
White, Henry P., Kalamazoo, Mich. Commutator	467,215	Jan. 19	1492	382	58	301
White, Henry W., Auburn, Me. Mop-holder	469,309	Feb. 23	2194	562	58	979
White, Holden B., et al. (See Moss, Julian, assignor.)						
White, Horace B. (See Knapp, Edmond B., assignor.)						
White, James, Chicago, Ill. Device for holding milk-tickets	476,343	June 7	182	43	59	1472
White, James, Chicago, Ill. Color-chart	488,375	Dec. 20	1892	473	61	1731
White, James, Brooklyn, N. Y. Sheet-metal tile	471,450	Mar. 22	2801	{ 714 715	58	1669
White, James, Brooklyn, N. Y. Sheet-metal tile. (Reissue)	11,294	Dec. 13	1552	{ 389 390	61	1648
White, James, Cleveland, Ohio. Safe-lock	481,319	Aug. 23	2555	{ 627 628	60	1111
White, James G., Kansas City, Mo. Safety-valve	487,809	Dec. 13	944	238	61	1526
White, James H. (See Dubbs, Jesse A., assignor.)						
White, John, Memphis, Tenn. Reservoir cooking-stove	475,100	May 17	1949	494	59	1039
White, John, Allegheny, assignor of one-half to J. L. Brown Company, Pittsburg, Pa. Corrugating-machine	483,192	Sept. 27	2068	522	60	1780
White, John B. (See Thompson, Robert J., assignor.)						
White, John D., Worthington, Iowa. Swinging gate	479,905	Aug. 2	194	48	60	620
White, John H., et al. (See Sands, John, assignor.)						
White, John H., Washington, D. C. Phonograph	467,530	Jan. 26	1998	506	58	404
White, John H., Washington, D. C. Machine for sticking match-splints	473,372	Apr. 19	2152	{ 540 541	59	435
White, John W., Burlington, Kans. Trace-carrier	476,344	June 7	183	43	59	1472
White, Lewis B., New York, N. Y., assignor to L. Abbett, Jersey City, N. J. Oil-burner	468,589	Feb. 9	1070	273	58	741
White, Lewis B., and J. V. Reilmayer, assignors of one-third to H. A. Reitzenstein, New York, N. Y. Hydrocarbon-burner	469,108	Feb. 16	1877	480	58	911
White, Lyman, and B. S. Bigelow, assignors to Seamless Structural Company, Milwaukee, Wis. Joint and metallic cylinder and producing the same	468,298	Feb. 2	607	152	58	641
White Magazine Rifle Company. (See White, Harry K., assignor.)						
White, Nelson J., Lawrence, Mass. Sniping-machine	485,401	Nov. 1	392	106	61	653

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
White, Norman, Bay Ridge, N. Y. Surgical antiseptic thread-holder.....	485,674	Nov. 8	800	213	61	753
White, Otis A., Boston, Mass. Tube-expander.....	488,376	Dec. 20	1893	474	61	1731
White, Peter L., Grand Rapids, Mich. Bedstead.....	479,043	July 19	1506	375	60	323
White, Richard, London, England. Drying apparatus.....	472,323	Apr. 5	494	{ 128 129	{ 59	93
White, Robert H., Madison, Ind. Window.....	480,682	Aug. 9	1500	{ 373 374	{ 60	880
White, Roger S. (See Pilkington and White.)						
White Ross Manufacturing Company. (See Ross, Oliver P., assignor.)						
White, S. Stewart, <i>et al.</i> (See Raymond, Silas H., assignor.)						
White, Samuel K. (See Lockwood and White.)						
White, Samuel S., Iola, Kans. Gate.....	468,712	Feb. 9	1260	320	58	780
White, Samuel T. (See Gardner, Fulton, assignor.)						
White Sewing Machine Company. (See Clyne, James B., assignor.)						
White, T. Stewart, <i>et al.</i> (See Raymond, Silas H., assignor.)						
White, Thomas. (See Farmer and White.)						
White, Wells H., Los Angeles, Cal. Vehicle-hub.....	473,985	May 3	155	37	59	668
White, Will R., <i>et al.</i> (See Sands, John, assignor.)						
White, William. (See Garey, Caleb E., assignor.)						
White, William. (See Houghton and White.)						
White, William, Cleveland, Ohio. Flask for casting pipe.....	487,810	Dec. 13	944	239	61	1526
White, William, deceased; P. Manro, Washington, D. C., administrator, and assignor to H. White, Woodside Villa, England. Solidifying liquid acids.....	475,586	May 24	2708	.....	59	1204
White, William F., Troy, N. Y. Whiffletree-hook.....	467,566	Jan. 26	2070	523	58	417
White, William H., Worcester, Mass. Back-rest for turning-lathes.....	470,229	Mar. 8	899	222	58	1282
White, William J., Cleveland, Ohio. Safety attachment for elevators.....	486,518	Nov. 22	2121	560	61	1050
White, William W., Forest City, Ill. Derrick.....	485,756	Nov. 8	923	247	61	779
Whitefield, George W., Evanston, Ill. Electrical device for preventing cribbing in horses.....	487,461	Dec. 6	382	100	61	1396
Whitehead, Benjamin S., Newark, N. J. Emblematic society badge and rosette.....	476,939	June 14	1107	267	59	1671
Whitehead, Benjamin S., Newark, N. J. Badge.....	484,527	Oct. 18	1546	392	61	336
Whitehead, Cabell, Washington, D. C. Treating mixtures containing sulphides of precious metals and copper.....	483,972	Oct. 4	677	.....	61	140
Whitehead, Rupert. (See Gilchrist, Raymond B., assignor.)						
Whitehead, William H., Erie, Pa. Sheet-metal-oven bottom for ranges.....	479,770	July 26	2703	673	60	565
Whitehill, David B., North Clarendon, Pa. Stove-jack.....	468,713	Feb. 9	1261	321	58	781
Whitehill, David B., North Clarendon, Pa. Auger-handle.....	486,463	Dec. 20	2025	505	61	1758
Whitehill, Robert, <i>et al.</i> (See Selkirk, Alexander, assignor.)						
Whitehouse, Eugene W. (See Chase, John F., assignor.)						
Whitehurst, Robert W., assignor of one-half to M. L. Wrenn, Norfolk, Va. Ladder.....	476,179	May 31	3668	927	59	1405
Whitelaw, Francis M., Hartwell, assignor to National Fly Paper Company, Cincinnati, Ohio. Toilet-paper holder.....	470,906	Mar. 15	1968	503	58	1497
Whitelaw, James, assignor to St. Louis Polar Plush Lined Sock Company, St. Louis, Mo. Attachment for knitting-machines.....	484,749	Oct. 18	1900	484	61	410
Whiteley, Amos. (See Broom, Henry, assignor.)						
Whiteley, William H., Darby, Pa. Solar or other bath.....	478,385	July 5	504	122	60	100
Whiteley, William H., Darby, Pa. Apparatus for degumming silk or other fibers.....	483,335	Sept. 27	2314	581	60	1825
Whitelock, Verdi E., Mortimer, Ohio. Nut-lock.....	472,242	Apr. 5	366	94	59	69
Whiteman, Abram V. (See Sanborn, Benjamin F., assignor.)						
Whitesides, Edward G., <i>et al.</i> (See Engquist, Nicholas, assignor.)						
Whitesides, George C., <i>et al.</i> (See Engquist, Nicholas, assignor.)						
Whitfield, Samuel A., Chicago, Ill. Thill-coupling.....	480,052	Aug. 2	475	120	60	673
Whitford, Clark, assignor to himself and W. L. Hellums, Water Valley, Miss. Hub for vehicle-wheels.....	486,996	Nov. 29	2941	758	61	1228
Whitin Machine Works. (See Taft, Cyrus A., assignor.)						
Whiting, Affa A., Rockland, Mass. Pie-box.....	469,987	Mar. 1	522	130	58	1199
Whiting, Amos C., Ladoga, Wis. Curd-cutter.....	487,611	Dec. 13	947	239	61	1527
Whiting & Co., F. M. (See Blackwell, John W., assignor.)						
Whiting, Ezra T., Dartford, Wis. Ice-carrier.....	471,451	Mar. 22	2802	715	58	1669
Whiting, Isaac S. (See Dean, John A., assignor.)						
Whiting Manufacturing Company. (See Osborne, Charles, assignor.)						
Whiting & Son, John L. (See Wolcott, Arthur H., assignor.)						
Whiting, William M., Orange, N. J. Belt-fastener.....	471,985	Mar. 22	2549	647	58	1621
Whitely, Albert, assignor of one-half to F. S. Robinson and R. O. Hornsby, Woodville, Miss. Cotton-chopper.....	488,592	Dec. 27	2238	554	61	1816
Whitlock, Daniel, Newark, N. J. Pegging-jack.....	483,191	Sept. 27	2067	522	60	1780
Whitlock, Sturges, Shelton, Conn. Mechanism for operating beds of printing-machines.....	479,382	July 19	2043	510	60	426
Whitlock, Thomas H. (See Jackson, Edmund, assignor.)						
Whitman & Barnes Manufacturing Company. (See Hoenscheld, Peter, assignor.)						
Whitman, Charles E., St. Louis, Mo. Baling-press.....	485,072	Oct. 25	2436	626	61	530
Whitman, Henry L., St. Louis, Mo. Baling-press.....	472,838	Apr. 12	1259	{ 322 323	{ 59	251
Whitman, Russell, Oakland, Cal. Harness-saddle pad.....	483,754	Oct. 4	346	87	61	72
Whitman, Willard O., Boston, Mass. Combined automatic relief and vacuum air-valve for radiators.....	478,489	July 5	652	160	60	130
Whitmore, Edwin B., Three Rivers, Mich., assignor of one-half to L. Emery, Jr., Bradford, Pa. Middlings-purifier. (Reissue).....	11,245	June 21	2246	{ 502 563	{ 59	1908
Whitmore, Joseph A., Canton, Ill. Feed-trough.....	477,724	June 28	2395	598	59	1956
Whitner, Hiram K., Chicago, Ill. Safety apparatus for window-cleaners.....	474,586	May 10	1131	289	59	865
Whitney, Arthur E., Winchester, Mass. Hide-fleshing machine.....	467,216	Jan. 19	1492	352	58	301
Whitney, Arthur E., Winchester, Mass. Hide-fleshing machine.....	473,039	Apr. 19	1587	{ 403 404	{ 59	328
Whitney, Arthur E., Winchester, Mass. Device for grinding the blades of rotary cylinders.....	476,938	June 14	1106	267	59	1670
Whitney, Charles E., Boston, Mass., assignor to Estey Organ Company, Brattleborough, Vt. Key for musical instruments.....	477,830	June 28	2570	644	59	1988
Whitney, Christopher F., Newton, Mass. Aluminium alloy.....	480,445	Aug. 9	1123	.....	60	806
Whitney, Frank E. (See Stanley, Robert L., assignor.)						
Whitney, Frank W., Westington Springs, S. D. Hay-stacker.....	477,878	June 28	2653	663	59	2003
Whitney, Fred C., Detroit, Mich. Stage appliance.....	473,986	May 3	157	37	59	668
Whitney, George, Winnetka, Ill. Photographic camera.....	471,584	Mar. 29	2996	761	58	1712
Whitney, George, Winnetka, Ill. Photographic camera.....	471,585	Mar. 29	2998	761	58	1713
Whitney, George, Winnetka, Ill. Package of photograph-films.....	471,586	Mar. 29	2991	761	58	1713
Whitney Glass Works. (See Whitney, John P., assignor.)						
Whitney, John P., Glassborough, N. J., assignor to Whitney Glass Works, of New Jersey. Oven for annealing glass.....	477,920	June 28	2714	679	59	2016

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. & G.	Vol.	Page.
Whitney, Ruel W., San Francisco, Cal. Cash-register	473,719	Apr. 26	2728	{ 686 687 }	59	567
Whitney, Ruel W., assignor to Standard Sewing Machine Company, Cleveland, Ohio. Embroidering attachment for sewing-machines	475,426	May 24	2456	636	59	1155
Whitney, William F., Waukesha, Wis. Boiler-flue cleaner	473,987	May 3	158	38	59	669
Whitney, Willie D., Clarendon, N. Y. Wire-fabric machine	484,528	Oct. 18	1548	393	61	337
Whiton, Walter F., assignor of one-fourth to J. R. Mason, Bangor, Me. Thill-coupling	476,345	June 7	184	44	59	1472
Whittall, Matthew J. (See Giles, Joseph S., assignor.)						
Whittelsey, Elbert A., <i>et al.</i> (See Appleton, Charles J., assignor.)						
Whittemore, E. L. (See Willcox, Alfred B., assignor.)						
Whitten-Godding Cycle Company. (See Saladee, Cyrus W., assignor.)						
Whitten, William M., South Bend, Ind. Cover for catch-basins	468,714	Feb. 9	1262	521	58	781
Whittier, Charles, Boston, Mass. Elevator	474,431	May 10	885	230	59	819
Whittier, Joseph G., Attica, Ind. Reclining rocking-chair	475,370	May 24	2365	606	59	1139
Whittier Machine Company. (See Clark, John H., assignor.)						
Whittier, Samuel, Leominster, Mass. Spool-holder for sewing-machines	471,366	Mar. 22	2671	679	58	1645
Whittier, Samuel, assignor of one-half to H. R. Brown, Leominster, Mass. Drawer-pull	467,487	Jan. 19	1913	489	58	381
Whittingham, David L., Detroit, Mich., assignor to Ideal Manufacturing Company, of Michigan. Valve	484,384	Oct. 11	1315	336	61	280
Whittington, Elliott L. (See Parker, Charles E., assignor.)						
Whittle, James H., Worcester, Mass. Screen for carding-engines	488,684	Dec. 27	2386	{ 590 591 }	61	1844
Whitus, Charles. (See Wilks and Whitus.)						
Whitworth, Charles E., assignor of two-thirds to T. Hill and J. W. Buckley, Worcester, Mass. Wire puzzle	479,145	July 19	1666	416	60	352
Whitworth, Thomas A. (See Wilson, James N., assignor.)						
Whitworth, Thomas S., Manchester, England, assignor to Lowell Machine Shop, Lowell, Mass. Carding-engine	468,854	Feb. 16	1478	377	58	833
Whitworth, Thomas S., Manchester, England, assignor to Lowell Machine Shop, Lowell, Mass. Carding-engine	468,855	Feb. 16	1480	{ 377 378 }	58	833
Whitworth, William, Worcester, Mass. Grate	478,775	July 12	1087	269	60	232
Whyte, Andrew C. (See Macphail, Neil, assignor.)						
Wiard, Frederick, assignor of one-half to J. W. Pratt, Batavia, N. Y. Plow	479,927	Aug. 2	235	59	60	628
Wiard, Harry, Syracuse, N. Y. Plow	473,989	May 3	162	38, 39	59	669
Wiard, Harry, and H. M. Burdick, Syracuse, N. Y. Disk harrow	476,435	June 7	325	74	59	1500
Wiaberg, Charles, North Platte, Nebr. Lawn-mower	475,649	May 24	2802	710	59	1223
Wiaberg, Peter, New York, N. Y. Baby-walker	481,609	Aug. 30	3022	739	60	1216
Wiaborg, Pehr J., Boston, Mass. Potato-digger	481,645	Aug. 30	3072	750	60	1226
Wich, Johann, Rotheufels, assignor to Mayer & Grammelspacher, Baden, Germany. Grater for culinary purposes	486,058	Nov. 8	1393	369	61	873
Wichard, Frank F., St. Louis, Mo. Woodworking-machine for shaping closet-seats	473,276	Apr. 19	1985	498	59	403
Wichman, Charles J. (See McArthur, James, assignor.)						
Wickers, Barney C., assignor of one-half to A. Wysong, Lebanon, Ind. Fence-wire tightener	481,880	Aug. 30	3466	850	60	1303
Wickers, George O. (See Daniels and Wickers.)						
Wickes Brothers. (See Heyde, Edward, assignor.)						
Wickey, Andrew, Chicago, Ill. Glass and bottle washer	467,304	Jan. 19	1633	416	58	327
Wickey, Andrew, Chicago, Ill. Horse-power	486,652	Nov. 22	2343	612	61	1092
Wickey, Andrew, Chicago, Ill. Baling-press	486,997	Nov. 29	2942	758	61	1229
Wickey, Andrew, Chicago, Ill. Baling-press	487,503	Dec. 6	446	115	61	1409
Wickey, Edward W., Chicago, Ill. Block-dropper for baling-presses	475,837	May 31	3119	790	59	1296
Wickey, Edward W., Chicago, Ill. Bale-tie	487,504	Dec. 6	447	116	61	1410
Wickham, Amos C., Carthage, Mo. Harrow	468,081	Feb. 2	259	63	58	574
Wickham, Dennis, Ware, England. Apparatus for applying bottle stoppers or caps	476,712	June 7	723	178	59	1581
Wickham, Dennis, Ware, England. Apparatus for filling and stoppering bottles	488,859	Dec. 27	2655	657	61	1899
Wickham, Horace, assignor to H. Ryan and H. D. Goodwin, Milwaukee, Wis. Coin-controlled electrical apparatus	475,527	May 24	2620	667	59	1186
Wickham, William S., <i>et al.</i> (See Hazard, Willet E., assignor.)						
Widick, Albert, Argonia, Kans. Grain-weigher	485,779	Nov. 8	951	255	61	784
Widman, Nicholas, Mascoutah, Ill. Rock-drilling machine	481,610	Aug. 30	3023	739	60	1217
Widmann, Albert V., <i>et al.</i> (See Wolf, Josef, assignor.)						
Widmayer, Louis. (See Bert and Widmayer.)						
Widmer, Heinrich, West Hoboken, N. J. Loom	477,094	June 14	1357	330	59	1722
Widmer, J. A., <i>et al.</i> (See Widmer, Jacob A., assignor.)						
Widmer, Jacob A., Pittsburg, Pa., assignor to F. W. Evans, H. Ruhe, A. Trautman, E. Haas, and J. A. Widmer. Glass-press	471,516	Mar. 22	2888	735	58	1686
Wieber, Charles. (See Rausser, Wieber, and Sokoloff.)						
Wiedeke, Gustave, Dayton, Ohio. Cut-off and flue-tightener	485,442	Nov. 1	449	120	61	664
Wieden, Arthur. (See Brankhorst, Wieden, and Richards.)						
Wiedenmann, Herman C., Philadelphia, Pa. Stand for bicycles	488,464	Dec. 20	2026	506	61	1759
Wiedrich, Charles L., assignor to Pratt & Letchworth, Buffalo, N. Y. Buckle-clip	468,028	Feb. 2	186	46	58	560
Wiedrich, Charles L., assignor to Pratt & Letchworth, Buffalo, N. Y. Hub-band	466,653	Nov. 22	2343	{ 612 613 }	61	1093
Wiegand, John G., Stockton, Ill. Cover for hay or grain ricks	470,527	Mar. 8	1404	367	58	1376
Wieland, Ludwig, New York, N. Y., assignor to F. Strosberg and Air Shaft Protector and Manufacturing Company, Newark, N. J. Fire-shutter for ventilating-shafts of buildings	474,890	May 17	1615	412	59	975
Wieland, Ludwig, New York, N. Y., assignor to Air Shaft Protector and Manufacturing Company, Newark, N. J. Fire-shutter for ventilating-shafts of buildings	474,982	May 17	1766	447	59	1004
Wieman, Henry B., <i>et al.</i> (See Ashworth, Granville H., assignor.)						
Wiener, Paul, Chicago, Ill. Picture-frame	481,217	Aug. 23	2370	583	60	1079
Wierda, Ubel, Winsum, Netherlands. Skate	475,650	May 24	2804	710	59	1223
Wiers, Michael R., Owosso, Mich. Holdback for vehicles	467,320	Jan. 19	1655	421	58	331
Wieseckel, John, Brooklyn, N. Y. Needle	487,040	Nov. 29	3004	773	61	1240
Wiesender, Julius, San Francisco, Cal. Purifying illuminating-gas	469,847	Mar. 1	292	76	58	1157
Wiest, Daniel C., Mohrsville, Pa. Wrench	488,158	Dec. 13	1526	383	61	1643
Wiest, Isaiab D. (See Malin and Wiest.)						
Wiest, John F., Huntington, Ind. Solar camera	474,708	May 10	1320	{ 336 337 }	59	903
Wiest, Jonas H. (See Malin and Wiest.)						
Wigert, David, Greenbush, Ill. Animal-trap	479,161	July 19	1686	422	60	356
Wigg, Edmund T., assignor of one-fourth to T. H. Robinson, London, Canada. Burner	482,145	Sept. 6	363	86, 87	60	1407
Wigger, David, New York, N. Y. Axle-bearing	474,709	May 10	1321	337	59	903
Wigger, Heinrich, Unna, Germany. Apparatus for cutting wood into disks for use in making wood pulp	467,786	Jan. 26	2402	610	58	480
Wiggers, Johann F., Hanover, Germany. Extension-table	488,465	Dec. 20	2028	506	61	1759
Wiggin, Joseph N., Orange, N. J. Printing-block	467,269	Jan. 19	1583	404	58	317

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Drig.	Vol.	Page.
Wiggington, John R., assignor of one-half to W. R. H. Alexander, Washington, D. C. } Tramway-switch.....	476,713	June 7	724	{ 178 179 }	59	1581
Wiggins, Alfred, Worcester, Mass. Toy.....	472,752	Apr. 12	1100	283	59	221
Wiggins, Richard L., Willimantic, Conn. Machine for reaming holes in spool-blocks.....	488,643	Dec. 27	2313	573	61	1830
Wiggins, Robert L. (See Morris and Wiggins.)						
Wight, Charles L., Mahukona, Hawaii. Fruit-jar.....	480,537	Aug. 9	1364	317	60	835
Wight, Henry F. (See Wight, Ronell L. and H. F.)						
Wight, Ronell L., Bridgton, Me., and H. F. Wight, Malden, assignors of one-third to W. } M. McDonald, Somerville, Mass. Can-labeling machine.....	474,618	May 10	1181	{ 300 301 }	59	875
Wightman, Daniel A., Allegheny, Pa. Boiler-brace.....	473,183	Apr. 19	1840	463	59	372
Wightman, Merle J., Scranton, Pa. Electro-magnetic reciprocating engine.....	409,441	Feb. 23	2391	{ 613 614 }	58	1018
Wightman, Merle J., Scranton, Pa. Armature for dynamo-electric machines.....	479,179	July 19	1719	431	60	362
Wightman, Merle J., Lynn, Mass., assignor to Thomson-Houston Electric Company, of } Connecticut. Alternating-current motor.....	476,346	June 7	185	44	59	1472
Wihl, Gustav, <i>et al.</i> (See Potter, Francis A., assignor.)						
Wike, John, Providence, R. I., assignor to Standard Horse Shoe Company, Wareham, Mass. } Horseshoe-bending machine.....	484,750	Oct. 18	1901	485	61	410
Wilber, Crawford. (See Beugler, John B., assignor.)						
Wilbur, Albert G., Jr., Chicago, Ill. Stable-gutter.....	487,548	Dec. 6	515	134	61	1423
Wilbur, Alfred, Indianapolis, Ind. Pipe-coupling.....	483,593	Oct. 4	117	28	61	25
Wilbur, William H., New York, N. Y. Apparatus for heating water, &c.....	468,124	Feb. 2	327	80	58	588
Wilcklow, William, <i>et al.</i> (See Fickett, William S., assignor.)						
Wilcox, Benajah, Gibson, N. Y. Automatic wagon-brake.....	488,644	Dec. 27	2319	574	61	1831
Wilcox, Camden L., West Williamsfield, Ohio. Fence-post.....	486,309	Nov. 15	1806	476	61	974
Wilcox, Curtis N., assignor to D. C. Folk, Brooklyn, N. Y. Auxiliary power mechanism } for rocking and swinging apparatus.....	467,842	Jan. 26	2495	{ 632 633 }	58	498
Wilcox, Curtis N., assignor to D. C. Folk, Brooklyn, N. Y. Device for securing the ends } of torsion-springs.....	467,843	Jan. 26	2499	633	58	498
Wilcox, Curtis N., assignor to D. C. Folk, Brooklyn, N. Y. Fishing-reel.....	477,196	June 14	1521	371	59	1756
Wilcox, Edmund N. (See Speed, Fred H., assignor.)						
Wilcox, George, Harvey, assignor of one-half to T. W. Harvey, Chicago, Ill. Automatic } adjusting device for journal-bearings.....	471,346	Mar. 22	2636	670	58	1638
Wilcox, George L., H. F. Hallenbeck, and T. Wandell, Albany, Oreg. Cloth-measuring } machine.....	478,531	July 5	726	{ 177 178 }	60	144
Wilcox, Lewis T., Jackson, Mich. Track for sliding doors.....	472,662	Apr. 12	1000	259	59	203
Wilcox, Margaret A., assignor to Wilcox Water Heater Company, Chicago, Ill. Combined } cooking and hot-water-heating stove.....	482,772	Sept. 20	1410	{ 348 349 }	60	1635
Wilcox, Norman T., Meriden, Conn. Electric-current transformer.....	477,879	June 28	2655	663	59	2003
Wilcox, Theodore B., Newark, N. J. Syringe.....	475,909	May 31	3239	818	59	1319
Wilcox, Thomas H. (See Ratcliff, William H., assignor.)						
Wilcox Water Heater Company. (See Wilcox, Margaret A., assignor.)						
Wilcox, William R., Ridgway, Colo. Wheel-tire.....	476,714	June 7	725	179	59	1581
Wilcoxson, Mitchell H. (See Devore, Levi M., assignor.)						
Wilcoxson, George M. (See McMahon and Wilcoxson.)						
Wild, Annie L., Providence, R. I. Lacing-string.....	487,411	Dec. 6	304	78	61	1381
Wild, Daniel. (See Raab, William, assignor.)						
Wild Engineering Company. (See Wild, William H., assignor.)						
Wild, William H., assignor to Wild Engineering Company, Valatie, N. Y. Car-buffer.....	469,051	Feb. 16	1806	{ 461 462 }	58	897
Wild, William H., assignor to Wild Engineering Company, Valatie, N. Y. Jack-screw.....	483,487	Sept. 27	2515	633	60	1865
Wildenberg, Martin V. (See Geurtz and Wildenberg.)						
Wilder, Atwood E., Homer, La. Cultivator.....	472,416	Apr. 5	636	163	59	119
Wilder, Charles H., Boston, Mass., assignor of one-half to L. A. Wilder, Chicago, Ill. Ap- } paratus for cooling and washing gas.....	486,150	Nov. 15	1563	414	61	924
Wilder, Deel R., Los Angeles, Cal. Teeth-regulator.....	473,040	Apr. 19	1590	405	59	328
Wilder Duplex Electric Burglar Alarm and Messenger Company. (See Wilder, Edmund } R., assignor.)						
Wilder, Edmund R., Kansas City, Mo., assignor to Wilder Duplex Electric Burglar Alarm } and Messenger Company, of West Virginia. Test-circuit for burglar-alarm systems.....	486,149	Nov. 15	1562	414	61	924
Wilder, Frank E., Salem, assignor to O. M. Angier, Boston, Mass. Machine for beveling } heel-blanks.....	484,833	Oct. 25	2051	{ 525 526 }	61	454
Wilder, Luke A. (See Wilder, Charles H., assignor.)						
Wilder, Moses G., Philadelphia, Pa. Plug-cock.....	472,093	Apr. 5	118	32	59	24
Wilder, Moses G., Philadelphia, Pa. Gas heating-stove.....	486,205	Nov. 15	1633	{ 432 433 }	61	938
Wilder, Moses G., Philadelphia, Pa. Group-governor.....	486,574	Nov. 22	2207	580	61	1066
Wilder, Rufus A., Cressona, Pa. Merchandising-car.....	480,308	Aug. 9	909	229	60	767
Wilder, Rufus A., Cressona, Pa. Railway-car.....	480,355	Aug. 9	975	246	60	779
Wilder, William H. (See Lannert, Jeavons, and Wilder.)						
Wilder, William H., Caledonia, N. Y. Bean-harvester.....	479,480	July 26	2242	562	60	478
Wilder, William H., Northampton, Mass. Oil-stove.....	486,311	Nov. 15	1810	477	61	975
Wilder, William H., Florence, Mass., J. A. Lannert and W. R. Jeavons, Cleveland, Ohio. } Oil and vapor burner.....	479,690	July 26	2554	635	60	536
Wilderman, Hugh H., Belleville, Ill. Drilling-machine.....	484,270	Oct. 11	1141	290	61	246
Wildman, Andrew and R., Saginaw, Mich. Spark-arrester.....	469,530	Feb. 23	2537	652	58	1045
Wildman, Robert. (See Wildman, Andrew and R.)						
Wildi, Emil, Highland, Ill. Can-filling machine.....	486,746	Nov. 22	2487	{ 649 650 549 550 551 552 554 555 556 557 490 491 492 493 494 }	61	1123
Wile, Sol, and H. La Casse, assignors to Bottlers' Specialty Company, Rochester, N. Y. Bot- } tling-machine.....	477,617	June 21	2214	{ 553 554 555 556 557 490 491 492 493 494 }	59	1901
Wile, Sol, and H. La Casse, assignors to Bottlers' Specialty Company, Rochester, N. Y. Bot- } tle-wiring machine.....	479,342	July 19	1908	{ 492 493 494 }	60	411
Wiles, Robert H., <i>et al.</i> (See Fordham, Arthur, assignor.)						
Wiles, Thomas S., Albany, and M. E. Wendell, assignors to Troy Laundry Machinery } Company, Limited, Troy, N. Y. Mangle.....	473,804	Apr. 26	2853	717	59	591

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wiles, Thomas S., Albany, and M. E. Wendell, Troy, N. Y. Compound doffer for manglos	487,592	Dec. 6	572	146	61	1435
Wiley, Charles D., St. Louis, Mo. Nut-lock	467,107	Jan. 12	1316	333	58	259
Wiley, Charles D., assignor of one-sixteenth to G. W. Bennett, St. Louis, Mo. Brake-beam	486,835	Nov. 22	2640	689	61	1154
Wiley, Daniel F. (See Newcomb and Wiley.)						
Wiley, Edgar C., assignor of two-thirds to J. A. Dickey and N. B. Ainsworth, Bristol, Tenn. Electric railway-signal	471,230	Mar. 22	2471	627 628	58	1606
Wiley, Edward M., Shelbyville, Ind. Bill-holder	481,412	Sept. 27	2424	610	60	1846
Wiley, Horace B., assignor of two-thirds to T. W. Wiley and J. J. Newport, St. Louis, Mo. Kitchen utensil	485,312	Nov. 1	235	65	61	620
Wiley, Ignatius. (See Farrell, George W., assignor.)						
Wiley, Thomas W., et al. (See Wiley, Horace B., assignor.)						
Wilfert, Andreas, Fabacher, La. Harrow	473,041	Apr. 19	1593	405	59	329
Wilfong Brothers. (See Wilfong, Millard F., assignor.)						
Wilfong, Millard F., assignor of one-half to Wilfong Brothers, Philadelphia, Pa. Annealing-box	467,474	Jan. 19	1892	483	58	377
Wilgus, Daniel C., Los Angeles, Cal. Lawn-sprinkler	484,074	Oct. 11	824	208	61	183
Wilhelm, Charles, New York, assignor to F. Ecaubert, Brooklyn, N. Y. Ornamenting watchcases	472,490	Apr. 5	752	191	59	143
Wilko, Frederick A., et al. (See Hamilton, William J., assignor.)						
Wilkening, Gustav, Houston, Tex. Poise for scale-beams	466,641	Jan. 5	524	136	58	101
Wilkinson, Basil M., Baltimore, Md., assignor, by mesne assignments, to S. S. White Dental Manufacturing Company, Philadelphia, Pa. Dental chair	478,672	July 12	923	229 230	60	198
Wilkes, George, and F. Edwards, Southampton, England. Antifriction thrust-bearing	482,430	Sept. 13	859	206	60	1517
Wilkie, Frederick, New York, N. Y. Implement for cutting pearl, &c	484,075	Oct. 11	825	209	61	184
Wilkin, Charles F. (See Gordon, Edward Y., assignor.)						
Wilkins, Alexander G., assignor to Wilkins Shoe Button Fastener Company, Meadville, Pa. Button-setting machine	484,835	Oct. 25	2057	527	61	455
Wilkins, Charles H., Chicago, Ill. Incandescent electric lamp	467,270	Jan. 19	1584	404	58	318
Wilkins, Charles L., Columbus, Ohio. Water-motor	484,271	Oct. 11	1143	290 291	61	246
Wilkins, Charles L., and A. F. Blesch, Columbus, Ohio. Siphon for water-closet tanks	484,834	Oct. 25	2055	526	61	454
Wilkins, Charles M., et al. (See Carter, Franklin S., assignor.)						
Wilkins, E. Ward, et al. (See Carter, Franklin S., assignor.)						
Wilkins, James S., Jr., Keene, N. H. Wheel toy	488,342	Dec. 20	1833	458	61	1719
Wilkins, John B., Farmington, Mo., assignor of one-half to T. W. Stringer, Vicksburg, Miss. Agricultural machine	484,690	Oct. 18	1865	459	61	389
Wilkins, Monroe P., New York, N. Y. Lock-washer machine	470,342	Mar. 8	1111	284 285	58	1321
Wilkins Shoe Button Fastener Company. (See Wilkins, Alexander G., assignor.)						
Wilkinson, Alfred, Philadelphia, Pa. Furnace-grate	480,538	Aug. 9	1265	317	60	835
Wilkinson, Alfred, Bridgeport, Pa., assignor to Wilkinson Manufacturing Company, of Pennsylvania. Steam-boiler furnace	486,747	Nov. 22	2490	650	61	1123
Wilkinson, Algernon L., Sr. (See Holt, John M., assignor.)						
Wilkinson, Asbury, Lake Charles, La. Sliding gate	469,843	Mar. 1	284	74	58	1156
Wilkinson, Asbury, Lake Charles, La. Sliding gate	486,803	Nov. 22	2581	673	61	1141
Wilkinson, Benjamin F., Kansas City, Mo. Window-curtain roller	473,990	May 3	165	39	59	670
Wilkinson, Charles E., New Haven, Conn. Cop for sewing-machines	476,436	June 7	327	75	59	1501
Wilkinson, Charles E., New Haven, and M. V. Palmer, Willimantic, Conn. Cop-holder for sewing-machine shuttles	487,910	Dec. 13	1109	277	61	1557
Wilkinson, Edward T. (See Boynton, Edward S., assignor.)						
Wilkinson, George W., Chicago, Ill. Car-coupling	482,605	Sept. 13	1139	275	60	1571
Wilkinson, Joseph W., Des Moines, Iowa. Boiler-furnace	478,210	July 5	218	55	60	45
Wilkinson Manufacturing Company. (See Wilkinson, Alfred, assignor.)						
Wilkinson, Marvin B. (See Doyle, Thrall, and Wilkinson.)						
Wilkinson, William, Philadelphia, Pa. Shears	469,988	Mar. 1	523	130	58	1200
Wilkinson, William A., Minneapolis, Minn. Friction-clutch	482,326	Sept. 6	681	162	60	1469
Wilkinson, William H., Roston, Mass. Automatic oil-cup	468,489	Feb. 9	916	232	58	711
Wilkinson, William L., et al. (See Harden, William H., assignor.)						
Wilks, John W., Wilksburg, and C. Whitus, Chester, S. C. Car-coupling	470,230	Mar. 8	899	222	58	1282
Wilks, John W., Wilksburg, and C. Whitus, Chester, S. C. Pin-lifter for car-couplings	483,193	Sept. 27	2070	523	60	1780
Wilks, John W., Wilksburg, and C. Whitus, Chester, S. C. Car-coupling	483,194	Sept. 27	2071	523	60	1781
Will, Gustavus A., St. Louis, Mo. Temporary covering for bung-holes	470,415	Mar. 8	1232	315	58	1342
Willan, Isaac, Detroit, Mich. Combined water and steam gage	480,309	Aug. 9	910	230	60	767
Willans, Peter W., London, England. Electric clutch	473,042	Apr. 19	1594	405	59	329
Willard, Emma A., Greenwich, Conn. Bodkin	471,926	Mar. 29	3507	896	58	1811
Willard, Frederick G., Austin, Ill. Job-printing press	486,312	Nov. 15	1811	477 478	61	975
Willbrandt, Emil, assignor to W. H. Armstrong & Co., Indianapolis, Ind. Scalpel	479,102	July 19	1594	399	60	339
Willcock, Stephen, Toronto, Canada. Repeating-clock	488,103	Dec. 13	1432	359	61	1625
Willcox, Alfred B., Chicago, Ill., assignor of one-half to E. L. Whittemore, Toledo, Ohio. Mechanical movement	476,715	June 7	726	179 180	59	1581
Willcox, Alfred B., assignor of two-thirds to M. L. Butler and S. E. Geor, Chicago, Ill. Doll-support	479,481	July 26	2242	562	60	478
Willcox, Charles H., New York, N. Y., and S. Borton, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing-machine	472,094	Apr. 5	120	32 33 34 35	59	24
Willcox, Charles H., New York, N. Y., and S. Borton, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing-machine	472,095	Apr. 5	127	35, 36	59	25
Willcox, Charles H., New York, N. Y., and S. Borton, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Sewing-machine needle	472,096	Apr. 5	133	36	59	26
Willcox, Charles H., New York, N. Y., and S. Borton, Providence, R. I., assignors to Willcox & Gibbs Sewing Machine Company, New York, N. Y. Tension apparatus for sewing-machines	472,097	Apr. 5	134	37	59	26
Willcox, George E., et al. (See Jackson and Reiger, assignors.)						
Willcox & Gibbs Sewing Machine Company. (See Willcox and Borton, assignors.)						
Willcox, Vestus P., Trenton, N. J. Brush-block-boring machine	480,053	Aug. 2	476	121	60	673
Willcoxon, John W., Manassas, Va. Nut-lock	470,088	Mar. 1	668	165	58	1228
Willcoxon, John W., Manassas, Va. Nut-lock	482,935	Sept. 20	1651	416	60	1684
Willer, Henry E., Milwaukee, Wis. Sash-lift	481,320	Aug. 23	2559	628	60	1111
Willett, Samuel J., et al. (See Newman, Nelson, assignor.)						
Willevor, George O. (See Young and Willevor.)						
Willey, George W., Brockton, Mass. Method of and means for making patterns for individual lasts	486,607	Nov. 22	2268	592	61	1077

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Willford, Henry. (See Kindermann, Oskar, assignor.)						
Willford, Joseph L., Minneapolis, Minn. Automatic feeder for roller-mills	482,419	Sept. 13	839	{ 201 202	60	1513
Willgeroth, August, Stadtoldendorf, Germany. Heating and ventilating apparatus	484,272	Oct. 11	1146	291	61	246
William Cramp & Sons Ship and Engine Building Company. (See Tait, William, assignor.)						
William D. Gibson Company. (See Sullivan, Joseph H., assignor.)						
William Deering & Company. (See Appleby, John F., assignor.)						
William Deering & Company. (See Appleby and Steward, assignors.)						
William Deering & Company. (See Ellithorp, Orren S., assignor.)						
William Deering & Company. (See Rand, Charles A. A., assignor.)						
William Schollhorn Company. (See Bernard, William A., assignor.)						
William Wharton, Jr., and Company. (See Angerer, Victor, assignor.)						
William Wharton, Jr., and Company. (See Angerer and Psilander, assignors.)						
William Wharton, Jr., and Company. (See Samuel, Angerer, and Psilander, assignors.)						
William Wharton, Jr., and Company. (See Wharton, William, Jr., assignor.)						
Williams, A. Zelff, Chicago, Ill. Brick or tile cutter	488,343	Dec. 20	1833	{ 458 459	61	1719
Williams, Alexander P., Adamsville, assignor of one-half to W. M. Breeden, Bennettsville, S. C. Fertilizer-distributor.	470,528	Mar. 8	1405	367	58	1376
Williams, Alfred G., Newark, N. J., assignor to Cole & Williams, New York, N. Y. Fancy box	470,529	Mar. 8	1406	367	58	1376
Williams, Benezzette, and C. Poore, Chicago, Ill. Flush-tank	481,710	Aug. 30	3176	776	60	1247
Williams, Carter, Philadelphia, Pa. Canopy-frame	468,280	Feb. 2	573	142	58	635
Williams, Charles A. (See Williams, Levi K. and C. A.)						
Williams, Charles A., and L. K. Williams, deceased, Chicago, Ill.; A. W. McAllister, ad- ministrator. Pattern-table for sheet-metal-shearing machines	488,344	Dec. 20	1839	{ 459 460	61	1720
Williams, Charles D., Philadelphia, Pa. Cylinder-lock	477,036	June 14	1255	304	59	1701
Williams, Charles E., Milford, Mass. Upper-folding machine	468,590	Feb. 9	1071	274	58	742
Williams, Charles E., Milford, Mass. Upper-folding machine	488,593	Dec. 27	2240	555	61	1816
Williams, Charles J., assignor of one-half to W. Wagner, Milwaukee, Wis. Cooling iron structures	472,746	Apr. 12	1135	291	59	227
Williams, Charles W., Montgomery, La. Cotton-chopper	476,586	June 7	538	128	59	1543
Williams & Co., J. H. (See Hammond, Henry, assignor.) (Reissue.)						
Williams, David. (See Reese and Williams.)						
Williams, David F., assignor to Albany Horse Nail Company, Albany, N. Y. Machine for making horseshoe-nails	484,836	Oct. 25	2059	{ 528 529 530 531	61	455
Williams, David M., Edwardsdale, Pa. Chain-link	482,665	Sept. 13	1222	298	60	1587
Williams, David S., Philadelphia, Pa. Manufacturing chenille	477,394	June 21	1857	457	59	1831
Williams, David S., Philadelphia, Pa. Woven chenille	477,395	June 21	1858	457	59	1831
Williams, De Witt B., Prescott, Ariz. Ter. Car	470,089	Mar. 1	669	165	58	1229
Williams, Dyer, assignor to F. Williams, Cedar Rapids, Iowa. Car-coupling	482,445	Sept. 13	884	213	60	1520
Williams, E. J., et al. (See Fangle, Robert K., assignor.)						
Williams, Eben B. (See Loftus and Williams.)						
Williams, Edgar L., Rochelle, Ill. Game-board	468,214	Feb. 2	460	114	58	615
Williams, Edward, Aberayron, England. Aeration of liquids	481,249	Aug. 23	2436	600	60	1091
Williams, Edward P., et al. (See Huston, John B., assignor.)						
Williams, Elkanah G., assignor of one-half to C. Sears, Harpster, Ohio. Bag-fastener	485,675	Nov. 8	801	214	61	753
Williams, Elmer L. (See Kallor and Williams.)						
Williams, Ezra T., Chicago, Ill. Fluid-fuel feeder	486,998	Nov. 29	2943	758	61	1229
Williams, Florence. (See Williams, Dyer, assignor.)						
Williams, Florence, assignor of one-half to L. S. Haskins, Seneca, Wis. Centrifugal honey- extractor	486,151	Nov. 15	1564	414	61	925
Williams Folding Feed Basket Company. (See Williams, John H., assignor.)						
Williams-Foots, Ambrose C. G., Duluth, Minn. Game-board	473,992	May 3	167	40	59	670
Williams, Francis C., Philadelphia, Pa. Rubber shoe	473,650	Apr. 26	2626	661	59	548
Williams, Frank A., Clarendon, N. Y. Fence	474,072	May 3	300	73	59	695
Williams, Frank E., et al. (See Mosbacher, Samuel, assignor.)						
Williams, Frank E., New York, N. Y. Link-button	470,731	Mar. 15	1699	438	58	1445
Williams, Frank E., New York, assignor of one-half to J. E. Hills, Brooklyn, N. Y. Button	477,861	Apr. 26	2949	744	59	610
Williams, Frank T., assignor to Edward Miller & Company, Meriden, Conn. Lamp-burner	477,034	June 14	1252	303	59	1701
Williams, Frank T., assignor to Edward Miller & Company, Meriden, Conn. Lamp-burner	477,035	June 14	1253	{ 303 304	59	1701
Williams, George, and A. A. Cleveland, Astoria, Oreg. Pound-net	481,990	Sept. 6	104	26	60	1355
Williams, George H., et al. (See Morrell, Robert, assignor.)						
Williams, George H., Boston, Mass. Dial-knob for combination-locks	473,686	Apr. 26	2678	674	59	558
Williams, George M., St. Louis, Mo. Combined fence-post and wire-stretcher	473,102	Apr. 19	1678	426	59	344
Williams, George W., Blue Ridge, Mo. Hame-tug	466,478	Jan. 5	270	68	58	52
Williams, Harry B., Brooklyn, N. Y. Bathing-cap	482,773	Sept. 20	1411	349	60	1636
Williams, Harry J., New Haven, assignor of one-half to C. L. Lyon, Meriden, Conn. Lemon-squeezer	473,043	Apr. 19	1595	406	59	329
Williams, Henry, Glasgow, Scotland. Deflection-stand for switch and signal rods	479,906	Aug. 2	195	48, 49	60	620
Williams, Henry B. (See Grouleff and Williams.)						
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Pilot for rail- way-cars	473,277	Apr. 19	1988	499	59	403
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Antifriction- bearing for car-axles	477,037	June 14	1256	304	59	1702
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Water-meter	483,951	Oct. 4	636	160	61	131
Williams, Henry B., assignor of one-half to L. A. Jeffreys, Rochester, N. Y. Automatic marine speed and direction indicator	486,008	Nov. 8	1314	{ 349 350	61	858
Williams, Henry M. (See Burger, Franz, assignor.)						
Williams, Henry S., et al. (See Bellati, Anthony J., assignor.)						
Williams, Horace E. (See Williams, James H. and H. E.)						
Williams, Horace G., Lykens, Pa. Rock-drill	475,910	May 31	3240	818	59	1319
Williams, Irving E., et al. (See Merry, George G., assignor.)						
Williams, James A., Walkerton, Ind. Machine for cutting the ends of spindles	482,934	Sept. 20	1650	416	60	1684
Williams, James B. (See Liles and Williams.)						
Williams, James B., Oakland, Cal. Insulated electric conductor	471,587	Mar. 29	2993	762	58	1714
Williams, James B., Oakland, Cal. Insulated electric conductor	471,588	Mar. 29	2995	762	58	1714
Williams, James H. and H. E., Fayetteville, Ark. Cotton-cultivator	475,101	May 17	1950	494	59	1039
Williams, James L. (See Moffitt, Williams, and Bennett.)						
Williams, James P., assignor of one-half to R. F. Williams, Independence, Ky. Circular- saw mill	468,856	Feb. 16	1483	378	58	834

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Williams, Jefferson D. (See Russell and Williams.)						
Williams, John. (See Palmer, Wesley, assignor.)						
Williams, John, Patricroft, England. Device for receiving coin and delivering tickets	487,139	Nov. 29	3159	810	61	1272
Williams, John A. and L. R., Ozark, Mo. Car-coupling	488,490	Dec. 20	2071	514	61	1768
Williams, John D., and D. E. Davies, Nanticoke, Pa. Gas-cap	476,852	June 14	961	233	59	1642
Williams, John E., Montezuma, Ind. Tiling	471,339	Mar. 22	2624	666	58	1636
Williams, John F., Roanoke, Va. Machine for applying labels to cans	473,298	July 5	372	90, 91	60	75
Williams, John H., assignor of one-half to C. A. Morss, Boston, Mass. Machine for making curved sheet-metal binding-pieces	469,763	Mar. 1	149	39	58	1129
Williams, John H., assignor to Williams Folding Feed Basket Company, Boston, Mass. Feed-bag	476,952	June 14	1130	{ 271 272 }	59	1675
Williams, John L., Philadelphia, Pa. Adjustable lathe-mandrel	470,416	Mar. 8	1233	315	58	1342
Williams, John S., Trenton, N. J. Game-board	487,976	Dec. 13	1204	301	61	1577
Williams, John W., and J. G. Capps, Lowell, Ark.; said Williams assignor to F. E. Bell, Brookville, Kans. Fifth-wheel for vehicles	468,905	Feb. 16	1554	395	58	847
Williams, Joseph, Jr., and E. O. Peoples, Allegheny, Pa. Apparatus for making gas	477,725	June 28	2396	{ 598 599 }	59	1956
Williams, Leonidas R. (See Williams, John A. and L. R.)						
Williams, Levi K. (See Williams, Charles A. and L. K.)						
Williams, Levi K. and C. A., Chicago, Ill. Countersink	468,857	Feb. 16	1485	379	58	834
Williams, Lewis N., Aberdare, England. Miner's safety-lamp	472,098	Apr. 5	136	37	59	26
Williams, Linus H., Akron, Ohio. Coffin-handle	479,044	July 19	1507	376	60	323
Williams, Louis N. D. (See Scott, Robert W., assignor.)						
Williams, Louis N. D. (See Scott and Williams.)						
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Machine for sewing knit fabrics	468,490	Feb. 9	917	{ 232 233 }	58	711
Williams, Louis N. D., assignor of one-half to R. W. Scott, Philadelphia, Pa. Knitted stocking	485,073	Oct. 25	2438	627	61	530
Williams, Malcolm B., Kalamazoo, Mich. Basket for marketing fruit	470,732	Mar. 15	1700	438	58	1445
Williams, Milton F. (See Little, Ezekiel C., assignor.)						
Williams, Orlando R. (See Macdonald, Williams, and Hitzeroth.)						
Williams, Paul E., Leeds, Ala. Device for increasing the draft in steam-boiler furnaces	469,620	Feb. 23	2662	{ 684 685 }	58	1071
Williams, R. F. (See Williams, James P., assignor.)						
Williams, Richard G., L'Anse, Mich. Automatic bottle-stopper	485,443	Nov. 1	451	121	61	664
Williams, Richard R., Brooklyn, N. Y. Indexing	471,205	Mar. 22	2432	619	58	1599
Williams, Robert E., assignor of two-thirds to V. E. Winston, Dallas, Tex., and D. Ferguson, Homer, La. Electric brush	479,321	July 19	1926	481	60	403
Williams, Robert T., St. Louis, Mo. Animal-trap	487,593	Dec. 6	574	147	61	1435
Williams, Samuel B., Martin's Ferry, Ohio. Clutch	471,589	Mar. 29	2997	{ 762 763 }	58	1714
Williams, Sanford R., assignor of one-half to J. J. and S. Malloy, Monmouth, Oreg. Car-coupling	482,288	Sept. 6	600	143	60	1452
Williams, Seth, assignor of one-half to W. W. Secor, Sing Sing, N. Y. Culinary vessel	470,090	Mar. 1	670	165	58	1229
Williams, Sylvester M., San Francisco, Cal. Flash-light burner	467,696	Jan. 26	2266	575	58	453
Williams, "T." W. H. (See Messina, John A., assignor.)						
Williams, Thomas E., London, England. Tea or coffee pot	476,851	June 14	960	233	59	1641
Williams, Thomas J., and T. S. Murray, Ironton, Ohio. Attachment for sawmills	468,215	Feb. 2	462	114	58	615
Williams, W. N., et al. (See Wade, William, assignor.)						
Williams, Warren. (See Munz, Charles W., assignor.)						
Williams, Willard C., Rush Creek Valley, assignor of one-half to L. S. Sanders, Campbells-ville, Ind. Thill-coupling	479,146	July 19	1667	416	60	352
Williams, William, and J. H. Crook, Philadelphia, Pa. Hose and wire bridge	488,258	Dec. 20	1693	423	61	1692
Williams, William A. (See Ferguson, Robert G., assignor.)						
Williams, William D., Ogden, Utah Ter. Car-coupling	472,840	Apr. 12	1262	323	59	252
Williams, William E., Decatur, Tex. Cultivator	469,109	Feb. 16	1879	481	58	912
Williams, William E., assignor of five-sixteenths to W. S. Stephens, J. E. Thro, C. A. and W. A. Sombart, and A. Dengolesky, Boonville, Mo. Car-coupling	467,126	Jan. 12	1351	{ 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	58	265
Williams, William F., Kansas City, Mo. Cornstalk-harvester	476,849	June 14	954	{ 232 233 }	59	1641
Williams, William H. (See Morris, James E., assignor.)						
Williams, William H., Long Island City, N. Y. Veneer-machine	472,839	Apr. 12	1261	323	59	251
Williams, William J., L. M. Bates, and H. H. James, Providence, R. I. Adjustable reclining-chair	470,027	Mar. 1	572	142	58	1210
Williams, Willie A. (See Liles and Williams, assignors.)						
Williamson, Alfred D., assignor to Siemens Brothers & Company, Limited, London, England. Device for heating metal rods	475,651	May 24	2806	711	59	1223
Williamson, David, assignor of one-half to H. B. Anderson, New York, N. Y. Centrifugal filtering apparatus	468,858	Feb. 16	1486	379	58	834
Williamson, David, New York, N. Y., assignor, by mesne assignments, to Continental Filter Company, of West Virginia. Filtering apparatus	477,727	June 28	2397	599	59	1956
Williamson, George, Luton, and C. de Negri, London, England. Buckle	482,030	Sept. 6	178	42	60	1370
Williamson, George R. (See Rouse, Albion M., assignor.)						
Williamson, George W., et al. (See Williamson, John D., assignor.)						
Williamson, George W., et al. (See Williamson, William C., assignor.)						
Williamson, Henry, Bay City, Mich. Saw-swaging device	476,850	June 14	959	233	59	1641
Williamson, James R., Fancy Bluff, Ga. Car-coupling	471,045	Mar. 15	2176	560	58	1537
Williamson, John D., et al. (See Williamson, William C., assignor.)						
Williamson, John D., assignor to himself, G. W. and W. C. Williamson, Philadelphia, Pa. Steering apparatus	472,324	Apr. 5	495	129	59	93
Williamson, Luther C., Union City, Ind. Refrigerating apparatus	486,655	Nov. 22	2345	613	61	1093
Williamson, Marshall D., assignor to G. F. Adams and M. D. Williamson, Indianapolis, Ind. Adjustable pressure-bar for veneer-cutting machines	479,750	July 26	2666	662	60	557
Williamson, Richard H., Ashton, England. Mechanical stoker	476,848	June 14	953	232	59	1640
Williamson, Samuel S., Bridgeport, Conn. Punch for bank-checks	474,932	May 17	1676	{ 428 429 430 }	59	988
Williamson, Theodore A., Allegheny, Pa. Burner	470,091	Mar. 1	671	165	58	1229
Williamson, Wallace W., Syracuse, N. Y. Dental engine	472,776	Apr. 12	1175	301	59	235
Williamson, William C., et al. (See Williamson, John D., assignor.)						
Williamson, William C., assignor to himself, G. W. and J. D. Williamson, Philadelphia, Pa. Steering apparatus for ships	486,007	Nov. 8	1312	349	61	858
Willard, Frank J. (See Grimm and Willard.)						
Willimantic Linen Company. (See Reigh, Mark B., assignor.)						
Willing, Carl A. P., and R. J. G. Violet, Berlin, Germany. Electric switch	474,541	May 10	1058	271	59	851

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Willis, Henry. (See Fay and Willis.)						
Willis, James, Bournemouth, England. Frame for umbrellas	478,150	July 5	118	30	60	26
Willis, James, Rosendale, Bournemouth, England. Geat for umbrellas or parasols	479,691	July 26	2555	635	60	537
Willis, William H., assignor of four-fifths to A. S. Jones, J. Graham, R. F. Hill, B. Osborne, and J. N. Clore, Buena Vista, Va. Nut-lock	480,758	Aug. 16	1613	405	60	919
Williston, Benjamin F., assignor of one-half to C. E. Smart, Jackson, Mich. Railway-switch	467,730	Jan. 26	2324	590	58	464
Willms, Charles, Baltimore, Md. Rheostat	467,338	Jan. 19	1689	432	58	337
Willms, Charles, Baltimore, Md. Rheostat	475,528	May 24	2621	667	59	1186
Willms, Charles, Baltimore, Md. Rheostat	475,529	May 24	2621	667	59	1187
Willms, Charles, Baltimore, Md. Sealed battery-cell or similar article	479,541	July 26	2326	581	60	495
Willms, Charles, Baltimore, Md. Induction apparatus	488,299	Dec. 20	1753	443	61	1705
Willoughby, Charles, San Francisco, Cal. Telegraph-transmitter	480,644	Aug. 9	1438	358 359	60	869
Willoughby, Frank S., and T. Horsfield, Manchester, England. Carriage-wheel tire	467,112	Jan. 12	1327	335 336	58	261
Wills, Arthur W. (See Evans, Joseph, assignor.)						
Wills, Frank J., Winchester, Mass. Tea-strainer	477,726	June 28	2397	599	59	1956
Wills, James A., Philadelphia, Pa. Desiccating-closet	469,764	Mar. 1	150	39	58	1129
Wills, William, Longstreth, Ohio. Apparatus for separation of smoke from gases of combustion	468,378	Feb. 9	737	183	58	676
Willis, George E. (See Spalding and Willis.)						
Willson, Richard D., Vincennes, Ind. Cabinet	473,541	Apr. 26	2436	617	59	510
Willson, Thomas L., Brooklyn, N. Y. Electric locomotive	469,799	Mar. 1	215	55	58	1143
Willson, Thomas L., Brooklyn, N. Y. Cannon	475,071	May 17	1900	482	59	1030
Willson, Thomas L., Brooklyn, N. Y. Electric locomotive	483,822	Oct. 4	451	112 113	61	93
Willson, Thomas L., Leaksville, N. C. Electrically reducing refractory compounds	486,575	Nov. 22	2209		61	1066
Willson, Walter V., Brunswick, assignor of one half to J. Irving, Troy, N. Y. Transom-lifter	466,842	Jan. 12	865	921	58	174
Willyard, Oscar A., Allegan, Mich. Harness	475,911	May 31	3242	819	59	1320
Willyard, Oscar A., Hamilton, Mich. Harness	475,912	May 31	3243	819	59	1320
Willyard, S. L., et al. (See Carpenter, Conrad H., assignor.)						
Wilmarth, Edwin B., Attleborough, Mass. Eyeglass-holder	470,136	Mar. 1	734	183	58	1242
Wilmore, William H., assignor of one-half to H. R. Morgan, Marshall, Tex. Wrecking-frog	471,927	Mar. 29	3508	896	58	1812
Wilmot, Frank A., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Hub for wheels	469,494	Feb. 23	2480	636	58	1034
Wilmot, Frank A., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Attaching knobs to shanks	482,952	Sept. 20	1687	425	60	1691
Wilmot, Frank A., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Knob	482,953	Sept. 20	1689	425	60	1691
Wilmot, Frank A., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Knob	482,954	Sept. 20	1690	425	60	1691
Wilmot & Hobbs Manufacturing Company. (See Wilmot, Frank A., assignor.)						
Wilmot & Hobbs Manufacturing Company. (See Wilmot, Samuel R., assignor.)						
Wilmot, John F., Kearney, Nebr. Case for blanks	482,990	Sept. 20	1745	441	60	1702
Wilmot, Samuel R., assignor to Wilmot & Hobbs Manufacturing Company, Bridgeport, Conn. Paint and varnish cup	478,831	July 12	1187	294	60	250
Wilms, Bernadine, St. Louis, Mo. Combined dresser and table	480,799	Aug. 16	1676	419	60	931
Wilskey, Frank A., assignor of two-thirds to J. M. Kaufman and S. Philbrick, Champaign, Ill. Campaign-rattle	471,046	Mar. 15	2178	560	58	1538
Wilson, A. (See Boles, Jacob E., assignor.)						
Wilson, Adoniram J., Port Chester, N. Y., assignor to Hall Signal Company, of Maine. Electric railway-signal	470,813	Mar. 15	1835	471	58	1471
Wilson, Adoniram J., Port Chester, N. Y., assignor to Hall Signal Company, of Maine. Apparatus for electric railway signaling	471,409	Mar. 22	2741	699	58	1658
Wilson, Adoniram J., Port Chester, N. Y., assignor to Hall Signal Company, of Maine. Electric railway signaling apparatus	471,410	Mar. 22	2743	700	58	1659
Wilson, Adoniram J., Port Chester, N. Y., assignor to Hall Signal Company, of Maine. Electric signaling apparatus	479,928	Aug. 2	236	59	60	628
Wilson, Adoniram J., Port Chester, N. Y., assignor to Hall Signal Company, of Maine. Electric railway-signal	485,728	Nov. 8	829	239	61	772
Wilson, Alexander, Rising Sun, Md., assignor of one-half to J. B. Siddell, Sylmar, Pa. Sash-cord fastener	475,950	May 31	3312	835	59	1333
Wilson, Arthur R., et al. (See McKinney, Samuel C., assignor.)						
Wilson, Bennet C., Philadelphia, Pa. Gas-burner	479,128	July 19	1638	410	60	346
Wilson, Carrie. (See Simons, Frederick W., assignor.)						
Wilson, Charles C., Columbus, Nebr. Mail-bag	468,715	Feb. 9	1263	321	58	781
Wilson, Charles C., assignor of one-half to A. V. Jessup, Greensborough, N. C. Water-motor	488,860	Dec. 27	2656	657	61	1899
Wilson, Charles F., Breckenridge, Colo. Device for dumping cars	472,648	Apr. 12	984	254	59	200
Wilson, Charles G. (See Gunderson and Wilson.)						
Wilson, Charles H., Chicago, Ill., assignor to American Bell Telephone Company, Boston, Mass. Distributing-box for cable systems	469,765	Mar. 1	152	39, 40	58	1129
Wilson, Charles H., Chicago, Ill., assignor to American Bell Telephone Company, Boston, Mass. Conduit for electric wires	473,044	Apr. 19	1596	406	59	329
Wilson, Christopher W. (See McLean, Alexander, assignor.)						
Wilson, David H., assignor of one-tenth to C. T. Brown, Chicago, Ill. Electric motor	476,347	June 7	187	44, 45	59	1472
Wilson, David Y., Gum Tree, assignor of one-half to E. P. Moore, Parkesburg, Pa. Whiffletree-hook	488,491	Dec. 20	2072	514	61	1768
Wilson, E. O., et al. (See Craggy, Benjamin J., assignor.)						
Wilson, Edgar C., et al. (See Bateman, Frank, assignor.)						
Wilson, Edward L., Ridley Park, Pa. Coin or check controlled device	469,393	Feb. 23	2318	597	58	1004
Wilson, Edward L., New York, N. Y. Coin-controlled apparatus for gramophones	472,417	Apr. 5	637	163	59	119
Wilson, Elbert D., Birmingham, Ala. Elevated railway	471,452	Mar. 22	2803	715	58	1669
Wilson, Eugene B., Milford, Conn. Apparatus for dumping cars	477,396	June 21	1859	458	59	1832
Wilson, Frank H., Cooper, Mich. Head-light for steam-thrashers	473,991	May 3	166	39	59	670
Wilson, George E., assignor to Minnesota Thresher Manufacturing Company, Stillwater, Minn. Rotating grain-meter	484,691	Oct. 18	1807	459	61	390
Wilson, George H., Louisville, Ky. Artificial ear-drum	476,853	June 14	963	234	59	1642
Wilson, George W., Sharon, Pa. Hood, casing, or covering for emery-wheels or grind-stones	469,310	Feb. 23	2194	562	58	979
Wilson, Harriett D. T., New York, N. Y. One-wheel vehicle	487,359	Dec. 6	201	55	61	1360

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wilson, Homer T., Louisville, Ky. Electric fire and burglar alarm connection.....	481,989	Sept. 6	103	26	60	1355
Wilson, Homer T., Louisville, Ky. Burglar-alarm.....	482,464	Sept. 13	909	221	60	1525
Wilson, Homer T., Louisville, Ky. Electric burglar-alarm.....	483,625	Oct. 4	162	40	61	34
Wilson Improved Store Service Company. (See Peirce, Almy L., assignor.)						
Wilson Improved Store Service Company. (See Wilson, Robert B., assignor.)						
Wilson, Isaac S., Cedar Gap, Mo. Planing attachment for saws.....	474,492	May 10	977	252	59	836
Wilson, Isaac S., Cedar Gap, Mo. Crosscut-saw.....	481,321	Aug. 23	2559	628	60	1112
Wilson, James, Columbia, Mo. Blind-stop.....	474,891	May 17	1617	413	59	975
Wilson, James, San Francisco, Cal. Window frame and sash.....	482,989	Sept. 20	1744	441	60	1702
Wilson, James E. (See Hilton and Wilson.)						
Wilson, James E., New York, N. Y. Type-writing machine.....	487,897	Dec. 13	1085	{ 271 272 }	61	1553
Wilson, James H., assignor of one-half to A. A. Coburn, Lowell, Mass. Automatic fire-extinguisher or sprinkler.....	485,519	Nov. 1	554	148	61	686
Wilson, James N., assignor of one-half to T. A. Whitworth, Minneapolis, Minn. Thrashing-machine.....	482,709	Sept. 13	1298	{ 317 318 }	60	1603
Wilson, James T., Tyrone, Pa. Electric motor.....	468,716	Feb. 9	1265	322	58	782
Wilson, Joel, Dover, N. J., assignor to Concrete Iron Company, of New Jersey. Treating powdery iron ore.....	467,361	Jan. 19	1720	-----	58	343
Wilson, John. (See Morrow and Wilson.)						
Wilson, John. (See Nelson, Alexander M., assignor.)						
Wilson, John, Sr., East St. Louis, Ill. Die-holder and die for making stamp-shoes.....	481,087	Aug. 16	2136	532	60	1020
Wilson, John, assignor to R. Debes, New York, N. Y. Furnace for the incineration of garbage.....	474,933	May 17	1677	429	59	988
Wilson, John, assignor to R. Debes, New York, N. Y. Hydrocarbon-oil burner for furnaces.....	475,478	May 24	2539	646	59	1171
Wilson, John, assignor to R. Debes, New York, N. Y. Apparatus for purifying sewage.....	479,885	Aug. 2	139	34	60	609
Wilson, John, assignor to R. Debes, New York, N. Y. Apparatus for purifying sewage.....	479,866	Aug. 2	140	34	60	609
Wilson, John, assignor to R. Debes, New York, N. Y. Apparatus for purifying sewage.....	482,052	Sept. 6	211	50	60	1376
Wilson, John, assignor to R. Debes, New York, N. Y. Apparatus for purifying sewage.....	482,053	Sept. 6	213	51	60	1377
Wilson, John A. L., Woodland, Ill. Grain-elevator.....	485,520	Nov. 1	555	149	61	686
Wilson, John B., Brooklyn, N. Y. Machine for cutting veneers.....	486,152	Nov. 15	1565	405	61	925
Wilson, John C. (See Martin, Morris, assignor.)						
Wilson, John C., Boston, Mass., assignor to Municipal Signal Company, Portland, Me. Police signal system.....	486,206	Nov. 15	1635	433	61	939
Wilson, John H., Carmi, Ill. Car-coupling.....	472,418	Apr. 5	639	163	59	120
Wilson, John J., Wahoo, Nebr. Feed-water heater.....	482,069	Sept. 6	237	58	60	1382
Wilson, John R., Pittsburg, Pa. Axle-lubricator.....	477,319	June 21	1740	426	59	1808
Wilson, John R., assignor of one-half to N. P. Hyndman, Pittsburg, Pa. Dumping apparatus.....	475,049	May 17	1866	{ 473 474 }	59	1024
Wilson, John R., assignor of one-half to N. P. Hyndman, Pittsburg, Pa. Automatic brake.....	487,412	Dec. 6	304	78	61	1381
Wilson, John S. (See Pendleton and Wilson.)						
Wilson, John T. (See Thomas, William J., assignor.)						
Wilson, Joshua H., Todmorden, England. Bobbin used in spinning and twisting frames..	488,045	Dec. 13	1341	332	61	1605
Wilson, Katharine M. (See Loury, Harriet S., assignor.)						
Wilson, Lucindia J., Hardy, Tex. Washing-machine.....	487,107	Nov. 29	3113	799	61	1263
Wilson Manufacturing Company. (See Baird, William C., assignor.)						
Wilson, Matthew, Garrison, Iowa. Corn-husker.....	484,076	Oct. 11	827	{ 209 210 }	61	184
Wilson, Milford J., Painesville, Ohio. Pipe-wrench.....	473,542	Apr. 26	2437	617	59	511
Wilson, Milford J., Painesville, Ohio. Pipe and nut wrench.....	483,336	Sept. 27	2314	582	60	1825
Wilson, Morris C., Athens, Pa. Extension-ladder.....	466,816	Jan. 12	822	211	58	166
Wilson, Morten C., Malden, Mass. Device for converting motion.....	473,720	Apr. 26	2731	687	59	567
Wilson, Pinkney C., Patterson, La. Conveyor.....	481,837	Aug. 30	3401	835	60	1290
Wilson, Robert B. (See Henry and Wilson.)						
Wilson, Robert B., Cincinnati, Ohio, assignor to Wilson Improved Store Service Company, of Kentucky. Store-service apparatus.....	478,038	June 28	2898	724	59	2051
Wilson, Robert E., Unionville, Ga. Agricultural scraper.....	484,273	Oct. 11	1147	292	61	247
Wilson, Robert J. (See Hatcher, Judson N., assignor.)						
Wilson, Robert M., Newberry, Pa. Suspender-buckle.....	484,274	Oct. 11	1148	292	61	247
Wilson, Robert R., assignor of one-half to W. H. Bofinger and A. Burbank, New Orleans, La. Car-coupling.....	479,729	July 26	2634	653	60	551
Wilson, Samuel H., Webster, Mass. Metal railway-tie.....	483,821	Oct. 4	450	112	61	93
Wilson, Sarah E., et al. (See Landin, Peter J., assignor.)						
Wilson, Sarah E. L., Baltimore, Md. Hat or bonnet stand.....	486,654	Nov. 22	2345	613	61	1093
Wilson, Stephen, Philadelphia, assignor of one-half to H. C. Conkle, Wayne, Pa. Bicycle.....	477,033	June 14	1250	303	59	1701
Wilson, Thomas, Birmingham, England. Revolving magazine-gun.....	481,452	Aug. 23	2761	679	60	1150
Wilson, Washington, et al. (See McKinney, Samuel C., assignor.)						
Wilson, William C., assignor of two-thirds to J. R. Foran and W. H. Ehlers, Kansas City, Mo. Inhaler.....	486,519	Nov. 22	2123	560	61	1051
Wilson, William H., Moline, assignor of one-half to J. V. Emmitt and R. L. Kimbro, Sterling, Ill. Adding-machine.....	479,343	July 19	1978	495	60	413
Wilson, William H., assignor of two-thirds to A. P. Spruance and C. H. McCormick, Indianapolis, Ind. Incrustation-preventer.....	484,837	Oct. 25	2067	531	61	457
Wilson, William J., Watford, England. Machine for cutting glass plates.....	477,585	June 21	2157	{ 535 536 }	59	1891
Wilts, Jibbo H., Ackley, Iowa. Combined land-roller, pulverizer, and barrow.....	478,490	July 5	653	160	60	130
Winmpee, George C., Rome, Ga. Lifting-jack.....	485,902	Nov. 8	1136	301	61	821
Winand, Paul A. N., assignor to Schleicher, Schumm & Co., Philadelphia, Pa. Apparatus for making gas.....	474,201	May 3	487	117	59	732
Winand, Paul A. N., assignor to Schleicher, Schumm & Co., Philadelphia, Pa. Gas-producer.....	474,202	May 3	490	118	59	732
Winans, Edwin, New York, N. Y. Power-transmitting clutch.....	474,934	May 17	1678	429	59	988
Winby, Frederick C., Brighton, England. Construction of locomotive-engines.....	466,546	Jan. 5	377	95, 96	58	73
Winby, William E. and W. M., Birmingham, assignors of one-half to F. H. Lloyd, Wednesbury, and T. F. Craddock, London, England. Cable tramway.....	466,987	Jan. 12	1107	280	58	219
Winby, William M. (See Winby, William E. and W. M.)						
Winchester, Gilman K., and A. S. Hood, Providence, R. I. Braiding-machine.....	468,432	Feb. 9	818	206	58	693
Winchester Repeating Arms Company. (See Bennett, Thomas G., assignor.)						
Winchester Repeating Arms Company. (See Browning, John M., assignor.)						
Winchester Repeating Arms Company. (See Browning, John M. and M. S., assignors.)						
Winchester Repeating Arms Company. (See Mason, William, assignor.)						
Winchester Repeating Arms Company. (See McGrail, John F., assignor.)						
Winchester, William W., assignor of one-half to E. A. Tobey, Troy, N. Y. Shelf-box.....	466,479	Jan. 5	271	68	58	52

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dis.	Vol.	Page.
Wind, William H., Philadelphia, Pa. Educational appliance	472,419	Apr. 5	640	164	59	120
Windfelder, George F., assignor of one-half to H. R. Riebeling, St. Louis, Mo. Expandible hinged-mouth mail-pouch	480,645	Aug. 9	1440	359	60	869
Windle, Howard, Fairville, Pa. Milk-can attachment	476,502	June 7	421	98	59	1519
Windle, John E., Worcester, Mass. Cloth-guiding machine	472,203	Apr. 5	310	80	59	58
Windmiller, William E. (See Stohman and Windmiller.)						
Windsor, B. F. (See Monzel, John, assignor.)						
Windsor, Fred E. (See Cobham, Frederick P., assignor.)						
Windsor, Herbert T. (See Sutphen, Edward A., assignor.)						
Windus, Werner, Baltimore, Md. Toy fence	473,247	Apr. 19	1941	488	59	393
Wineman, Albert F. (See Coleman, Clyde J., assignor.)						
Winfield, William N., Detroit, Mich. Exhibiting device	475,005	May 17	1804	457	59	1010
Wing, Goodman, Kamrar, Iowa. Draft-equalizer	480,837	Aug. 16	1735	434	60	943
Wing, Leander J., Lexington, Mass. Clutch	475,838	May 31	3121	790	59	1296
Winge, Hagbarth, Miles City, Mont. Wind-motor	476,716	June 7	729	180	59	1582
Winget, Jasper S., assignor to M. H. Scoville, Columbus, Ohio. Cigar-rolling machine	481,453	Aug. 23	2763	680	60	1151
Winget, Marion A., assignor of one-half to J. C. Briggs, Columbus, Ohio. Hopper for cigar-machines	486,919	Nov. 29	2822	731	61	1206
Winget, Marion A., assignor of one-half to J. C. Briggs, Columbus, Ohio. Cigar-mold	487,108	Nov. 29	3114	799	61	1264
Winkelmann, Hermann R., Oakland, Fla., and A. C. Perkins, Macon, Ga. Carpenter's combination-level	467,844	Jan. 26	2501	633	58	498
Winkelmann, John, Milwaukee, Wis. Pendulum level and plumb	469,430	Feb. 23	2377	610	58	1015
Winkler, Charles F., Troy, N. Y. Pulley	466,390	Jan. 5	125	35	58	26
Winkler, Charles F., Troy, N. Y. Railway electric motor	466,914	Jan. 12	991	253	58	198
Winkler, Charles F., Troy, N. Y. Secondary battery	471,590	Mar. 29	2998	763	58	1714
Winkler, Charles F., Troy, N. Y. Secondary-battery electrode	471,591	Mar. 29	3000	763	58	1714
Winkler, Charles F., Troy, N. Y. Secondary battery	471,592	Mar. 29	3001	763	58	1715
Winkler, Fred and L., South Bend, Ind. Street-sprinkling machine	477,461	June 21	1993	495	59	1858
Winkler, Friedrich G., Zschopau, Germany, assignor to Friedrich Georg Winkler Machine Company, of Maine. Elevator-bucket	468,517	Feb. 9	961	244	58	721
Winkler, George, San Francisco, Cal. Animal-trap	472,687	Apr. 12	1040	268	59	209
Winkler, Lenhart. (See Winkler, Fred and L.)						
Winkley, Erastus E. (See Kavanagh and Winkley.)						
Winkley, Erastus E., Lynn, Mass. Draft-regulator for locomotive-engines	470,733	Mar. 15	1701	438	58	1445
Winkley, Frank D., Madison, Wis. Oil-cup	470,734	Mar. 15	1702	439	58	1445
Winlund, Nicholas J., assignor of two-thirds to E. McSherry and H. W. Price, Rockford, Ill. Knitting-machine	478,673	July 12	927	230	60	199
Winlund, Olof J., and A. L. Larson, Worcester, Mass. Making sheet or band metal	471,298	Mar. 22	2571	653	58	1625
Winlund, Olof J., and A. L. Larson, Worcester, Mass. Annealing-furnace	471,299	Mar. 22	2572	653	58	1625
Winn, William A., White Hall, Ill. Link valve-gear	473,278	Apr. 19	1989	499	59	403
Winship, William W., Washington, D. C. Torpedo-net	485,074	Oct. 25	2439	627	61	531
Winslow, George H., Pittsburg, Pa. Binder for leaves	484,275	Oct. 11	1149	292	61	247
Winslow, James, San Francisco, Cal. Roofing and siding	481,541	Aug. 23	2911	714	60	1180
Winslow, Joshua B. (See Strange, John F., assignor.)						
Winslow, Simon, Chelsea, Mich. Portable fence	471,160	Mar. 22	2365	604	58	1586
Winslow, William A., Watertown, N. Y. Passenger-car	486,313	Nov. 15	1813	478	61	975
Winslow, William H., Chicago, Ill. Grill-work	471,161	Mar. 22	2366	605	58	1586
Winsor, Clinton B., and G. W. Cummings, Jamestown, N. Y. Mail-bag thrower	481,322	Aug. 23	2561	628	60	1112
Winsor, Clinton B., and G. W. Cummings, Jamestown, assignors of one-third to L. B. Sessions, Panama, N. Y. Mail-bag catcher	470,160	Mar. 1	775	191	58	1249
Winston, Val. E., et al. (See Williams, Robert E., assignor.)						
Winter, Fritz R., Knobnoster, Mo. Cultivator	469,311	Feb. 23	2195	562	58	979
Winternight, Heury A., assignor of one-half to J. M. Cornyn, Philadelphia, Pa. Paper-filing device	483,089	Sept. 20	1898	480	60	1735
Winterros, Claes E., Brooklyn, N. Y. Filter	477,238	June 21	1607	393	59	1783
Winters, Sardinia and S. A., Portland, Ind. Bodkin and stitch-ripper	488,862	Dec. 27	2657	658	61	1899
Winters, Sardinia and S. A., Portland, Ind. Guide for sewing-machines	488,862	Dec. 27	2658	653	61	1900
Winters, Seth A. (See Winters, Sardinia and S. A.)						
Wintersteen, Jacob L. (See Frazee and Wintersteen.)						
Winther, Charles A. G., Somerville, assignor of one-half to Star Brass Manufacturing Company, Boston, Mass. Pressure-gage	466,547	Jan. 5	378	96	58	73
Wintjen, John G., Mount Vernon, N. Y. Dress-elevator	485,780	Nov. 8	952	256	61	785
Winton, Alexander, Cleveland, Ohio. Bicycle	481,536	Aug. 23	2904	713	60	1179
Winton, Henry D., Wellesley, Mass., assignor to Hersey Manufacturing Company, Portland, Me., and Boston, Mass. Insulator for overhead electric railways	470,356	Mar. 8	1137	291	58	1325
Wintout, Henry D., Wellesley, Mass., assignor to Hersey Manufacturing Company, Portland, Me. Device for bending electric trolley-wires	475,261	May 17	2190	558	59	1088
Wintrode, Charles E., Huntington, Ind. Tension device	468,717	Feb. 9	1266	322	58	782
Wintrode, Charles E., Huntington, Ind. Adjustable wire-twisting wrench	468,718	Feb. 9	1267	322	58	782
Wintrode, Charles E., Huntington, Ind. Brace for fence-posts	472,841	Apr. 12	1263	323	59	252
Wintrode, Charles E., Huntington, Ind. Picket fence	478,900	July 12	1274	316	60	267
Wintrode, Charles E., Huntington, Ind. Adjustable wire-twisting wrench	484,692	Oct. 18	1808	460	61	390
Wire Fabric Company. (See Rumsey, Charles B., assignor.)						
Wire Goods Company. (See Farnellee, Arthur W., assignor.)						
Wires, Edward T. (See Chaney and Wires.)						
Wirsching, Aloys, New York, N. Y. Electric resistance-box	474,073	May 3	301	73	59	696
Wirsig, Oswald H. (See Preston and Wirsig.)						
Wirt, Charles, Chicago, Ill. Insulating joint	484,483	Oct. 18	1481	377	61	323
Wirt, Charles, Chicago, Ill. Insulator	488,046	Dec. 13	1342	332	61	1605
Wirt, Charles, Chicago, Ill., assignor to Electrical Supply Company, of Illinois. Rosette	484,077	Oct. 11	831	210	61	185
Wirt, Elmer L. (See Barker and Wirt.)						
Wirt, Herbert C. (See Andrews and Spencer, assignors.) (Reissue.)						
Wirt, Herbert C., Boston, Mass., assignor to Thomson-Houston Electric Company, of Connecticut. Insulator	477,980	June 28	2797	701	59	2033
Wirt, Reuben D., Independence, Mo. Combined button and fastener	486,009	Nov. 8	1316	350	61	858
Wirt, Reuben D., Independence, Mo. Hose-reel	486,010	Nov. 8	1317	350	61	859
Wirth, Peter, Marshfield, Wis. Horse-power	467,626	Jan. 26	2150	546	58	432

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wirth, Richard. (See Ottstadt and Wirth.)						
Wirths, Maurice, New York, N. Y. Card or plate holder	467,284	Jan. 19	1605	409	58	321
Wirths, Maurice, New York, N. Y. Setting for cards or pictures	479,129	July 19	1639	410	60	346
Wirths, Maurice, Jersey City, N. J. Bulb-guard for atomizers	477,345	June 21	1776	434	59	1815
Wirz, Wilhelm, Frankfort, Germany. Tobacco-pipe cleaner	470,530	Mar. 8	1407	367	58	1377
Wischerth, Joseph F., Brooklyn, N. Y. Cam for buttonhole-machines	480,054	Aug. 2	478	122	60	673
Wisda, Joseph J., Defiance, Ohio. Car-coupling	481,991	Sept. 6	105	26	60	1355
Wise, Benjamin F., assignor of two-thirds to S. T. Price and W. C. Donoho, St. Louis, Mo. Penholder	471,923	Mar. 29	3509	896	58	1812
Wise, Henry T. C., Philadelphia, Pa. Duplicating apparatus	479,968	Aug. 2	310	76	60	641
Wise, James B., et al. (See Bragger, John W., assignor.)						
Wise, James B., et al. (See Henry, Archie J., assignor.)						
Wise, Morris, New York, N. Y. Heel	487,311	Dec. 6	117	35	61	1344
Wise, Morris, New York, N. Y. Interchangeable heel	487,312	Dec. 6	118	35	61	1345
Wise, Renben M. (See Greenwood and Wise.)						
Wise, Willard M., Williamsport, Pa. Bottle-washer	470,387	Mar. 8	1191	304	58	1335
Wiser, David, Plymouth, Ind. Drive-well filter	470,274	Mar. 8	970	240	58	1296
Wishard, James J., Sacramento, Cal. Ditching-machine	473,279	Apr. 19	1991	499	59	404
Wiss, Peter, Chicago, Ill. Fishing apparatus	476,940	June 14	1108	267	59	1671
Wistar, Dillwyn. (See Ardrey, Robert, assignor.)						
Wisteman, Henry F., Belvidere, Kans. Combined plow and seeder	469,352	Feb. 23	2254	578	58	992
Wistrand, Peter E., assignor to Peters Pump Company, Kewanee, Ill. Corn-planter wheel	476,348	June 7	189	45	59	1473
Wiswall, James A., Embarrass, Wis. Car-coupling	482,774	Sept. 20	1413	349	60	1636
Wiswell, Frederick A., Lynn, Mass. Crnshing-mill	473,280	Apr. 19	1995	500	59	404
Withall, Charles E. (See Gereke, Edward G., assignor.)						
Witherbee, Benjamin A., et al. (See Stults, William H., assignor.)						
Witherell, Alonzo E., assignor to Howard Manufacturing Company, Boston, Mass. Razor-strop	478,946	July 12	1343	333	60	281
Witherell, Silas, assignor to L. C. Hinze, Fort Madison, Iowa. House-door letter-box	472,007	Mar. 29	3617	924	58	1832
Witherow, James P., Allegheny, Pa. Manufacture of iron and steel	481,881	Aug. 30	3467	850	60	1303
Withers, Samuel, London, England, and D. S. Covert, Chicago, Ill. Gas-engine	487,313	Dec. 6	118	36	61	1345
Withington, Charles B., Janesville, Wis. Breech-loading gun	467,217	Jan. 19	1495	383	58	301
Withington, Charles B., Janesville, Wis. Automatic ejecting mechanism for breakdown guns	485,313	Nov. 1	236	65	61	620
Withrow, John M., Bentonville, Ark. Elevating mechanism for fruit-evaporators	474,892	May 17	1618	413	59	975
Witt, George W. (See Hallenbeck, Witt, and Pattison.)						
Witt, Julius F., Chicago, Ill. Detachable umbrella-cover	475,072	May 17	1902	483	59	1030
Witte, Frank, Cincinnati, Ohio, assignor of two-thirds to J. Peare, Covington, Ky., and J. Preis, Chicago, Ill. Barber's register	474,935	May 17	1679	430	59	988
Wittmann, Jacob F., Fort Hamilton, N. Y. Bottle-washing machine	474,510	May 10	1003	258	59	841
Wittmann, Jacob F., Fort Hamilton, N. Y. Capping-machine	481,626	Aug. 30	3047	744	60	1221
Wittmann, Jacob F., Yonkers, N. Y. Apparatus for charging portable fountains with carbonated beverages	484,078	Oct. 11	832	210	61	185
Wittmann, Jacob F., Yonkers, N. Y. Carbonating fermented beverages	487,342	Dec. 6	168	47	61	1354
Wittmore, John Q. A. (See Taylor, Eugene H., assignor.)						
Witter, Ezra E., Milford Centre, Ohio. Corn-harvester	470,609	Mar. 8	1510	394	58	1400
Witter, George, Storm Lake, Iowa. Wire bed-bottom	484,484	Oct. 18	1482	377	61	323
Wittkamper, H. B., et al. (See Heister, William, assignor.)						
Witty, John B., et al. (See Cole, John J., assignor.)						
Witzel, Joseph R., Philadelphia, Pa. Pill-machine	470,028	Mar. 1	574	143	58	1210
Wladimiroff, Nicholas, St. Petersburg, Russia. Secondary battery	488,726	Dec. 27	2445	607	61	1856
Wm. Knabe & Co. Manufacturing Company. (See Keidel, Charles, Jr., assignor.)						
Wm. L. Gilbert Clock Company. (See Beckwith, Samuel V., assignor.)						
Woelfel, Christian, Philadelphia, Pa. Cloth-napping machine	466,642	Jan. 5	525	136	58	102
Woessner, Charles F., assignor of one-half to L. C. Koch, St. Louis, Mo. Truck-handle support	479,542	July 26	2327	581	60	495
Woessner, Charles F., assignor of one-half to A. Schneider, St. Louis, Mo. Device for cleaning bottles or similar receptacles	481,537	Aug. 23	2906	713	60	1179
Wogaman, George. (See Kline, John R., assignor.)						
Wohlang, Otto R. J., Altona, Germany. Adding and counting apparatus	469,766	Mar. 1	153	40	58	1129
Wohlfarth, Charles F., Norwich, Conn., assignor to T. Milburn, Toronto, Canada. Brake-shoe	480,982	Aug. 16	1969	492	60	988
Wohlfort, Frederick W., New York, N. Y. Separable square	485,402	Nov. 1	394	106	61	653
Wohlgemuth, Frederick, Philadelphia, Pa. Theatrical appliance	475,236	May 17	2134	540	59	1076
Wohlmuth, Theodor, Vienna, Austria-Hungary. Lock	471,453	Mar. 22	2804	715	58	1669
Wohlman, John J., et al. (See Dunham, Curtis, assignor.)						
Wojan, Hermann, Brooklyn, N. Y. Steam-boiler	477,880	June 28	2656	664	59	2004
Wojdkow, Louis, Brooklyn, assignor to S. Sternau, New York, N. Y., and H. Strassburger, Montgomery, Ala. Cooking-lamp	466,867	Jan. 12	913	234	58	183
Wolcott, Arthur H., Winthrop, assignor to J. L. Whiting & Son, Boston, Mass. Brush and making the same	482,666	Sept. 13	1223	298	60	1587
Wolcott, Clayton, Hartford, Conn. Sash-fastener	487,314	Dec. 6	121	37	61	1345
Wolcott, Clayton, Hartford, Conn. Sash-cord guide	487,812	Dec. 13	948	239	61	1527
Wolcott, Henry, Providence, R. I. Display-card for jewelry	488,932	Dec. 27	2767	683	61	1923
Wold, Martin M. (See Hove, John J., assignor.)						
Wolf, Augustus. (See Gilbert, Perry R., assignor.)						
Wolf, Clarence. (See Nicholson, Francis T., assignor.)						
Wolf, Clarence, Philadelphia, Pa. Puzzle	480,983	Aug. 16	1970	493	60	988
Wolf, Elmer E., Springfield, Ohio. Shoe-horn	466,643	Jan. 5	526	137	58	102
Wolf, Frank, New York, N. Y. Cloak-rack	478,386	July 5	505	122	60	100
Wolf, G. W., et al. (See Carpenter, Conrad H., assignor.)						
Wolf, John J., Philadelphia, Pa. Chip for beer, ale, &c	481,774	Aug. 30	3298	804	60	1271
Wolf, Josef, assignor to A. V. Widmann and J. Coppersmith, Newark, N. J. Door-spring and check	484,838	Oct. 25	2067	531	61	457
Wolf, Josef, assignor to A. V. Widmann and J. Coppersmith, Newark, N. J. Spring-hinge	484,839	Oct. 25	2069	532	61	457

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Wolf, Theodore G. (See Moffat and Wolf.)						
Wolfe, David C., Lyons, Kans. Device for ascertaining grades, &c	478,491	July 5	655	160	60	130
Wolfe, Edward M., assignor to Reading Iron Company, Reading, Pa. Pipe-tap	482,955	Sept. 20	1691	425	60	1691
Wolfe, George C., assignor of two-thirds to W. H. Stafford, Chippewa Falls, and T. F. Frawley, Eau Claire, Wis. Umbrella-stick	479,929	Aug. 2	239	59	60	628
Wolfe, George W. (See Duck, Savidge, and Wolfe.)						
Wolfe, Israel, Goshen, Ind. Nut-lock	485,120	Oct. 25	2504	643	61	545
Wolfe, Jacob C., assignor to Metal Base Electrotype Company, New York, N. Y. Mold for electrotype-shells and similar articles	476,717	June 7	730	{ 180 181 }	{ 59 }	1582
Wolfe, James M. (See Conley and Wolfe.)						
Wolfe, John B., assignor of one-fourth to C. C. Merritt, West Duluth, Minn. Clothes drier	473,601	Apr. 26	2549	642	59	533
Wolff, Abraham W., Chicago, Ill. Combined flour bin and sieve	473,543	Apr. 26	2438	617	59	511
Wolff, Alfred, Rutherford, N. J. Music-box	470,610	Mar. 8	1518	396	58	1400
Wolff, Arnovitz, New York, N. Y. Gas heater or radiator	466,958	Jan. 12	1057	268	58	209
Wolff, Arnovitz, New York, N. Y. Gas heater or radiator	481,742	Aug. 30	3244	789	60	1259
Wolff, C. F., et al. (See Ziegler, Josef, assignor.)						
Wolff & Co., Rudolph. (See Milligan, Henry C., assignor.)						
Wolff, Henry A. (See March and Wolf.)						
Wolfinger, William A., Milton, Pa. Lifting-jack	479,692	July 26	2556	636	60	537
Wolfram, Theodor, Columbus, Ohio. Guitar-bridge	474,432	May 10	886	231	59	820
Wolfrom, Eli J., Maysville, Colo. Tramway	475,102	May 17	1952	{ 494 495 }	{ 59 }	1039
Wolfsheimer, Joel H., Leesburg, Va. House-door letter-box	484,985	Oct. 25	2301	{ 594 595 }	{ 61 }	502
Woll, Peter, Jr., Philadelphia, Pa. Manufacturing curled hair	486,593	Nov. 22	2242	568	61	1073
Wollensak, John F. (See Gill, William E., assignor.)						
Wollensak, John F., Chicago, Ill. Electric push	466,644	Jan. 5	528	137	58	102
Wollensak, John F., Chicago, Ill. Connector for electric circuits	479,322	July 19	1927	482	60	403
Wollensak, John F., Chicago, Ill. Electric push	480,683	Aug. 9	1502	374	60	880
Wollensak, John F., Chicago, Ill. Transom-lifter	481,917	Aug. 30	3532	865	60	1316
Wollheim, Hugo, London, England. Disinfecting sewage	456,172	Nov. 15	1591		61	930
Wolpert, Henry R., Lancaster, Pa. Rail-clamp	479,667	Aug. 2	143	34	60	610
Wolpert, John, Louisville, Ky. Sulky-plow	483,480	Sept. 27	2506	631	60	1863
Wolstencroft, James, et al. (See Carlinet, John G., assignor.)						
Wolstencroft, James, et al. (See Soley and Perkins, assignors.)						
Woltz, Charles E. (See Thomas and Woltz.)						
Womersley, William, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeding machine	475,839	May 31	3123	{ 791 792 }	{ 59 }	1296
Womersley, William, Poughkeepsie, assignor to D. H. Burrell & Co., Little Falls, N. Y. Paper-feeding machine	481,992	Sept. 6	106	26, 27	60	1355
Wompler, Paul, West Brookfield, Ohio. Well-drilling machine	466,970	Jan. 12	1074	272	58	212
Wonn, William. (See Drake and Wonn.)						
Wood, Albert A. (See Lucas and Wood.)						
Wood, Albert A., assignor to W. I. Zachry, G. A. Howell, J. M. Brosius, and T. S. Lewis, Atlanta, Ga. Spring-motor	470,611	Mar. 8	1520	{ 396 397 }	{ 58 }	1401
Wood, Albana P., Atlanta, Ga. Funnel	474,036	Mar. 3	241	58	59	684
Wood, Amos L., Boston, Mass. Apparatus for aging and purifying liquors	488,104	Dec. 13	1434	{ 359 360 }	{ 61 }	1625
Wood, Augustus L., Harris, Ohio. Machine for burnishing and embossing wood	470,612	Mar. 8	1524	397	58	1402
Wood, Bertini T. (See Wood, Thomas W. and B. T.)						
Wood & Boyd. (See McGregor, Bradford, assignor.)						
Wood, Charles F., et al. (See Morrell, Robert, assignor.)						
Wood, David J. (See Sims, Wood, and Sims.)						
Wood, Edgar J., Brooklyn, N. Y. Dynamometer	468,947	Feb. 16	1633	416	58	862
Wood, Edwin O. (See Sanders, David H., assignor.)						
Wood, Eliza A. H., deceased, (J. P. Gallaway, Tavares, administrator,) and M. W. Gordon, Bloomfield, Fla. Dish-washer	467,798	Jan. 26	2423	616	58	484
Wood, Ernest N., Lanesborough, Mass. Axle-box	483,372	Sept. 27	2366	593	60	1835
Wood, Ezra F., Munhall, assignor to Carnegie, Phipps & Company, Limited, Pittsburg, Pa. Manufacturing alloys of iron or steel and nickel	476,913	June 14	1062		59	1662
Wood, Frank. (See Stanhope and Wood.)						
Wood, Frank L., Racine, Wis. Adjustable wagon-pole	488,410	Dec. 20	1947	487	61	1742
Wood, Frank S., Greece, N. Y. Fence-post	476,912	June 14	1061	256	59	1661
Wood, Fred W. and J. Fowler, Los Angeles, Cal. Brake for street-cars	472,597	Apr. 12	908	233	59	187
Wood, Frederick W. (See Aiken, Wood, and Campbell.)						
Wood, Frederick W., Baltimore, Md. Metal-rolling machine	471,727	Mar. 29	3213	818	58	1753
Wood, Fredrick W., Norwich, Conn., and J. F. Bingham, Lawrence, Mass. Handle for utensils	487,688	Dec. 6	734	188	61	1466
Wood, Harry. (See Gibson, Ezra B., assignor.)						
Wood, Harry C., Tiffin, Ohio. Device for grinding and polishing glassware	469,052	Feb. 16	1807	462	58	897
Wood, Henry A. W., New York, N. Y. Mechanical movement	481,128	Aug. 16	2202	545	60	1032
Wood, Horatio G., Newport, R. I. Car-coupling	486,011	Nov. 8	1318	350	61	859
Wood, Isaac, Minneapolis, Minn. Sulky	488,236	Dec. 20	1662	415	61	1686
Wood, James J. (See Bradley and Wood.)						
Wood, James J., Fort Wayne, Ind. Belt-tightening base for machinery	468,010	Feb. 2	159	39	58	555
Wood, James J., Fort Wayne, Ind. Electrical measuring instrument and current-direction indicator	468,020	Feb. 2	171	42	58	557
Wood, James J., Fort Wayne, Ind. Electric meter	469,800	Mar. 1	217	56	58	1143
Wood, James J., Fort Wayne, Ind. Electric switch	474,050	May 3	269	65	59	689
Wood, James J., Fort Wayne, Ind. Dynamo-electric machine	477,729	June 28	2401	{ 600 601 }	{ 59 }	1957
Wood, James J., Fort Wayne, Ind. Carbon-brush holder for dynamo-electric machines and motors	486,656	Nov. 22	2347	{ 613 614 }	{ 61 }	1093
Wood, James J., Fort Wayne, Ind. Electric-arc lamp	487,315	Dec. 6	122	37, 38	61	1345
Wood, James J., Fort Wayne, Ind. Connection-plate for dynamos	487,462	Dec. 6	384	100	61	1397
Wood, James S., Northport, N. Y. Oyster-knife	469,312	Feb. 23	2197	563	58	979
Wood, James W. (See Hall and Wood.)						
Wood, John, Philadelphia, Pa. Household utensil	471,162	Mar. 22	2367	605	58	1586
Wood, John H., Charleston, Ill. Damper-regulator for stoves	486,314	Nov. 15	1815	478	61	976
Wood, John J., Liverpool, England. Eyeglasses	470,029	Mar. 1	577	144	58	1211
Wood, Joseph M., Albion, Wis. Holder for tobacco-laths	486,804	Nov. 22	2582	673	61	1141
Wood, Joseph M., assignor of two-thirds to J. Schwab and W. Barnard, Bellaire, Ohio. Tile roofing	477,346	June 21	1777	435	59	1816

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Wood, Joseph S., Philadelphia, Pa. Vapor-burner.....	483,885	Oct. 4	538	136	61	112
Wood, Montravelle M., Chicago, Ill. Trolley-pole catcher.....	471,206	Mar. 22	2434	620	58	1599
Wood, Montravelle M., Chicago, Ill. Trolley-wire clamp.....	472,596	Apr. 12	907	233	59	186
Wood, Montravelle M., Chicago, Ill. Lightning-arrester.....	473,045	Apr. 19	1599	407	59	330
Wood, Montravelle M., Chicago, Ill. Trolley-pole catcher.....	484,986	Oct. 25	2303	595	61	503
Wood, Percy. (See Lamplough, Arthur, assignor.)						
Wood, Robert, Syracuse, N. Y. Automatic valve.....	470,735	Mar. 15	1703	439	58	1446
Wood, Robert, Syracuse, N. Y. Valve.....	473,488	Apr. 26	2351	596	59	495
Wood, S. W., et al. (See Facer, Wilson E., assignor.)						
Wood, Thomas E., Kalamazoo, Mich. Photographie paper holder and cutter.....	477,728	June 28	2400	600	59	1957
Wood, Thomas T., St. Joseph, Mich. Brick-machine.....	481,454	Aug. 23	2766	680 681 682	60	1151
Wood, Thomas T., Parkside, assignor of one-fourth to G. E. Harris, Chicago, Ill. Lawn-mower.....	468,075	Feb. 2	251	61	58	573
Wood, Thomas W. and B. T., Berlin, Wis. Milk-aerator.....	487,413	Dec. 6	305	78	61	1382
Wood, Walter. (See Richards, Francis H., assignor.)						
Wood, Walter S. (See Merrill, Parker, assignor.)						
Wood, Warren, et al. (See Ashley, Frank M., assignor.)						
Wood, Willard A., Brooklyn, N. Y. Hydraulic motor.....	479,868	Aug. 2	144	35	60	610
Wood, William C., et al. (See Penniman, Russell S., assignor.)						
Wood, William C. S. (See Ellis and Wood.)						
Wood, William D. (See Votey and Wood.)						
Wood, William H., New York, N. Y. Counterbalance for journals.....	466,645	Jan. 5	528	137 138	58	102
Wood, William H., assignor of one-half to F. A. Sherwood, Rochester, N. Y. Clamp for uppers.....	488,913	Dec. 27	2741	676	61	1917
Wood, William M., assignor to American Projectile Company, Boston, Mass. "Banding- machine.....	467,657	Jan. 26	2198	559	58	441
Wood, William T., assignor of one-half to S. O. Merrill and J. T. Dicks, Nashville, Tenn. Device for collecting, registering, and recording fares.....	481,993	Sept. 6	109	27	60	1356
Wood, William T., assignor to J. C. McCrory and W. P. Houze, Nashville, Tenn. Hydro- static air-compressor.....	485,853	Nov. 8	1054	281	61	804
Wood, William W., Elbridge, N. Y. Bank-note.....	477,038	June 14	1257	305	59	1702
Woodard, Alvin N., Mansfield, Ohio. Pump.....	483,034	Sept. 20	1819	462	60	1718
Woodard, Edward C., Brockton, Mass. Machine for laying sole-edges.....	478,299	July 5	378	91	60	76
Woodard, George J. (See Baker, Ambrose S., assignor.)						
Woodard, Lyman E., Owosso, Mich. Coffin-handle.....	471,047	Mar. 15	2179	560	58	1538
Woodard, Russell M., Norton, Vt. Car-coupling.....	483,196	Sept. 27	2074	524	60	1781
Woodberry, Jesse, Boston, Mass. Combination organ stop-action.....	481,089	Aug. 16	2138	532 533	60	1021
Woodbridge, Samuel H., Boston, Mass., assignor to Westinghouse, Church, Kerr & Com- pany, New York, N. Y. Condenser-head.....	481,518	Aug. 23	2865	704	60	1171
Woodbury, Amasa O., Lampasas, assignor of one-half to J. O. Darby, Florence, Tex. Heel attachment for plows.....	486,416	Nov. 15	1973	524	61	1007
Woodbury, Crayton A., Rutland, Vt. Seesaw.....	481,994	Sept. 6	111	28	60	1356
Woodbury, Levi. (See Graham, Edmund H., assignor.)						
Woodbury, Samuel S., Bradford, Pa. Apparatus for the pasteurization of beer.....	482,667	Sept. 13	1223	298	60	1587
Woodcock, Charles H., et al. (See Westgate, Joseph D., assignor.)						
Woodhead, Richard M., and P. Anglois, Nottingham, England. Brake for cycles.....	474,051	May 3	272	65, 66	59	690
Woodhouse, Alfred, Bremgarten, Woking, England, assignor of one-half to W. L. Allen, Newark, N. J. Amalgamator for free-milling gold ore.....	471,367	Mar. 22	2672	680	58	1645
Woodhouse, John W., Rich Hill, Mo. Axle-lubricator.....	478,832	July 12	1187	294	60	250
Woodhouse & Rawson United. (See Goulding, Joseph C., assignor.)						
Wooding, Henry, Northampton, England. Sole.....	481,682	Aug. 30	3132	764	60	1238
Wooding, Ralph A., Kensington, Conn. Buckle-shield.....	466,959	Jan. 12	1058	268	58	210
Woodman, Daniel T., Blocksburg, Cal. Horse-controlling device.....	476,109	May 31	3548	890	59	1381
Woodman, Frank B., Cedar Rapids, Iowa. Car-coupling.....	476,349	June 7	191	45	59	1473
Woodmancy, Henry F., Whitesville, Mass. Support for spinning-spindles.....	475,994	May 31	3369	849	59	1344
Woodmancy, Henry F., Whitesville, Mass. Support for spinning-spindles.....	476,587	June 7	539	129	59	1544
Woodmancy, Henry F., Whitesville, Mass. Spinning and twisting machine spindle.....	480,984	Aug. 16	1971	493	60	988
Woodmancy, Henry F., Whitesville, Mass. Spindle-support.....	480,985	Aug. 16	1972	493	60	989
Woodring, Peter, assignor to himself and J. M. Gross, Kansas City, Mo. Bucksaw.....	482,606	Sept. 13	1140	275	60	1571
Woodruff, Benjamin E. (See Hamilton, John H., assignor.)						
Woodruff, Charles, et al. (See Kenna and O'Connor, assignors.)						
Woodruff, Charles, et al. (See Leahy, Matthew, assignor.)						
Woodruff, Edgar F., Hartwell, Ohio. Combined thill-support and anti-rattler.....	470,613	Mar. 8	1525	398	58	1402
Woodruff, Edmund W., Washington, D. C. Holder for letters, files, &c.....	476,854	June 14	964	234	59	1642
Woodruff, George B., Winsted, Conn. Pinion-chuck.....	483,195	Sept. 27	2072	523	60	1781
Woodruff, George M., Colony, Kans. Corn-harvester.....	483,755	Oct. 4	347	87	61	72
Woodruff, Merrit N., et al. (See Pearce, William, assignor.)						
Woodruff, Oliver D., Southington, Conn. Meat-cutter.....	480,002	Aug. 2	374	93	60	652
Woodruff, Oliver D., Southington, Conn. Meat-cutter.....	482,146	Sept. 6	365	87	60	1407
Woodruff, Oliver D., Southington, Conn., assignor to Enterprise Manufacturing Company, Philadelphia, Pa. Meat-cutter.....	481,882	Aug. 30	3468	851	60	1393
Woodruff, Oliver D., Southington, Conn., assignor to Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Meat-cutter.....	485,854	Nov. 8	1055	281	61	805
Woodruff, Oliver D., Southington, and L. T. Snow, New Haven, Conn. Meat-cutter.....	484,987	Oct. 25	2305	595	61	503
Woodruff, Oliver D., Southington, and L. T. Snow, New Haven, Conn. Meat-cutter.....	484,988	Oct. 25	2308	596	61	504
Woodruff, William F., et al. (See Suyder, William D., assignor.)						
Woodruff, William N. (See Saladee, Cyrus W., assignor.)						
Woodruff, William N., Hartford, Conn. Turret-head for screw-machines.....	466,646	Jan. 5	530	138	58	102
Woods, Charles T., Randolph, Kans. Washing-machine.....	486,805	Nov. 22	2583	673 674	61	1141
Woods, Henry J., Muskegon, Mich. Boat-launching carriage.....	486,012	Nov. 8	1320	351	61	859
Woods, James T., Manti, Utah Ter. Machine for coating pop-corn.....	475,840	May 31	1927	792	59	1297
Woods, John F. M., Oakland, Cal. Reversing-gear.....	475,026	May 17	1833	464 465	59	1017
Woods, Robert, assignor of one-half to J. Garbutt and A. Field, Minto, N. D. Bundle car- rier and shocker.....	472,155	Apr. 5	224	59, 60	59	42
Woods, Samuel W., Anita, Iowa. Draft-equalizer.....	474,493	May 10	978	252	59	836
Woods, William A., San Francisco, Cal. Water gage.....	479,235	July 19	1802	451	60	377
Woods, William L. (See Raymo and Woods.)						
Woodson, J. P., et al. (See Jones and Ashley, assignors.)						
Woodstock, Warren Z., Wytheville, Va. Nut-lock.....	486,147	Nov. 15	1559	413	61	924

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Woodward, Charles E. W., assignor to Overman Wheel Company, Chicopee Falls, Mass. Wheel-tire.	466,548	Jan. 5	380	97	58	73
Woodward, Charles E. W., assignor to Overman Wheel Company, Chicopee Falls, Mass., and Hartford, Conn. Cycle-wheel.	477,397	June 21	1861	458	59	1832
Woodward, Charles E. W., Chicopee Falls, Mass., assignor to Overman Wheel Company, Hartford, Conn. Cycle-lamp.	478,776	July 12	1088	270	60	232
Woodward, Charles E. W., assignor to Overman Wheel Company, Chicopee, Mass. Rim and tire for wheels.	481,340	Aug. 23	2587	635	60	1117
Woodward, Charles E. W., assignor to Overman Wheel Company, Chicopee Falls, Mass. Cycle-wheel.	483,373	Sept. 27	2367	593	60	1836
Woodward, Elmer E., Rockford, Ill. Orange-sizer.	466,817	Jan. 12	823	211	58	166
Woodward, Erastus, Somerville, Mass. Tacking-machine.	468,379	Feb. 9	738	183 184	58	676
Woodward, Erastus, Somerville, Mass. Pegging-machine.	473,136	Apr. 19	1747	441 442	59	356
Woodward, Erastus, Somerville, assignor to Barrett Brothers, Boston, Mass. Machine for marking mail-matter.	469,004	Feb. 16	1742	443	58	884
Woodward, Erastus, Somerville, assignor to Merrick Sewing Machine Company, Boston, Mass. Eyeletting-machine.	476,504	June 7	424	98, 99	59	1520
Woodward, Erastus, Somerville, Mass., assignor to Consolidated Fastener Company, Portland, Me. Button-setting machine.	477,347	June 21	1779	435	59	1816
Woodward, Frank R., Hill, N. H. Combination ice-tool.	466,549	Jan. 5	382	97	58	74
Woodward, Frank R., Hill, N. H. Cake-cutter.	473,281	Apr. 19	1896	502	59	405
Woodward, James E., Yardville, N. J. Whip-holder.	480,356	Aug. 9	976	246	60	779
Woodward, Mary S., Chicago, Ill. Inhaler.	484,944	Oct. 25	2241	577	61	491
Woodward, Robert P., Brooklyn, N. Y. Shirt and chest protector.	476,503	June 7	422	98	59	1519
Woodward, Roland E., Chicago, Ill. Inhaler.	466,718	Jan. 5	656	168	58	124
Woodward, Russel G., Wankegan, assignor to Union Special Sewing Machine Company, Chicago, Ill. Feeding mechanism for sewing-machines.	470,092	Mar. 1	673	166	58	1229
Woodward, Russel G., and C. Timm, assignors to Union Special Sewing Machine Company, Chicago, Ill. Sewing-machine trimmer.	480,377	Aug. 9	1012	254	60	786
Woodward, Theodore B., Norway, Pa. Fire-escape.	479,610	July 26	2427	605	60	513
Woodward, Theodore B., Norway, Pa. Thill-support.	485,023	Oct. 25	2371	609	61	516
Woodward, Thomas, Derby, England. Breakdown gun.	481,290	Aug. 23	2510	617	60	1102
Woodward, Willis J. (See Barckdall, Daniel, assignor.)						
Woodworth, George D., Brooklyn, N. Y. Machine for stamping or branding cigars.	466,480	Jan. 5	271	68, 69	58	52
Woodworth, James E. (See Stager, Henry E., assignor.)						
Woody, Sidney F., Kansas City, Mo. Bill-holder.	464,904	Oct. 25	2170	558	61	477
Woolard, Jesse H. and J. L., Williamston, N. C. Peanut-cleaner.	474,893	May 17	1619	413 414	59	976
Woolard, Josephus L. (See Woolard, Jesse H. and J. L.)						
Woolcott, Charles M. (See Bowers, William, assignor.)						
Woolcott, Henry J., Mariner's Harbor, assignor of one-half to B. B. Stewart, Port Richmond, N. Y. Milling machinery.	468,735	Feb. 9	1291	328	58	787
Woolf, Albert E., assignor, by mesne assignments, to R. Woolf and T. J. Montgomery, New York, N. Y. Process of and apparatus for bleaching by electrolysis.	471,454	Mar. 22	2806	716	58	1670
Woolf, Albert E., assignor, by mesne assignments, to R. Woolf and T. J. Montgomery, New York, N. Y. Process of and apparatus for bleaching by electrolysis. (Reissue).	11,244	June 7	810	193	59	1599
Woolf, Albert E., assignor to R. Woolf and T. J. Montgomery, New York, N. Y. Car-coupling.	478,492	July 5	656	161	60	130
Woolf, Alfred E., St. Louis, Mo. Puzzle.	485,314	Nov. 1	238	66	61	620
Woolf, Ellis J., Minneapolis, Minn. Single-cylinder compound engine.	475,427	May 24	2457	626	59	1155
Woolf, Rosamond, et al. (See Woolf, Albert E., assignor.)						
Woolfolk, Lucien B., Cincinnati, Ohio. Fountain-pen.	480,800	Aug. 16	1677	419 420	60	931
Woolfolk, Lucien B., Cincinnati, Ohio. Fountain-pen.	481,090	Aug. 16	2142	533	60	1021
Woolens, Theodore, Jr., Cheyenne, Wyoming. Rotary water-meter.	473,046	Apr. 19	1600	407	59	330
Woolley, Amos G., et al. (See Wright, Benjamin F., assignor.)						
Woolley, Edgar M., et al. (See Wright, Benjamin F., assignor.)						
Woolley, George W., Washington, D. C. Shield for attachment to penholders or pencils.	467,677	Jan. 26	2228	567	58	446
Woolley, James P., Simcoe, Canada. Cut off for electrical machines.	473,262	Apr. 19	1997	502	59	405
Woolley, Leonidas G., Grand Rapids, Mich. Automatic electric fire-alarm.	471,929	Mar. 29	3510	896	58	1812
Woolley, Leonidas G., Grand Rapids, Mich. Electrical apparatus.	482,668	Sept. 13	1925	299	60	1587
Woolley, Leonidas G., Grand Rapids, Mich. Automatic electric-lighting apparatus.	487,109	Nov. 29	3115	800	61	1264
Woolley, William J., Anderson, Ind. Pottery-machine.	468,391	Feb. 9	760	189	58	680
Woolmough, William, London, England. Apparatus for double-seaming metal cans, tins, &c.	486,999	Nov. 29	2944	759	61	1229
Woolridge, John, Chicago, Ill. Flour-receptacle.	467,218	Jan. 19	1498	383	58	302
Woolridge, John, Chicago, Ill. Bread-board.	469,413	Feb. 23	2355	604	58	1011
Woolstoncroft, Abraham, Centralia, Kans. Listed-corn cultivator.	488,345	Dec. 20	1840	460	61	1720
Woolworth, Felix M. (See Kelley, Harry E., assignor.)						
Woonsocket Edge Tool Company. (See Bailey and Lincoln, assignors.)						
Woonsocket Machine and Press Company. (See Geb, Jacob F., assignor.)						
Wooster, Frederick J., assignor to Waterbury Brass Company, Waterbury, Conn. Mold for casting.	475,652	May 24	2807	711	59	1223
Wooster, George H., New York, N. Y. Material for the treatment of walls.	471,163	Mar. 22	2368		58	1586
Wooster, Herbert S., Bath, England. Billiard-score keeper and game-counter.	470,275	Mar. 8	971	240 241	58	1296
Worcester, James S., Hackensack, N. J. Cultivator-tooth.	481,129	Aug. 16	2207	546	60	1033
Worcester, Joseph R., Waltham, assignor of one-half to D. H. Andrews, Boston, Mass. Bridge-flooring.	480,483	Aug. 9	1186	298	60	819
Worden, Charles, Rye, N. Y. Holder or rack.	481,455	Aug. 23	2770	682	60	1152
Worden, Charles A., U. S. Army. Machine for sharpening razors.	487,140	Nov. 29	3162	810 811	61	1272
Worden, Elmer J., Grand Rapids, Mich. Folding table.	467,845	Jan. 26	2503	634	58	499
Worden, George W., Dover, Del. Crate for shipping baskets.	473,047	Apr. 19	1601	407 408	59	330
Worden, James M. (See Greeley, Andrew J., assignor.)						
Work, Milton C., Philadelphia, Pa. Apparatus for duplicate whist.	481,995	Sept. 6	113	28	60	1357
Worm, Henry A., Zanesville, Ohio. Child's carriage.	467,846	Jan. 26	2504	634	58	499
Worn, Mary E., Philadelphia, Pa. Pencil-sharpener.	472,420	Apr. 5	641	164	59	120
Wörner, Adolf, Buda-Pesth, Austria-Hungary, assignor to Siemens & Halske, Berlin, Germany. Tram-car.	480,310	Aug. 9	911	230	60	768
Wörner, Adolf, Buda-Pesth, Austria-Hungary, assignor to Siemens & Halske, Berlin, Germany. Drive-chain.	486,920	Nov. 29	2823	731	61	1206

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. ^g	Vol.	Page.
Wörner, Adolf, Buda-Pesth, Austria-Hungary, assignor to Siemens & Halske, Berlin, Germany. Electric-railway trolley	487,813	Dec. 13	949	240	61	1527
Worner, Christian H., <i>et al.</i> (See Myers, Henry, assignor.)						
Worrall, Arthur J., assignor of one-half to T. Ball, Jersey City, N. J. Resilient frame attachment for mats	470,614	Mar. 8	1525	398	58	1402
Worrest, Alfred H., Glen Loch, Pa. Fertilizer-feeder	469,801	Mar. 1	221	56	58	1144
Worrest, Alfred H., Lancaster, Pa. Fifth-wheel	488,237	Dec. 20	1663	415	61	1686
Worst, Warren H. (See Rupert and Worst.)						
Wortham, John E., assignor of one-half to H. C. Salls, Grand Tower, Ill. Artificial arm	483,090	Sept. 20	1900	480	60	1735
Worthen, Arthur E., assignor of one-half to C. L. Sprague, Melrose, Mass. Dental jaw-brace	480,357	Aug. 9	977	246	60	779
Worthen, William H., Brooklyn, N. Y. Condenser	466,550	Jan. 5	323	97	58	74
Worthington, Charles C., Irvington, N. Y. Engine-register	476,588	June 7	540	129	59	1544
Worthington, Charles C., Irvington, N. Y. Feed-water heater for steam-boilers	485,570	Nov. 1	640	170 171	61	704
Worthington, George J. (See Garaghty and Worthington.)						
Worthington, Lewis N., Canandaigua, N. Y. Creating memorials of deceased persons	473,597	Apr. 26	2546		59	533
Worthington, Thomas, <i>et al.</i> (See Basket, James M., assignor.)						
Worthington, Thomas K., <i>et al.</i> (See Silkman, Edward J., assignor.)						
Wortman, Alve, Seafield, Ind. Combined section-closer and foundation-fastener for honey-sections	468,380	Feb. 9	742	184	58	677
Wortmann, Sigismund B., New York, N. Y. Mechanical movement	468,167	Feb. 2	390	97	58	600
Worts, George. (See Smith, Charles A., assignor.)						
Wotton, James A., assignor of one-half to J. D. Easterlin, Atlanta, Ga. Safety-fuse for electric conductors	466,761	Jan. 5	728	188	58	132
Wreden, Robert, St. Petersburg, Russia. Shears	467,025	Jan. 12	1164	295	58	230
Wreden, Robert, St. Petersburg, Russia. Microtelephonic apparatus for divers	478,493	July 5	658	161 162	60	131
Wren, Charles A., Coral, Me. Plow-cutter	488,863	Dec. 27	2660	658	61	1900
Wrenn, McD. L. (See Whitehurst, Robert W., assignor.)						
Wrenshall, Charles C., Anniston, Ala. Nut-lock	482,910	Sept. 20	1622	406	60	1677
Wright, Abram W., assignor to Ramapo Iron Works, Hillburn, N. Y. Switch-clip	484,622	Oct. 18	1691	429	61	366
Wright, Alfred A. (See Bryant, Charles A., assignor.)						
Wright, Alfred A., Montclair, N. J. Hook and eye	466,857	Jan. 12	888	228	58	178
Wright, Allen J., Cleveland, Ohio. High and low water alarm	479,482	July 26	2243	563	60	479
Wright, Augustine W., Chicago, Ill., assignor to Siemens & Halske Electric Company of America, of Illinois. Electric-railway conduit	486,315	Nov. 15	1816	479	61	976
Wright, Augustus, Providence, R. I. Electric switch	468,125	Feb. 2	325	80	58	588
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Support for electric-arc lamps	480,539	Aug. 9	1266	318	60	835
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Mast-arm	481,381	Aug. 23	2619	649	60	1128
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Support for electric lamps	482,112	Sept. 6	308	72, 73	60	1395
Wright, Augustus, assignor to Hope Electric Appliance Company, Providence, R. I. Electric switch and case	482,936	Sept. 20	1652	416	60	1684
Wright, Benjamin, Hudson, Mich. Pump	485,250	Nov. 1	147	43	61	603
Wright, Benjamin F., Hartwell, assignor of two-thirds to A. G. and E. M. Woolley, Cincinnati, Ohio. Cash-register	482,956	Sept. 20	1692	426	60	1692
Wright, Beverly W., and E. E. Rogers, Preston, Md. Can-labeling machine	488,346	Dec. 20	1841	460 461	61	1720
Wright, Cass T., <i>et al.</i> (See Abbott, Charles J., assignor.)						
Wright, Charles E., Vicksburg, Miss. Dam or levee	479,543	July 26	2328	581	60	495
Wright, Charles L., New York, N. Y. Apparatus for insulating delicate mechanism from vibration	466,818	Jan. 12	823	212	58	167
Wright, Chester, Fairfield, Nebr. Potato-planter	481,456	Aug. 23	2771	682 683	60	1152
Wright, David A. (See Minear, Solomon C., assignor.)						
Wright, David D., and W. R. Berry, Peoria, Ill. Saddle for velocipedes	479,969	Aug. 2	311	76	60	641
Wright, E. K., <i>et al.</i> (See Nolley, David D., assignor.)						
Wright, Edgar A., Memphis, Tenn. Cotton-chopper	479,693	July 26	2558	636	60	537
Wright, Elias M., Buffalo, N. Y. Burner for oil-stoves	469,510	Feb. 23	2506	642	58	1039
Wright, Eliza M., Brooklyn, N. Y. Hook-and-eye safety-pin	483,886	Oct. 4	540	136	61	112
Wright, Emerson, <i>et al.</i> (See Shaw, Henry R., assignor.)						
Wright, Fairchild N., <i>et al.</i> (See Abbott, Charles J., assignor.)						
Wright, Franklin H., Toronto, Canada. Machine for bashing mortises	470,276	Mar. 8	974	241 242	58	1297
Wright, Fred, Coldwater, Mich. Picket-fence machine	468,719	Feb. 9	1267	322 323	58	782
Wright, Frederic W., Great Neck, N. Y. Hose-coupling	471,661	Mar. 29	3092	786 787	58	1731
Wright, Frederic W., Great Neck, N. Y. Hose-coupling	471,662	Mar. 29	3095	787	58	1732
Wright, Frederic W., Great Neck, N. Y. Hose-coupling	474,894	May 17	1621	414 415	59	976
Wright, Frederic W., Great Neck, N. Y. Hose-coupling	477,239	June 21	1610	394	59	1784
Wright, Frederic W., Great Neck, N. Y. Hose-coupling	485,729	Nov. 8	891	239	61	772
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, and R. E. Dietz Company, New York, N. Y. Tubular lantern	476,505	June 7	426	99	59	1520
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, N. Y. Wick-raiser attachment for lanterns	476,506	June 7	427	100	59	1521
Wright, George E., assignor of one-half to D. Houlihan, Newark, N. J. Device for plugging sprinkler-heads	478,181	July 5	174	45	60	37
Wright, George T., <i>et al.</i> (See Eastham, Charles L., assignor.)						
Wright, Gilbert, Newton, Mass. Check punching and marking machine	485,444	Nov. 1	452	121	61	665
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Door-spring	478,387	July 5	506	123	60	100
Wright, Granville W., assignor to Sargent & Company, New Haven, Conn. Pneumatic door-check	478,388	July 5	507	123	60	100
Wright, Henry C., <i>et al.</i> (See Dickey, Foster, assignor.)						
Wright, Henry M., Aspen, Colo. Whiffletree	486,947	Nov. 29	2868	741	61	1214
Wright, James A., and J. B. Rockingham, N. C. Advertising device	485,676	Nov. 8	802	214	61	753
Wright, James E. (See Guiley and Wright.)						
Wright, James K. (See Wright, John A., assignor.)						
Wright, John, Cleveland, Ohio. Match-board	469,879	Mar. 1	342	88	58	1167

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Wright, John A., assignor of one-half to J. K. Wright, Grayling, Mich. Baling-press	467,475	Jan. 19	1833	{ 483 484 }	{ 58 }	377
Wright, John B. (See Wright, James A. and J. B.)						
Wright, John E., New York, N. Y., assignor, by mesne assignments, to American Type- Telegraph, of New Jersey. Printing-telegraph	466,858	Jan. 12	889	{ 228 229 }	{ 58 }	178
Wright, John G., Spring Valley, Ill. Chain propeller	484,485	Oct. 18	1433	378	61	323
Wright, John M., Fayetteville, N. C. Railway-track jack	486,389	Nov. 15	1928	511	61	999
Wright, John P., Thomaston, Tex. Powder-duster	478,901	July 12	1275	316	60	267
Wright, John R., Morocco, Ind. Velocipede	478,674	July 12	928	231	60	199
Wright, John W. (See Scott and Wright.)						
Wright, John W., New York, N. Y. Sash-fastener	469,313	Feb. 23	2198	563	58	979
Wright, Joseph W., Guion, Tex. Adding-machine	476,350	June 7	192	45, 46	59	1473
Wright, Judson E., assignor of one-half to W. B. Moore, Chicago, Ill. Rotary sickle	468,859	Feb. 16	1488	379	58	835
Wright, Martin, Leicester, England. Writing and print copying machine	477,482	June 21	1995	{ 495 496 }	{ 59 }	1858
Wright, Maryette, <i>et al.</i> (See Abbott, Charles J., assignor.)						
Wright, Napoleon B., assignor of nine-twentieths to C. H. Knapp and W. J. Walters, Syracuse, N. Y. Cash-register	478,532	July 5	730	178	60	145
Wright, Parvin, Denver, Colo. Elevator	477,730	June 28	2404	601	59	1958
Wright, Parvin, assignor of one-half to J. W. Kinsey, Denver, Colo. Switch-box for electric motors	472,283	Apr. 5	430	110	59	80
Wright, Rezin C., Colorado Springs, Colo. Car-brake	484,486	Oct. 18	1484	378	61	324
Wright, Robert, Detroit, Mich. Gymnastic apparatus	478,833	July 12	1188	{ 294 295 }	{ 60 }	250
Wright, Samuel, Mountain Grove, Mo. Tanning compound	473,805	Apr. 26	2857		59	592
Wright, Sammel, assignor to himself, J. Muir, and W. Boyd, Glasgow, Scotland. Machine for preparing and jointing staves, for casks and barrels	469,459	Feb. 23	2422	{ 620 621 }	{ 58 }	1024
Wright, Samuel, assignor to himself, J. Muir, and W. Boyd, Glasgow, Scotland. Mechan- ism used in the manufacture of barrels	471,838	Mar. 29	3388	{ 864 865 }	{ 58 }	1787
Wright, Samuel, assignor to himself, J. Muir, and W. Boyd, Glasgow, Scotland. Machine for turning or shaping the heads of casks	477,039	June 14	1258	305	59	1702
Wright, Samuel H., Dublin, Ireland. Clip for holding papers or for other purposes	486,316	Nov. 15	1817	479	61	976
Wright, Syrus W., Eden, Ala. Car-coupling	479,483	July 26	2245	563	60	479
Wright, Walter B., Chicago, Ill. Traction device for tram-cars	468,860	Feb. 16	1490	380	58	835
Wright, Walter S., Chicago, Ill. Gas water-heater	479,869	Aug. 2	145	35	60	610
Wright, William, McDonald, Pa. Device for raising and lowering buggy-curtains	467,966	Feb. 2	86	21	58	541
Wright, William, Newburg, N. Y. Engine cross-head	475,428	May 24	2459	{ 626 627 }	{ 59 }	1155
Wright, William, New York, N. Y., assignor to Columbian Electric Light, Power, Heat, and Manufacturing Company, of New Jersey. Battery compound	484,385	Oct. 11	1316		61	280
Wright, William, assignor to D. P. Sullivan, Boston, Mass. Strainer for mixed drinks	484,276	Oct. 11	1150	293	61	247
Wright, William A., Centerton, N. J. Speed-changing mechanism	475,735	May 24	2938	746	59	1246
Wright, William H., Buffalo, N. Y. Hardening steel articles	470,277	Mar. 8	980	242	58	1299
Wright, William J., Cooperstown, assignor to Stave Jointer and Planer Company, Oil City, Pa. Stave trimming and jointing machine	475,227	May 17	2135	{ 541 542 }	{ 59 }	1077
Wright, William J., Cooperstown, assignor to Stave Jointer and Planer Company, Oil City, Pa. Stave-jointing machine	488,914	Dec. 27	2742	676	61	1917
Wrigley, William H., New Orleans, La. Bed-fan	474,710	May 10	1322	337	59	903
Wrigley, William H., New Orleans, La. Coffee-pot	476,718	June 7	732	181	59	1583
Wrighting Telegraph Company. (See Etheridge, Harry, assignor.)						
Wroughton, Burton. (See Moore and Wroughton.)						
Wroughton, Cyrus L. (See Moore and Wroughton.)						
Wuagneux, Philip H. (See Kastenhuber, Wuagneux, and States.)						
Wucherer, John G., Columbus, Ohio. Machine for sharpening slate-pencils	470,615	Mar. 8	1526	398	58	1402
Wuefling, Paul, Indianapolis, Ind. Car starter and brake	486,520	Nov. 22	2124	561	61	1051
Wuest, Philip, Jr., assignor to C. J. and F. J. Heppie, Philadelphia, Pa. Sounding-board for pianos	486,013	Nov. 8	1323	351	61	860
Wuest, Philip, Jr., assignor to C. J. and F. J. Heppie, Philadelphia, Pa. Piano-key coupler	486,317	Nov. 15	1817	{ 479 480 }	{ 61 }	976
Wunderlich, Charles W., Washington, Mo. Gun-cleaner	484,487	Oct. 18	1485	378	61	324
Wunderlich, Fritz. (See Krueger and Wunderlich.)						
Wurmb, Theodore H. (See Smith, Andrew J., assignor.)						
Wurmb, Theodore H. (See Walker, William J., assignor.)						
Wurth, Louis J. (See Beardsley, Moulton, and Wurth.)						
Wurts, Alexander. (See Scott and Wurts.)						
Wurts, Alexander, Pittsburg, Pa. Circuit-interrupting device	470,161	Mar. 1	777	192	58	1249
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pitts- burg, Pa. Circuit-interrupting device	470,772	Mar. 15	1763	453	58	1457
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pitts- burg, Pa. Circuit-interrupting device	470,773	Mar. 15	1764	454	58	1457
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pitts- burg, Pa. Apparatus for protecting circuits	470,774	Mar. 15	1767	{ 454 455 }	{ 58 }	1458
Wurts, Alexander, assignor to Westinghouse Electric and Manufacturing Company, Pitts- burg, Pa. Lightning-arrester	476,855	June 14	967	235	59	1643
Wurzburg, Ludwig, London, England. Sealing device	482,216	Sept. 6	485	116	60	1429
Wurzburg, W. F., <i>et al.</i> (See Wurzburg and Tloczynski, assignors.)						
Wurzburg, W. M., <i>et al.</i> (See Wurzburg and Tloczynski, assignors.)						
Wurzburg, William F. and W. M., and A. A. Tloczynski, assignors to W. F. and W. M., Wurzburg, Grand Rapids, Mich. Cash register and indicator	486,815	Nov. 22	2603	{ 678 679 }	{ 61 }	1146
Wurzburg, William M. (See Wurzburg and Tloczynski.)						
Wyant, Eli M., Waterloo, Iowa. Door-closer	482,836	Sept. 20	1494	371	60	1654
Wyatt, Daniel M., assignor of one-half to E. W. Hill, Covington, Ohio. Umbrella-lock	475,736	May 24	2940	746	59	1217
Wyatt, Harry F., New York, N. Y. Chromatic-printing machine	469,767	Mar. 1	156	41, 42	58	1130
Wylde, Edward, assignor to Elevator Supply and Repair Company, Chicago, Ill. Indi- cator for elevators	479,484	July 26	2246	563	60	479
Wylie, Arthur J., Rome, N. Y. Insulator	481,457	Aug. 23	2772	683	60	1152
Wyman, Adolphus F., New Bedford, Mass. Pneumatic tire	481,323	Aug. 23	2563	629	60	1112
Wyman, Charles A., Hutchinson, Minn. Clay-separator	471,322	Mar. 22	2602	660	58	1631
Wynau, Horace, and J. A. Clark, assignors to Crompton Loom Works, Worcester, Mass. Weft stop-motion for looms	477,731	June 28	2406	601	59	1958
Wyman, Horace, and J. A. Clark, assignors to Crompton Loom Works, Worcester, Mass. Loom	480,684	Aug. 9	1503	374	60	981
Wyman, Horace, and A. A. Gordon, assignors to Crompton Loom Works, Worcester, Mass. Friction let-off for looms. (Reissue)	11,288	Nov. 29	3347	852	61	1306

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr. g.	Vol.	Page.
Wyman, Maud, San Francisco, Cal. Slate attachment	488,411	Dec. 20	1948	487	61	1742
Wymble Manufacturing Company. (See Scharling, John H., assignor.)						
Wynkoop, Jehiel F., Corsica, Pa. Trace-holder	485,825	Nov. 8	1012	272	61	796
Wynne, Henry G., assignor to Novelty Iron Building Company, New York, N. Y. Metal-lic structure	468,924	Feb. 16	1587	412	58	854
Wyns, Alfred, Münster, Germany. Tracing apparatus	472,099	Apr. 5	137	37	59	26
Wyoming Boiler Company. (See Pollock, James, assignor.)						
Wysong, Adolph. (See Wickers, Barney C., assignor.)						
Wythe, William W., Orange, N. J., assignor to L. L. F. Fixture Company, of New Jer-sey. Window-shade fixture	475,228	May 17	2141	543	59	1078
Xander, George A., assignor of one-half to A. Murdoch, Hamburg, Pa. Railway time-signal	473,862	Apr. 26	2950	744	59	610
Yackee, August A., Roberts, Ill. Colter for plows	472,186	Apr. 5	277	72	59	52
Yaeger, Philomena B., Helena, Mont. Trunk	479,485	July 26	2249	564	60	480
Yaiser, Gustav A., Boston, Mass. Vegetable-slicer	466,930	Jan. 12	1016	259	58	202
Yale, Charles O., New York, N. Y. Safe	468,803	Dec. 27	2564	636	61	1880
Yale & Towne Manufacturing Company. (See Ballou, Waldo R., assignor.)						
Yale & Towne Manufacturing Company. (See Berry, Charles A., assignor.)						
Yale & Towne Manufacturing Company. (See Bullard, Frederick H., assignor.)						
Yale & Towne Manufacturing Company. (See Harriott, John W., assignor.)						
Yale & Towne Manufacturing Company. (See Stockwell, Emory and H. C., assignors.)						
Yale & Towne Manufacturing Company. (See Taylor, Warren H., assignor.)						
Yale & Towne Manufacturing Company. (See Weston, Thomas A., assignor.)						
Yarbro, Frank B. (See Callaway, William, Sr., assignor.)						
Yarborough, Oreneth F., Dallas, Tex. Seed-planter	471,728	Mar. 29	3214	818	58	1753
Yard, Frank A., assignor to E. A. More, trustee, St. Louis, Mo. Cable-grip	483,952	Oct. 4	638	160	61	131
Yarrington, Charles H., assignor of one-half to P. F. Deeley, Torrington, Conn. Swaging-machine	483,091	Sept. 20	1901	{ 480 481 }	{ 60 }	1735
Yarrow, Alfred F., London, England, assignor to H. See, New York, N. Y. Water-tube boiler	472,777	Apr. 12	1176	301	59	235
Yaryan Company. (See Yaryan, Homer T., assignor.)						
Yaryan Fifth Wheel Company. (See Bosart, Timothy L., assignor.)						
Yaryan, Homer T., Toledo, Ohio, assignor to Yaryan Company, Mechanicsville, N. Y. Vacuum evaporating apparatus	485,315	Nov. 1	239	66	61	621
Yates, Henry G., assignor to Universal Ball Bearing Wheel Company, San Francisco, Cal. Ball-bearing	468,067	Feb. 2	241	59	58	571
Yates, John S. (See Johnson, William B., assignor.)						
Yates, Marcus R., Burrows, Mo. Fence-wire twister	476,856	June 14	969	235	59	1643
Yates, William B., Chicago, Ill. Printing-press	471,368	Mar. 22	2673	680	58	1645
Yates, William B., Chicago, Ill. Reciprocating mechanism for printing-presses	471,369	Mar. 22	2675	680	58	1646
Yeadon, John A., and W. Adgie, Leeds, England. Retort-furnace	477,286	June 21	1686	{ 413 414 }	{ 59 }	1798
Yeager, James E., Waco, Tex. Folding bed	474,587	May 10	1133	289	59	866
Yeakel, Abraham M., Allentown, Pa. Watchcase-pendant	467,390	Jan. 19	1760	449	58	350
Yeakley, Melvin A., assignor of one-half to R. A. Robertson, Cleveland, Ohio. Safety at-tachment for railway-trolleys	476,028	May 31	3412	{ 861 862 863 }	{ 59 }	1354
Yeaton, Edgar A., Lyons, Nehr. Car-coupling	469,110	Feb. 16	1881	481	58	912
Yeiser, Edmund. (See Miller and Yeiser.)						
Yeiser, Frederick, Tampa, Fla. Electric motor	477,483	June 21	1997	{ 496 497 }	{ 59 }	1859
Yelland, William H., et al. (See Soley and Perkins, assignors.)						
Yerington, Reuben, Middleville, Mich. Harness-buckle	466,647	Jan. 5	533	139	58	103
Yingling, George S., Tiffin, Ohio, assignor of one-half to J. K. Pfaltzgraff & Co., York, Pa. Chemical compound for treating tobacco	475,737	May 24	2942	{ 273 274 }	{ 59 }	1247
Yoder, Simon P., Ligonier, Ind. Harrow attachment for sulky-plows	485,830	Nov. 8	1018	{ 274 275 }	{ 61 }	797
York, Henry, and F. W. Austin, Colton, Cal. Lifting-jack	480,646	Aug. 9	1442	359	60	870
York, James E. (See Stevenson, John L., assignor.)						
York, Levi D., Portsmouth, Ohio. Jail-bar	480,358	Aug. 9	978	246	60	779
York Manufacturing Company. (See St. Clair, Stuart, assignor.)						
York, Robert. (See Louthian, John E., assignor.)						
Yorke, Patrick, Washington, Pa. Apparatus for drilling Artesian wells	475,913	May 31	3244	819	59	1320
Yost, Abraham and F., New York, N. Y. Unicycle	481,883	Aug. 30	3471	851	60	1304
Yost, Fernando. (See Yost, Abraham and F.)						
Yost, George W. N., assignor to Yost Writing Machine Company, New York, N. Y. Type-writing machine	474,936	May 17	1682	430	59	989
Yost, George W. N., assignor, by mesne assignments, to Yost Writing Machine Company, New York, N. Y. Type-writing machine	474,937	May 17	1684	430	59	989
Yost, George W. N., assignor, by mesne assignments, to Yost Writing Machine Company, New York, N. Y. Type-writing machine	474,938	May 17	1687	431	59	990
Yost, William L., Wytheville, Va. Revolving case	488,594	Dec. 27	2243	556	61	1817
Yost Writing Machine Company. (See Davidson, Alexander, assignor.)						
Yost Writing Machine Company. (See Merritt, Mortimer G., assignor.)						
Yost Writing Machine Company. (See Wallace, Casper D., assignor.)						
Yost Writing Machine Company. (See Yost, George W. N., assignor.)						
Youlin, Arvine J., Chicago, Ill. Game-counter	471,593	Mar. 29	3002	764	58	1715
Youlten, Annie F. M., London, England. Sliding window	469,955	Mar. 1	468	{ 116 117 }	{ 58 }	1189
Young, Amasa H., Centralia, Ill. Folding gate	480,159	Aug. 2	640	162	60	704
Young, Annie M., Providence, R. I. Dress facing and protector	474,074	May 3	303	73	59	696
Young, Andrew, Union City, Pa. Bag-holder	484,079	Oct. 11	835	211	61	186
Young, Arthur A. (See Lambert, George A., assignor.)						
Young, Benjamin F., J. L. and P. S. Vogel, Smithsburg, Md. Cultivator	470,030	Mar. 1	578	144	58	1211
Young, Charles E., Sabetha, Kans. Trace-guide	476,719	June 7	733	181	59	1583
Young, Charles H., assignor to D. A. Weyer, Kansas City, and W. Clow, Independence, Mo. Cloth-measuring machine	473,103	Apr. 19	1679	426	59	344
Young Coloring Company. (See Young, James A., assignor.)						
Young, Cornelius, Selma, Ala. Cotton-cleaning machine	482,669	Sept. 13	1228	299	60	1588
Young, Dewitt E., and W. F. Littell, Wellsville, Colo., assignors, by mesne assignments, to Littell Indicator Lock and Car Seal Company. Indicator-lock	483,092	Sept. 20	1903	481	60	1735
Young, Edward T., assignor of one-half to W. Scott, Detroit, Mich. Reversing mechanism for elevators. (Reissue)	11,251	June 28	2957	{ 738 739 }	{ 59 }	2062

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Young, George, Winton, F. Pearn, Gorton, near Manchester; said Pearn assignor to W. Crippin, Egerton Mills, Patricroft, near Manchester, England. Apparatus for bleaching and dyeing	479,383	July 19	2045	511	60	426
Young, George C., and G. O. Willever, assignors of one-third to J. M. R. Shimer, Phillipsburg, N. J. Automatic mechanical block railway-signal	481,884	Aug. 30	3472	851	60	1304
Young, George H., Davenport, Iowa. Neck-yoke	475,841	May 31	3128	792	59	1297
Young, George W., assignor of one-half to G. Knowles, Jr., Milwaukee, Wis. Automatic valve	469,768	Mar. 1	158	42	58	1130
Young, Harlan P., Lowell, Mass. Horn	488,238	Dec. 20	1664	415	61	1686
Young, Henry B. (See Young, John D. and H. B.)						
Young, Jacob, Trenton, N. J. Skate-sharpener	471,164	Mar. 22	2368	605	58	1586
Young, James A., assignor to Young Coloring Company, Boston, Mass. Apparatus for disintegrating, mixing, and other purposes	472,421	Apr. 5	642	164	59	120
Young, James A., assignor to Young Coloring Company, Boston, Mass. Dyeing wool	475,229	May 17	2142	543	59	1078
Young, James D., Elgin, Tex. Car-coupling	476,351	June 7	194	46	59	1474
Young, James F., Manhasset, N. Y. Candle-holder	474,768	May 10	1411	359	59	921
Young, James H., Troy, N. Y. Machine for turning collars and cuffs	462,859	Sept. 20	1528	380	60	1661
Young, James M., Pittsburg, Pa. Stand for range-boilers	478,494	July 5	661	162	60	131
Young, John, Tiffin, Ohio. Fruit-can	466,648	Jan. 5	534	139	58	103
Young, John A., Fulbright, Tex. Rein-holder	474,433	May 10	887	231	59	820
Young, John C. (See Upp and Young.)						
Young, John D., Barnstable, and H. B. Young, London, England. Oil-lamp	479,344	July 19	1981	495	60	414
Young, John G., Jr., assignor of one-half to E. B. Pendleton, Hyde Park, Mass. Paper-box machine	471,930	Mar. 29	3512	{ 897 898 }	58	1812
Young, John G., Jr., assignor of one-half to E. B. Pendleton, Hyde Park, Mass. Mechanical movement	471,931	Mar. 29	3518	898	58	1813
Young, John S., Brooklyn, N. Y. Clasp	474,277	May 3	600	149	59	754
Young, John V., Boston, Mass., assignor to Union Switch and Signal Company, Swissvale, Pa. Electric signal-circuit	468,138	Dec. 13	1486	374	61	1635
Young, Josiah L., Buffalo, N. Y., assignor of one-half to C. H. Edgar, trustee. Method of and apparatus for producing stencils	478,675	July 12	930	231	60	200
Young, Josiah L., Tarrytown, assignor to C. H. Edgar, trustee, Brooklyn, N. Y. Type-writer for stencil-making	486,059	Nov. 8	1394	360	61	874
Young, Levi H., St. John, Canada. Nut-lock	478,300	July 5	379	92	60	76
Young, Robert G., assignor of one-half to T. B. Miller, Helena, Mont. Ink-well	472,649	Apr. 12	985	255	59	300
Young, Robert J., et al. (See Cross, Thomas A., assignor.)						
Young, Samuel, and M. Moskowitz, Newark, N. J. Car-coupling	466,481	Jan. 5	273	69	58	55
Young, Samuel, and M. Moskowitz, assignors of one-half to L. D. Adler and J. Loewenberg, Newark, N. J. Car-coupling	471,739	Mar. 29	3231	822	58	1753
Young, Samuel, and M. Moskowitz, assignors of one-fourth to L. D. Adler and J. Loewenberg, Newark, N. J. Electric car-lighting system	478,183	July 5	176	46	60	37
Young, Samuel, M. Moskowitz, L. D. Adler, and J. Loewenberg, Newark, N. J. Electrical distribution for cars	478,182	July 5	175	45, 46	60	37
Young, Samuel G., New York, N. Y. Combined ruler and blotter	477,586	June 21	2159	536	59	1691
Young, Stina C., Englewood, Ill. Window-sash	471,663	Mar. 29	3097	788	58	1732
Young, Theodore F. (See Guarrant, George M., assignor.)						
Young, Wesley. (See Tiffany, Albert R., assignor.)						
Young, Wesley, assignor of one-half to A. R. Tiffany, Dayton, Ohio. Package-case	472,008	Mar. 29	3619	924	58	1833
Young, William A., Mandeville, Mo. Corn-harvester	486,014	Nov. 8	1324	{ 351 352 }	61	860
Young, William A., and A. G. Neville, Blairsville, Pa. Manufacturing central-draft lamps	484,277	Oct. 11	1152	293	61	247
Young, William E., assignor of one-half to J. F. Kohne, Toledo, Ohio. Lathe	470,278	Mar. 8	981	242	58	1299
Young, William J., Lynn, Mass. Heel-press	486,921	Nov. 29	2825	731	61	1206
Younglove, Seward D. (See Cherry and Younglove.)						
Youngs, Edwin J. (See Mallory and Youngs.)						
Youngs, Fred E., Allegheny, Pa. Bicycle-handle	471,932	Mar. 29	3519	898	58	1813
Youngs, Fred E., Allegheny, Pa. Proportional meter	473,544	Apr. 26	2439	{ 617 618 }	59	511
Youngs, Fred E., Allegheny, Pa. Air or gas meter	485,075	Oct. 25	2441	{ 627 628 }	61	531
Youngs, Fred E., Allegheny, Pa. Air or gas meter	485,076	Oct. 25	2443	{ 628 629 }	61	531
Youngs, Fred E., Pittsburg, Pa. Proportional meter	473,545	Apr. 26	2441	618	59	511
Yule, George, Newark, N. J., and W. A. Baglin, New York, N. Y. Machine for wringing hats	483,823	Oct. 4	455	113	61	94
Yule, John S., Glasgow, Scotland. Automatic advertising apparatus	484,576	Oct. 18	1616	410	61	351
Yungbauer, Joseph, assignor of one-half to T. B. Myers, St. Paul, Minn. Electric alarm-clock	469,802	Mar. 1	223	56	58	1144
Zachry, W. I., et al. (See Wood, Albert A., assignor.)						
Zachule, Joseph. (See Holland, William, assignor.)						
Zagelmeyer, Alexander, West Bay City, Mich. Walk and bridge plank	482,536	Sept. 13	1039	251	60	1552
Zahn, Benjamin J., Roberts, Ill. Horse-collar	473,050	Apr. 19	1604	{ 408 409 }	59	331
Zahn, Henry, Denver, Colo. Artificial fuel	478,039	June 28	2899		59	2052
Zahn, William. (See Endemann, Hermann, assignor.)						
Zahner, Frederick J., Stanwich, Conn. Dumb-waiter signal	467,073	Jan. 12	1248	316	58	245
Zähler-Mösl, Johann J., Rehobol, Switzerland. Cloth-winding machine	473,602	Apr. 26	2550	643	59	533
Zahringer, Frank X., Bell Air, Mo. Nail-extractor	488,595	Dec. 27	2241	556	61	1817
Zabnski, Edmund L., U. S. Army. Artillery-cartridge	467,400	Dec. 6	279	72	61	1376
Zalsman, John F., Holland, Mich. Ice-velocipede	476,857	June 14	970	235	59	1636
Zalud, Albert, assignor of one-half to A. J. Erhart, Chicago, Ill. Reflector	483,197	Sept. 27	2075	524	60	1781
Zander, Johan A., San Francisco, Cal. Wrench	473,048	Apr. 19	1602	408	59	330
Zappert, Hermann C., St. Louis, Mo. Drying-kiln for lumber	488,412	Dec. 20	1949	487	61	1742
Zastrow, George W., Baltimore, Md. Machine for treating pineapples	482,493	Sept. 13	965	234	60	1537
Zauner, Alexander, San Antonio, Tex. Floor-clamp	484,488	Oct. 18	1487	378	61	324
Zavadil, Ignatius W., Humphrey, Neb. Music-rack	483,244	Sept. 27	2147	514	60	1795
Zellman, Charles G., Albany, N. Y. Urinal	473,806	Apr. 26	2858	718	59	592
Zeip, John H. E., St. Louis, Mo. Feed-bag holder	484,278	Oct. 11	1153	293	61	248
Zeiser, Jennie E., Schenectady, N. Y. Scrubbing-pail	475,429	May 24	2460	627	59	1155
Zeitler, Friedrich A. (See Cocchi and Zeitler.)						
Zell, Nicholas J., Reading, Pa. Padlock	481,458	Aug. 23	2773	683	60	1152
Zell, Robert R., Baltimore, Md. Furnace	480,378	Aug. 9	1014	254	60	786
Zell, Robert R., assignor to Campbell & Zell Company, Baltimore, Md. Water-tube boiler	469,810	Mar. 1	234	59	58	1146

Alphabetical list of patentees—Continued.

Name, residence, and invention.	No.	Date.	Monthly volume.		Official Gazette.	
			Spec.	Dr'g.	Vol.	Page.
Zellers, Theodor A., assignor to Ottawa Glass Company, Ottawa, Ill. Carrier for conveying glass from flattening-ovens.	474,983	May 17	1768	{ 447 448 893 894	{ 59	1004
Zellers, William H., Philadelphia, Pa. Circular-knitting machine.	476,110	May 31	3550	{ 122 114	{ 59	1382
Zellner, Elvin T., Philadelphia, Pa. Cigar-press.	480,055	Aug. 2	479	122	60	673
Zempter, George H., R. A. Manning, and G. W. Overall, Memphis, Tenn. Cotton-harvester.	483,824	Oct. 4	457	114	61	94
Zervas, Josef, <i>et al.</i> (See Hoz, Adolf, assignor.)						
Zennert, Emil O., Leisnig, Germany. Carding-machine.	469,381	Feb. 23	2303	{ 592 593	{ 58	1001
Ziegler, Adam J., assignor of one-half to S. H. Martin, Lincoln, Ill. Veterinary instrument.	486,153	Nov. 15	1568	416	61	925
Ziegler, Alfred M., Boston, Mass. Suspender-end	487,041	Nov. 29	3005	774	61	1240
Ziegler, Alfred M., Boston, Mass. Elastic cord and making the same.	487,042	Nov. 29	3007	774	61	1241
Ziegler, Alfred M., Boston, Mass. Buckle	487,043	Nov. 29	3008	774	61	1241
Ziegler, Alfred M., Boston, Mass. Suspender-buckle	487,044	Nov. 29	3010	774	61	1241
Ziegler, Berthold, Todtnau, Germany. Rotary disintegrator and separator for fibrous materials	469,495	Feb. 23	2481	{ 636 637	{ 58	1035
Ziegler, Edward E. (See Meigs and Ziegler, assignors.)						
Ziegler, Frank A. (See Metcalfe and Ziegler.)						
Ziegler, Gaspard, deceased. (See Offermann and Ziegler.)						
Ziegler, Jacob, Arlington, Nebr. Neck-yoke	481,996	Sept. 6	114	28	60	1357
Ziegler, Jacob, Arlington, Nebr. Buckle	482,289	Sept. 6	601	143	60	1452
Ziegler, John G. (See Meigs and Ziegler.)						
Ziegler, Josef, Biebrich, Germany. Antiseptic quinoline	478,495	July 5	662		60	131
Ziegler, Josef, Biebrich, Germany. Chinolinophenol-sulphate and obtaining the same.	486,363	Nov. 15	1855		61	989
Ziegler, Josef, assignor to A. Lembach and U. Schleicher, Biebrich, and C. F. Wolf, Wiesbaden, Germany. Preparing phenol sulphates of oxychinoline	466,707	Jan. 5	623		58	120
Ziegler, Josef, assignor to A. Lembach and U. Schleicher, Biebrich, and C. F. Wolf, Wiesbaden, Germany. Preparing oxychinoline sulphate	466,708	Jan. 5	624		58	120
Ziegler, Oscar J. (See Gipe, Emanuel C., assignor.)						
Ziegler, William K., Washington, D. C., assignor of one-half to M. S. Hoadley, Waverly, N. Y. Coin-operated vending-machine	483,093	Sept. 20	1905	{ 481 482	{ 60	1736
Zieres, George. (See Deusing, Eduard, assignor.)						
Zies, Charles, Baltimore, Md. Rotary knife	473,049	Apr. 19	1603	408	59	331
Zillesen, Ernst, Crefeld, Germany. Dyeing	484,080	Oct. 11	835		61	186
Zillgitt, Gustav, Ludington, Mich. Bicycle	471,249	Mar. 22	2497	633	58	1611
Zimmer, Cyrus W., Logansport, Ind. Bicycle-saddle	478,184	July 5	179	47	60	38
Zimmer, Werner H., and O. G. Hess, assignors to Ohio Valley China Company, Wheeling, W. Va. Pottery-kiln	488,413	Dec. 20	1952	488	61	1743
Zimmerling, August F., Jackson, Mich. Oil-stove	476,352	June 7	196	47	59	1474
Zimmerling, Charles, Philadelphia, Pa. Game apparatus	475,653	May 24	2808	712	59	1924
Zimmerling, Charles, Philadelphia, Pa. Game apparatus	477,287	June 21	1689	414	59	1793
Zimmerling, Lisette F., Jackson, Mich. Stove	486,948	Nov. 29	2869	741	61	1214
Zimmerman, Charles, Brooklyn, N. Y., assignor of two-thirds to G. F. S. and M. J. C. Zimmerman, Frederick, Md. Shutter-worker	488,492	Dec. 20	2073	515	61	1768
Zimmerman, Charles A., St. Paul, Minn. Drawbridge	486,552	Nov. 22	2165	572	61	1059
Zimmerman, Cyrus J., Manor Station, Pa. Marking attachment for tenoning-machines	483,887	Oct. 4	541	136	61	112
Zimmerman, George F. S., <i>et al.</i> (See Zimmerman, Charles, assignor.)						
Zimmerman, George H., <i>et al.</i> (See Trawick, Joseph E., assignor.)						
Zimmerman, John, assignor to National Key-Opening Can Company, Chicago, Ill. Key-opening can	486,521	Nov. 22	2126	{ 561 562	{ 61	1051
Zimmerman, John, assignor to National Key-Opening Can Company, Chicago, Ill. Key-opening can	486,522	Nov. 22	2129	562	61	1052
Zimmerman, John, assignor to National Key-Opening Can Company, Chicago, Ill. Key-opening sheet-metal can	486,523	Nov. 22	2131	562	61	1052
Zimmerman, John E., Trinidad, Colo. Spark-arrester	488,864	Dec. 27	2660	659	61	1900
Zimmerman, Joseph W., Beaumont, Tex. Refuse-carrier frame	470,093	Mar. 1	674	166	58	1230
Zimmerman, Mary J. C., <i>et al.</i> (See Zimmerman, Charles, assignor.)						
Zimmermann, Charles E., Syracuse, N. Y. Rotary cutter for woodwork	486,269	Nov. 15	1745	460	61	962
Zimmermann, Charles G., Philadelphia, Pa. Musical instrument	471,370	Mar. 22	2677	681	58	1646
Zimmermann, Peter, Jr., New York, N. Y. Lock	480,359	Aug. 9	979	247	60	779
Zimmermann, Peter, Jr., assignor to himself, A. M. and W. B. Miller, New York, N. Y., and R. H. Cunningham, Paterson, N. J. Stop-cock or analogous valve	475,530	May 24	2625	668	59	1187
Zink, George, Clear Spring, Md. Well-drilling machine	483,756	Oct. 4	349	88	61	73
Zink, George, Clear Spring, Md. Well-drilling machine	483,888	Oct. 4	543	137	61	112
Zinn, Simon. (See Koenig, Michael, assignor.)						
Zinn, Simon. (See Schenber, August W., assignor.)						
Zinsmayer, Robert, Galion, Ohio. Locomotive attachment for supplying steam to pumps	479,870	Aug. 2	146	35	60	610
Zinsser, August. (See Krenslar, Arnold, assignor.)						
Zinsser & Co., William. (See Heidenhain, Heinrich, assignor.)						
Zitzewitz, Hermann, Chicago, Ill. Embossing-machine	468,168	Feb. 2	394	98	58	601
Zitzman, Edward H., <i>et al.</i> (See Stillman and Markoe, assignors.)						
Zogmann, Henry, New York, N. Y. Building	475,842	May 31	3129	{ 793 794	{ 59	1298
Zoldoske, Andrew, Everton, Mo. Road-leveler	469,956	Mar. 1	469	117	58	1190
Zoller, Charles. (See Schimper and Zoller.)						
Zolper, Anton, Cramer's Hill, N. J. Bottle-brush	488,784	Dec. 27	2533	629	61	1874
Zoschnick, Henry G., Cleveland, Ohio. Hand-elevator	482,054	Sept. 6	215	51	60	1377
Zuccato, Eugenio de, London, England. Apparatus for making stencils	473,301	July 5	380	92	60	76
Zuchtmann, Frederick, <i>et al.</i> (See Perkins, Duane T., assignor.)						
Zuckweiler, Henry, Pekin, Ill. Trolling-hook	470,279	Mar. 8	982	242	58	1299
Zumdick, John B., assignor of one-half to J. H. Zumdick, Covington, Ky. Guide for furniture-drawers	475,230	May 17	2143	543	59	1078
Zumdick, John H. (See Zumdick, John B., assignor.)						
Zunner, John H. G., Boston, Mass. Apparatus for heating tar	488,414	Dec. 20	1955	489	61	1743
Zwietusch, Otto, Milwaukee, Wis. Soda-fountain	476,589	June 7	542	{ 129 130	{ 59	1544
Zwietusch, Otto, Milwaukee, Wis. Impregnating beer, &c., with carbonic-acid gas and apparatus therefor	485,362	Nov. 1	332	88	61	640

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Volume.	Page.
Abbot, Edgar W., Brooklyn, assignor to O. A. Gager & Co., New York, N. Y. Reception-plate....	21,498	Apr. 26	59	624
Abram Cox Stove Company. (See Rankin, Thomas I., assignor.)				
Acton, Richard E., Alexandria, Va. Spoon.....	21,835	Sept. 6	60	1471
Adams, Caleb C., Brooklyn, N. Y. Spoon, &c.....	21,460	Apr. 12	59	293
Adams, George E., Providence, R. I. Buckle.....	21,363	Feb. 23	58	952
Adams, Peter. (See Shepard and Adams.)				
Adams, Thomas, assignor to Hensel-Calladay Company, Philadelphia, Pa. Dress-trimming.....	21,504	Apr. 26	59	625
Adams, Thomas, assignor to Hensel-Calladay Company, Philadelphia, Pa. Dress-trimming.....	21,505	Apr. 26	59	625
Adams, Thomas, assignor to Hensel-Calladay Company, Philadelphia, Pa. Dress-trimming.....	21,506	Apr. 26	59	625
Adams, Thomas, assignor to Hensel-Calladay Company, Philadelphia, Pa. Dress-trimming.....	21,507	Apr. 26	59	625
Allen, Alonzo W., Philadelphia, Pa. Bracket-arm.....	22,055	Dec. 6	61	1473
American Buckle and Cartridge Company. (See Shillitt, Francis W., assignor.)				
Andrews, John H., New York, N. Y. Bird-cage.....	21,569	May 24	59	1252
Anderson, William C., assignor to W. L. Libby & Son Company, Toledo, Ohio. Ornamentation of glass dishes.....	21,364	Mar. 8	58	1262
Arnold, Constable & Co. (See George, Herbert T., assignor.)				
Aucaigne, Eugene F. (See Merritt and Aucaigne.)				
Aymé, Louis H. (See Holloway, Charles, assignor.)				
Babcock, Albert L., Billings, Mont. Shepherd's crook.....	21,816	Aug. 30	60	1320
Babcock, George H., Plainfield, N. J. Roofing-plate.....	21,367	Mar. 8	58	1262
Babcock, George H., Plainfield, N. J. Roofing-tile.....	21,772	Aug. 9	60	889
Back, Albert, New York, N. Y., assignor to the Estate of T. Back. Ruffling or ruching.....	21,493	Apr. 19	59	458
Back, Estate of Tillie. (See Back, Albert, assignor.)				
Badger, James C., Concord, N. H. Spoon.....	21,777	Aug. 16	60	1045
Bailey, Banks & Biddle. (See Sackett, William P., assignor.)				
Bain, Patterson, <i>et al.</i> (See Cohen, David J., assignor.)				
Bainbridge, John G., New York, N. Y. Sponge-cup.....	21,589	May 31	59	1425
Baldwin, Fred B., Muskegon, Mich., assignor of one-half to H. L. Young, Chicago, Ill. Show-case.....	21,763	Aug. 9	60	888
Ball, Charles A., Marion, Ind. Badge.....	21,643	June 21	59	1912
Ball, Charles A., Marion, Ind. Badge.....	21,644	June 21	59	1912
Banghart, Andrew B. (See Treat and Banghart.)				
Baptist Young Peoples Union of America. (See Pierce and Spratt, assignors.)				
Barbero, Mamie C., Maquon, Ill. Badge.....	21,585	May 31	59	1424
Bark, Birger, Chicago, Ill., assignor to S. S. Jewett & Co., Buffalo, N. Y. Shelf-bracket or wall-piece.....	21,305	Jan. 19	58	280
Bartmann, Theodore H., Brooklyn, N. Y. Portière or curtain.....	21,389	Mar. 8	58	1262
Bascom, Henry C., Lansingburg, N. Y., assignor to S. B. Sexton & Son, Baltimore, Md. Range.....	21,599	May 31	59	1426
Bascom, Henry C., and R. Galbraith, Lansingburg, N. Y., assignors to said Bascom. Dwarf parlour-stove.....	21,598	May 31	59	1426
Bascom, Henry C., Lansingburg, and F. Ritchie, Troy, N. Y., assignors to Channon-Emery Stove Company, Quincy, Ill. Cooking-stove.....	21,897	Oct. 11	61	282
Bassett Jewelry Co. (See Roehr, Ludwig J., assignor.)				
Bates, Thomas H. (See Quinby and Bates.)				
Bates, Thomas H., and A. O. Quimby, Fresno, Cal. Spoon.....	21,952	Nov. 1	61	717
Baumgarten, Albert, <i>et al.</i> (See Morgan and Redlinger, assignors.)				
Baxter, Sara, New York, N. Y. Clasp.....	21,845	Sept. 6	60	1472
Bean, George W., assignor to Bean & Vail Bros., Philadelphia, Pa. Bottle.....	21,553	May 24	59	1250
Bean & Vail Bros. (See Bean, George W., assignor.)				
Beeman, Charles H., North Fairfax, Vt. Potato-baker.....	21,597	May 31	59	1426
Belding Brothers & Co. (See Oliver, Frederick, assignor.)				
Bell, Harold J., assignor to T. Devlin, L. J. McGrath, W. K. Brown, and C. A. McGrath, executors, Philadelphia, Pa. Radiator.....	21,986	Nov. 8	61	880
Bell's Sons, H. H. (See Ohle, August C., assignor.)				
Benedict, Maurice G., Detroit, Mich. Oil heating-stove.....	21,853	Sept. 6	60	1474
Benfield, Thomas, Newark, N. J. Watchcase.....	21,478	Apr. 19	59	456
Benfield, Thomas, Newark, N. J. Watchcase.....	21,479	Apr. 19	59	456
Benfield, Thomas, Newark, N. J. Watchcase.....	21,480	Apr. 19	59	456
Benfield, Thomas, Newark, N. J. Watchcase.....	21,481	Apr. 19	59	456
Benfield, Thomas, Newark, N. J. Watchcase.....	21,482	Apr. 19	59	456
Benfield, Thomas, Newark, N. J. Watchcase.....	21,483	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,484	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,485	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,486	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,487	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,488	Apr. 19	59	457
Benfield, Thomas, Newark, N. J. Watchcase.....	21,489	Apr. 19	59	457
Benlisa, Samuel. (See Feder, Harry N., assignor.)				
Bennett, Benjamin, Jeannette, and H. S. McKee, Allegheny, Pa. Glass dish.....	21,620	June 14	59	1756
Bergen, James D., assignor to J. D. Bergen Company, Meriden, Conn. Bowl.....	21,6-1	July 5	60	150
Borger, Leander D., Philadelphia, Pa. Bucket-ear.....	21,567	May 24	59	1251
Borger, Wilson C., Canton, Ohio. Siding-plate.....	21,423	Mar. 29	58	1698
Bernheim, Eugene C., assignor to J. H. Flanagan, Washington, D. C. Spoon.....	22,0-2	Dec. 27	61	1941
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Sugar-bowl.....	21,921	Oct. 25	61	500
Berry, Henry, assignor to Derby Silver Company, Shelton, Conn. Sugar-bowl.....	21,922	Oct. 25	61	560
Berry, William W., Scranton, Pa. Spoon.....	21,699	July 12	60	290
Bertels, Charles E., Wilkes-Barré, Pa. Cover for dinner-pails.....	21,366	Mar. 8	58	1262
Best, Daniel, San Leandro, Cal. Engine-frame.....	21,545	May 17	59	1099
Best, Daniel, San Leandro, Cal. Engine-frame.....	21,887	Oct. 11	61	981
Best, John, Paterson, N. J. Badge.....	21,859	Sept. 13	60	1606
Bidwell, Julius A., Ivanpah, Cal. Pin.....	21,645	June 21	59	1912

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Bidwell, Julius A., Pomona, Cal. Cuff-button	21,902	Oct. 18	61	419
Bigelow Carpet Company. (See Brown, William F., assignor.)				
Bigelow Carpet Company. (See Chambellan, Pierre C., assignor.)				
Bigler, William A., Chicago, Ill. Handle for spoons, &c.	22,035	Dec. 6	61	1471
Billings, Oscar L., Philadelphia, Pa. Dial	22,054	Dec. 6	61	1473
Birge & Sons, M. H. (See Booze, Charles, assignor.)				
Black, Estell M., Harper's Ferry, W. Va. Spoon	21,920	Oct. 25	61	559
Blair, George W., Pittsburg, Pa. Lamp-chimney	21,616	June 7	59	1601
Blair, George W., Pittsburg, Pa. Lamp-chimney	21,617	June 7	59	1601
Blake, Charles E., Sr., San Francisco, Cal. Dental punch	21,771	Aug. 9	60	888
Block, Israel, New York, N. Y. Oil-stove	21,650	June 21	59	1912
Boeck, Charles H., Jackson, Mich. Lamp-stove	21,427	Mar. 29	58	1698
Boeck, Charles H., Jackson, Mich., assignor to Central Oilgas Stove Company, Florence, Mass. Oil or gas stove	21,365	Mar. 8	58	1262
Bogert, Matthew J., Demarest, N. J. Box	21,303	Jan. 19	58	280
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,908	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,909	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,910	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,911	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,912	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,913	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,914	Oct. 25	61	558
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,915	Oct. 25	61	559
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,916	Oct. 25	61	559
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,917	Oct. 25	61	559
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,936	Nov. 1	61	714
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,937	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,938	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,939	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,940	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,941	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,942	Nov. 1	61	715
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,943	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,944	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,945	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,946	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,947	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,948	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,949	Nov. 1	61	716
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,958	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,959	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,960	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,961	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,962	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,963	Nov. 8	61	876
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,964	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,965	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,966	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,967	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,968	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,969	Nov. 8	61	877
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,970	Nov. 8	61	878
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,971	Nov. 8	61	878
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	21,972	Nov. 8	61	878
Booze, Charles, assignor to M. H. Birge & Sons, Buffalo, N. Y. Wall-paper	22,018	Nov. 29	61	1307
Borchardt, Samuel, New York, N. Y. Leggin	21,627	Aug. 30	60	1322
Bowen, William F., Chicago, Ill. Badge	21,443	Apr. 5	59	152
Boynton, Nathan S., Port Huron, Mich. Badge	21,975	Nov. 8	61	878
Brandt, Oscar E., assignor to W. W. Kimball Company, Chicago, Ill. Top of an organ-case	21,881	Oct. 4	61	146
Brandt, Oscar E., assignor to W. W. Kimball Company, Chicago, Ill. Top of an organ-case	21,882	Oct. 4	61	146
Brayton, Albert P., Jr., San Francisco, Cal. Water-wheel casing	21,826	Jan. 5	58	1
Bridge & Beach Manufacturing Company. (See Holland, George H., assignor.)				
Brokaw, John G., Somerville, N. J. Scarf-pin	22,036	Dec. 6	61	1471
Bronley & Sons, John. (See Petzold, Adolph, assignor.)				
Bronley & Sons, John. (See Poole, Edward, assignor.)				
Brooks, John J., assignor of one-half to F. E. Goldsberry, Athens, Ohio. Sad-iron	21,593	May 31	59	1425
Brown, Charles W., Troy, N. H., assignor to L. C. Chase & Co., Boston, Mass. Printed fabric	21,541	May 17	59	1098
Brown, Edward C., Chicago, Ill. Picture-frame	21,610	June 7	59	1600
Brown, William F., Newark, N. J., assignor to Bigelow Carpet Company, Hartford, Conn. Carpet	21,994	Nov. 15	61	1011
Brown, William K., et al., executors. (See Bell, Harold J., assignor.)				
Brundage, Moses S., McConnell, Ill. Cap	21,712	July 12	60	292
Brunswick, Anthony A., San Francisco, Cal. Button	21,449	Apr. 5	59	152
Bryant, Solon, Worcester, Mass. Corset	21,544	May 17	59	1099
Bryant, Thomas W., Torrington, Conn. Dog-collar	21,344	Feb. 16	58	809
Buchholtz, John P., Philadelphia, Pa. Lantern-body	21,518	May 3	59	784
Burbank, Gardner E. (See Hopkins, Edwin F., assignor.)				
Burlington Carpet Company. (See Lawton, Thomas L., assignor.)				
Busbee, Albert A., Attleborough, Mass. Button, &c.	21,869	Sept. 27	60	1879
Button, Eugene L., Brooklyn, N. Y. Box	21,796	Aug. 23	60	1183
C. F. Monroe Company. (See Helmschmied, Carl V., assignor.)				
Caldwell & Co., J. E. (See Houston, Hugh B., assignor.)				
Cameron, Mary E., Albany, N. Y. Game-board	21,880	Oct. 4	61	146
Carlewitz, August, Newark, N. J. Cornice	21,579	May 24	59	1253
Carlewitz, August, Newark, N. J. Cornice	21,580	May 24	59	1253
Carlewitz, August, Newark, N. J. Cornice	21,623	June 21	59	1910
Carlewitz, August, Newark, N. J. Cornice	21,624	June 21	59	1910
Carlewitz, August, Newark, N. J. Cornice	21,731	July 19	60	432
Carranza, Manuel, Havana, Cuba. Fan	22,072	Dec. 20	61	1783
Casiraghi, Augustus, New York, N. Y. Chair	22,088	Dec. 27	61	1942
Central Oilgas Stove Company. (See Boeck, Charles H., assignor.)				
Chambellan, Pierre C., West Hoboken, N. J., assignor to Bigelow Carpet Company, Clinton, Mass. Carpet	21,829	Aug. 30	60	1322
Champion, Charles S., Washington, D. C. Spoon	21,714	July 19	60	431

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Channon-Emery Stove Company. (See Bascom and Ritchie, assignors.)				
Chapman, Benjamin G., <i>et al.</i> (See Cohen, David J., assignor.)				
Chase & Co., L. C. (See Brown, Charles W., assignor.)				
Cheney Brothers. (See Thyng, Annie G., assignor.)				
Cherry, Joseph P., Nashville, Tenn. Bottle	21,500	Apr. 26	59	624
Chipman, Calley & Co. (See Sisson, Charles, assignor.)				
Christesen, Rudolphe W. E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Knob and lock escutcheon	21,706	July 12	60	291
Christesen, Rudolphe W. E., assignor to Russell & Erwin Manufacturing Company, New Britain, Conn. Door-knob	21,769	Aug. 9	60	888
Clark & Co., T. B. (See Wood, Walter A., assignor.)				
Clemes, William H., assignor to Taylor & Boggis Foundry Company, Cleveland, Ohio. Wick-tube and burner-plate	21,442	Mar. 29	58	1698
Clulee, Harry I., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon or fork handle	21,692	July 5	60	152
Cohen, Adolph, New York, N. Y. Ruffling	21,993	Nov. 15	61	1010
Cohen, David J., Columbus, Miss., assignor of two-thirds to B. G. Chapman and P. Bain, St. Louis, Mo. Badge or medal	21,411	Mar. 22	58	1561
Combes, Theodore C., Philadelphia, Pa. Spoon	21,900	Oct. 18	61	419
Connolly, William, and A. A. Sealy, Brooklyn, N. Y. Badge	21,885	Oct. 11	61	281
Conradson, Conrad M., Madison, Wis. Lathe-bed	21,798	Aug. 23	60	1183
Conradson, Conrad M., Madison, Wis. Lathe-bed	21,799	Aug. 23	60	1183
Consolidated Fruit Jar Company. (See Fisher, Alvin L., assignor.)				
Cooke, Daniel, Camden, N. J. Toy money-bank	21,457	Apr. 12	59	292
Cooper, Henrietta L., Philadelphia, Pa. Pincushion or sachet	22,050	Dec. 6	61	1473
Copp, William J., Hamilton, Canada. Hall-stove	21,345	Feb. 16	58	809
Corbin Cabinet Lock Company. (See Judd, Edward A., assignor.)				
Corby, Edward T., Carbondale, Pa. Cuff-button, &c	21,586	May 31	59	1424
Courts, Alfred A. (See Lipper and Courts.)				
Crabb, Frederick G., New Haven, Conn. Thimble	22,000	Nov. 22	61	1158
Crandall, Jesse A., Brooklyn, N. Y. Toy rattle	21,764	Aug. 9	60	888
Crandall, Jesse A., Brooklyn, N. Y. Toy rattle	21,765	Aug. 9	60	888
Crawford, John, Brooklyn, N. Y. Penholder	21,538	May 17	59	1098
Creecilius, Harry F., Reading, Pa. Badge or charm	21,368	Mar. 8	58	1262
Crominger, Edward B., Covington, Ky. Bar-pin	22,073	Dec. 20	61	1783
Crosby, Joseph H., Jr., <i>et al.</i> (See Crowell, Gilbert L., Jr., assignor.)				
Crossley, Joseph, Trenton, N. J. Brick or building-block	21,631	June 21	59	1911
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to D. Greenleaf and J. H. Crosby, Jr., Jacksonville, Fla. Spoon or similar article	21,560	May 24	59	1250
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to D. Greenleaf and J. H. Crosby, Jr., Jacksonville, Fla. Spoon, &c	21,601	June 7	59	1599
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Hafl, New York, N. Y. Spoon, &c	21,700	July 12	60	290
Crowell, Gilbert L., Jr., Arlington, N. J., assignor to Dominick & Hafl, New York, N. Y. Backs for brushes, &c	21,709	July 12	60	292
Culver, Walter L., St. Louis, Mo. Furnace	21,467	Apr. 19	59	455
Curtis, Charles, Newton, Mass., and N. M. Jones, Bangor, Me. Lining-tile	22,077	Dec. 20	61	1783
D'Arcy, Frank P., Kalamazoo, Mich. Spoon	22,029	Dec. 6	61	1470
Danner, John, Canton, Ohio. Hat and towel rack	21,407	Mar. 15	58	1420
Davis, Nannie G., Washington, D. C. Spoon	21,312	Jan. 26	58	390
Davis, Stephen A., Newark, N. J., assignor to Domestic Sewing Machine Company of New Jersey. Pencil-sharpener	21,864	Sept. 20	60	1746
Davison, Joseph K., Philadelphia, Pa. Badge	21,688	July 5	60	152
Dawes, John L., Pittsburg, Pa. Bottle	21,412	Mar. 22	58	1561
Dawley, James A., Denver, Colo. Finger-ring	21,691	July 5	60	152
Dawley, James A., Denver, Colo. Watch-charm	21,718	July 19	60	431
De Voursney, Marcus L., Newark, N. J. Carriage-lamp	21,778	Aug. 16	60	1045
Decker, William F., New York, N. Y. Casing for upright pianofortes	21,995	Nov. 15	61	1011
Demarest, Aaron T. (See Demarest and Van Herck, assignors.)				
Demarest, Aaron T., New York, N. Y. Carriage-body	21,773	Aug. 9	60	889
Demarest, William R., and H. Van Herck, New Haven, Conn., assignors to A. T. Demarest, New York, N. Y. Coach-lamp	21,672	June 28	59	2065
Denison, Edwin N., Westerly, R. I. Spoon	21,422	Mar. 22	58	1561
Depollier, Charles L., Brooklyn, N. Y. Watchcase	21,721	July 19	60	431
Derby Silver Company. (See Berry, Henry, assignor.)				
Deslauriers, Philip A., St. Paul, Minn. Siding-plate	21,825	Aug. 30	60	1321
Deslauriers, Philip A., St. Paul, Minn. Siding-plate	22,091	Dec. 27	61	1942
Deylin, Thomas, <i>et al.</i> , executors. (See Bell, Harold J., assignor.)				
Dewey, Mark W., Syracuse, N. Y. Electric-heater casing	22,017	Nov. 22	61	1160
Dexheimer, Julius G., Milwaukee, Wis. Snap-hook	21,982	Nov. 8	61	880
Dixey, Thomas B., East Orange, N. J. Balloon	21,874	Sept. 27	60	1880
Dobrick, Charles L., New York, N. Y. Box	21,840	Sept. 6	60	1472
Dohson, W. E. & F. (See Heald, Francis B., assignor.)				
Domestic Sewing Machine Company. (See Davis, Stephen A., assignor.)				
Dominick & Hafl. (See Crowell, Gilbert L., Jr., assignor.)				
Doyle, Luke, Boston, Mass. Wagon-body	21,756	Aug. 2	60	731
Drew, George H., Boston, Mass. Advertising-coupon	21,584	May 31	59	1424
Driggs, George A., Waterbury, Conn. Pin-package	21,387	Jan. 12	58	147
Dueber, John C., Canton, Ohio. Watchcase	21,288	Jan. 12	58	147
Dueber, John C., Canton, Ohio. Watchcase	21,295	Jan. 12	58	147
Dueber, John C., Canton, Ohio. Watchcase	21,346	Feb. 16	58	809
Dueber, John C., Canton, Ohio. Watchcase	21,548	May 17	59	1099
Dueber, John C., Canton, Ohio. Watchcase	21,549	May 17	59	1099
Dueber, John C., Canton, Ohio. Watchcase	21,719	July 19	60	431
Dueber, John C., Canton, Ohio. Watchcase	21,720	July 19	60	431
Dueber, John C., Canton, Ohio. Watchcase	21,797	Aug. 23	60	1183
Dueber, John C., Canton, Ohio. Watchcase	21,813	Aug. 30	60	1520
Dueber, John C., Canton, Ohio. Watchcase	22,056	Dec. 13	61	1659
E. W. Bliss Company. (See Fancher, Alton H., assignor.)				
Eagle Machine Company. (See Joss, George N., assignor.)				
Edward Miller & Company. (See Homan, William C., assignor.)				
Elbel & Co. (See Harriss, James W., assignor.)				
Ellison, Adolph S., New York, N. Y. Trimming	21,793	Aug. 23	60	1182
English, James G., assignor to English & Mersick, New Haven, Conn. Hub-band	21,625	June 21	59	1910

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
English & Mersick. (See English, James E., assignor.)				
Estes, Webster C., Flatbush, N. Y. Box	21,289	Jan. 12	58	147
Estes, Webster C., Flatbush, N. Y. Box	21,762	Aug. 9	60	887
Evans, French S., Washington, D. C. Cane-handle.	21,784	Aug. 23	60	1181
Fairchild & Co., Leroy W. (See Hurd, Louis F., assignor.)				
Fairchild, Harry P., New York, N. Y. Handle for button-hooks, &c.	{ 21,403 }	Mar. 15	58	1420
Fairchild, Harry P., New York, N. Y. Handle for cutlery	{ 21,404 }	Mar. 22	58	1561
Fancher, Alton H., Brooklyn, N. Y., assignor to E. W. Bliss Company, Limited, London, England.	21,413			
Spoon	21,836	Sept. 6	60	1471
Farnham, Paulding, assignor to Tiffany & Co., New York, N. Y. Spoon, &c.	21,988	Nov. 15	61	1009
Fanlhaber, John L., Fostoria, Ohio. Roofing-plate	21,313	Jan. 26	58	390
Feder, Harry N., Washington, D. C., assignor of one-half to S. Benlisa, Jacksonville, Fla. Ink-stand	22,084	Dec. 27	61	1941
Fenwick, Edward T., Washington, D. C. Spoon or similar article	21,554	May 24	59	1250
Fenwick, Edward T., Washington, D. C. Spoon or similar article	21,565	May 24	59	1251
Fink, Joseph H., New York, N. Y. Finger-ring	21,926	Oct. 25	61	560
Firemen's Publishing Company. (See Reinmangel, George H., assignor.)				
Fisher, Alvin L., New Brunswick, N. J., assignor to Consolidated Fruit Jar Company, New York, N. Y. Oilier	21,671	June 28	59	2065
Fitch, Ezra C., Newton, Mass. Watch-bridge	21,423	Mar. 22	58	1561
Fitch, William E., Louisville, Ky. Fireplace-front	21,444	Apr. 5	59	152
Flanagan, John H. (See Bernheim, Eugene C., assignor.)				
Forster, Thomas V., New Utrecht, N. Y. Hose-reel spool	21,622	June 14	59	1757
Fowle Manufacturing Company. (See Tilton, George P., assignor.)				
Fraley, George B., San Francisco, Cal. Frame for electric dynamos	21,906	Oct. 18	61	420
Frank, Abraham, New York, N. Y. Plastron or waist	22,040	Dec. 6	61	1472
Frank, Abraham, New York, N. Y. Cape	22,041	Dec. 6	61	1471
Frank, Henry C., New York, N. Y. Cuff-holder stand	21,876	Oct. 4	61	145
Frankl, Albert A., New York, N. Y. Trimming or fringe	21,678	July 5	60	150
Fraser, Horatio N., New York, N. Y. Pocket-bottle	21,728	July 19	60	432
Freer, Charles S., Brooklyn, assignor to E. Todd & Co., New York, N. Y. Pencil-case	21,572	May 24	59	1252
Fry, David L., Lebanon, Oreg. Watch-chain	21,689	July 5	60	152
Fuchs & Brothers, Ferdinand. (See Graff, Charles, assignor.)				
Fuchs, Henry F. G., Jersey City, N. J. Floral lapel ornament	21,690	July 5	60	152
Fuchs, Henry F. G., Jersey City, N. J. Badge	21,898	Oct. 18	61	419
Fuller, Marie L., New York, N. Y. Dancing-dress	21,458	Apr. 12	59	292
Fuller, Marie L., New York, N. Y. Dancing-dress	21,526	May 10	59	934
Fuller, Marie L., New York, N. Y. Dancing-dress	21,527	May 10	59	934
Fyles, Franklin, New York, N. Y. Envelope	21,277	Jan. 5	58	1
Gager & Co., O. A. (See Abbott, Edgar W., assignor.)				
Gager & Co., O. A. (See Gérard, Emile, assignor.)				
Galbraith, Robert. (See Bascom and Galbraith.)				
Gallagher, Richard D. (See Sloan and Gallagher.)				
Gardner, Thomas W., Indianapolis, Ind. Cane	22,009	Nov. 22	61	1150
Gash, Edgar, Macomb, Ill. Badge	21,758	Aug. 9	60	887
Gaston Electrical Manufacturing Company. (See Gaston, James E., assignor.)				
Gaston, James E., assignor to Gaston Electrical Manufacturing Company, Sparta, Ill. Electric-lamp frame	21,701	July 12	60	290
Gauline, Charles E., Baltimore, Md. Bottle	21,390	Mar. 8	58	1262
George, Herbert T., London, England, assignor to Arnold, Constable & Co., New York, N. Y. Carpet.	21,857	Sept. 13	60	1605
Geraci, Ignatius, Baltimore, Md. Tailor's gage	21,568	May 24	59	1851
Gérard, Emile, Limoges, France, assignor to O. A. Gager & Co., New York, N. Y. Cuspidor	21,324	Feb. 2	58	526
Gérard, Emile, Limoges, France, assignor to O. A. Gager & Co., New York, N. Y. Ornamentation of dishes	21,668	June 28	59	2065
Gérard, Emile, Limoges, France, assignor to Haviland & Abbot, New York, N. Y. Dish	21,989	Nov. 15	61	1010
Giesecke, Georg E., Leipzig, Germany. Font of type	21,330	Feb. 2	58	526
Gifford, George B., Albany, N. Y. Baking-pan	21,754	Aug. 2	60	731
Gilhuly, Stephen B., Long Branch, N. J. Bicycle's bag	22,057	Dec. 13	61	1650
Girsch, Charles W., New York, and C. F. Roehsler, Brooklyn, N. Y. Postal-card	21,950	Nov. 1	61	717
Goertz, August, Newark, N. J. Frame for purses or bags	21,397	Mar. 15	58	1420
Goesling, William, St. Louis, Mo. Sign-board	22,053	Dec. 6	61	1473
Goldsberry, Frank E. (See Brooks, John J., assignor.)				
Gorham Manufacturing Company. (See Wilkinson, George, assignor.)				
Graff, Charles, assignor to F. Fuchs & Brothers, New York, N. Y. Holder for matches and cigar-ettes	21,468	Apr. 19	59	292
Graham, William H., St. Louis, Mo. Sink-trap	21,528	May 10	59	934
Graham, William H., St. Louis, Mo. Sink-trap	21,529	May 10	59	934
Graham, William H., assignor to N. O. Nelson Manufacturing Company, St. Louis, Mo. Valve for basins and bath-tubs	21,933	Oct. 25	61	561
Greenleaf, Damon, <i>et al.</i> (See Crowell, Gilbert L., Jr., assignor.)				
Griffin, William B., Glens Falls, N. Y. Vehicle-body	21,453	Apr. 12	59	455
Griffith, Frank C., Boston, Mass. Condiment-holder for plates	21,539	May 17	59	1098
Griffith Manufacturing Company. (See Griffith, William M., assignor.)				
Griffith, William M., assignor to Griffith Manufacturing Company, Baltimore, Md. Necktie	21,977	Nov. 8	61	879
Grist, James. (See Jenkins and Grist.)				
Grist, John. (See Jenkins and Grist.)				
Grommes, John B., Chicago, Ill. Bottle	21,856	Aug. 30	60	1322
Grubb, Moses H., Spring City, Pa. Scrubber-holder	21,405	Mar. 15	58	1420
Guillaume, Franz, Bonn, Germany. Plate or similar article	21,476	Apr. 19	59	456
Guillaume, Franz, Bonn, Germany. Vase	21,477	Apr. 19	59	456
Guillaume, Franz, Bonn, Germany. Vase or similar article	21,491	Apr. 19	59	458
Guillaume, Franz, Bonn, Germany. Vase or similar article	21,494	Apr. 19	59	458
H. M. Moses Company. (See Moses, Harry M., assignor.)				
Hall, Wright W., New Windsor, Colo. Frame for bridle-bits	21,872	Sept. 27	60	1880
Hammann, Edward, Brooklyn, assignor to J. L. Mott Iron Works, New York, N. Y. Urinal	21,957	Nov. 1	61	718
Hanna, William C., Jr., New York, N. Y. Railing	21,980	Nov. 8	61	879
Hannahs, Fred C., assignor of one-half to J. A. Jackson, Kenosha, Wis. Crib or cradle body	21,530	May 10	59	934
Hannahs, Fred C., assignor of one-half to J. A. Jackson, Kenosha, Wis. Crib or cradle body	21,531	May 10	59	935
Hannold, Isaac N., Philadelphia, Pa. Flask	21,382	Mar. 8	58	1262
Harris, Charles R., Williamsport, Pa. Suspender-buckle	21,791	Aug. 23	60	1182
Harris, James W., assignor to Elbel & Co., Canton, Ohio. Snap-hook	21,399	Mar. 15	58	1420
Hart, Alexander, New York, N. Y. Fur trimming	21,547	May 17	59	1069
Hartenstein, Jacob, Philadelphia, Pa. Trimming	21,660	June 28	59	2064

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Harvey, William, Philadelphia, Pa., and E. Osborn, New York, N. Y., assignors to themselves and J. and J. Watts, Philadelphia, Pa. Handle for canes	23,083	Dec. 27	61	1911
Hatch, Augustus T., San Francisco, Cal. Badge	21,875	Oct. 4	61	145
Haviland & Abbot. (See Gérard, Emile, assignor.)				
Haviland, Charles E., Limoges, France. Dish	21,381	Mar. 8	58	1262
Haviland, Charles E., Limoges, France. Plate	21,682	July 5	60	150
Haviland, Charles E., Limoges, France. Plate	21,683	July 5	60	151
Haviland, Charles E., Limoges, France. Plate	21,684	July 5	60	151
Haviland, Charles E., Limoges, France. Sandwich-plate	21,685	July 5	60	151
Haviland, Charles E., Limoges, France. Cnp.	21,686	July 5	60	151
Haviland, Charles E., Limoges, France. Cover-dish	21,687	July 5	60	151
Haviland, Theodore, Amhazac, France. Sirup-jug	23,028	D. c. 6	61	1461
Hawkes, Thomas G., Corning, N. Y. Ornamentation of glass vessels	21,705	July 12	60	291
Hayden, William W., Newark, N. J. Match-box	21,611	June 7	59	1600
Hayden, William W., Newark, N. J. Match-box	21,635	June 21	59	1911
Hayden, William W., Newark, N. J. Match-box	21,636	June 21	59	1911
Hayden, William W., Newark, N. J. Match-box	21,637	June 21	59	1911
Hayden, William W., Newark, N. J. Match-box	21,638	June 21	59	1911
Hayden, William W., Newark, N. J. Match-box	21,639	June 21	59	1911
Hayden, William W., Newark, N. J. Handle for cutlery, &c.	21,809	Aug. 30	60	1320
Hayden, William W., Newark, N. J. Handle for cutlery, &c.	21,810	Aug. 30	60	1320
Hayden, William W., Newark, N. J. Handle for cutlery, &c.	21,811	Aug. 30	60	1320
Hayden, William W., Newark, N. J. Handle for cutlery, &c.	21,812	Aug. 30	60	1320
Haynes, David F., Baltimore, Md. Ewer or jug	{ 21,306 } { 21,307 }	Jan. 19	58	220
Headley & Carrow Manufacturing Company. (See Weber, Anton, assignor.)				
Heald, Francis B., Nottingham, England, assignor to W. E. & F. Dobson, New York, N. Y. Bed-spread or similar article	21,535	May 10	59	935
Hedgeland, Frederick W., assignor to W. W. Kimball Company, Chicago, Ill. Organ-case	21,349	Feb. 16	58	810
Heer, David, Philadelphia, Pa. Badge	21,574	May 21	59	1252
Heffernan, Laurence J., New York, N. Y. Paper-weight	21,863	Sept. 20	60	1716
Heinig, Friedrich O., Philadelphia, Pa. Trimming	21,743	Aug. 2	60	730
Heinig, Friedrich O., assignor to M. W. Lipper & Co., Philadelphia, Pa. Trimming	22,044	Dec. 6	61	1472
Heinz, Henry J., Pittsburg, Pa. Spoon	21,895	Oct. 11	61	282
Held, Charles O., Columbus, Ohio. Picture-frame	21,293	Jan. 12	58	147
Helmshmidt, Carl V., assignor to C. F. Monroe Company, Meriden, Conn. Table-vessel	21,878	Oct. 4	61	145
Hemphill, Edward A., Elizabeth, N. J. Calendar and inkstand holder	21,587	May 31	59	1424
Henderson, John T., Catskill, N. Y. Spoon	21,283	Jan. 5	58	1
Henderson, William A., Atlanta, Ga. Spoon	21,738	Aug. 2	60	730
Hendryx, Andrew B., New Haven, Conn. Fishing-reel	21,546	May 17	59	1099
Henkel, John, Hoboken, N. J., assignor to J. Mehl & Co., New York, N. Y. Pocketbook	21,542	May 17	59	1098
Hensel-Calladay Company. (See Adams, Thomas, assignor.)				
Heppel, Christopher J., et al. (See Wuest, Philip, Jr., assignor.)				
Heppel, Florence J., et al. (See Wuest, Philip, Jr., assignor.)				
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Heel-protector	21,888	Oct. 11	61	281
Herrick, Frank J., assignor to North & Judd Manufacturing Company, New Britain, Conn. Heel-protector	21,889	Oct. 11	61	281
Hill, Charles G., Nottingham, England. Ruffling or rucbing	21,447	Apr. 5	59	152
Hill, Harry W., Cleveland, Ohio. Pillow-block standard	21,613	June 7	59	1601
Hill, Harry W., Cleveland, Ohio. Clutch-frame	21,767	Aug. 9	60	888
Hiller, Louis C., assignor to Meriden Silver Plate Company, Meriden, Conn. Metal border	21,697	July 5	60	153
Hiller, Louis C., assignor to Meriden Silver Plate Company, Meriden, Conn. Metal border	21,698	July 5	60	153
Hine, William C., Youngstown, Ohio. Oil-can	21,984	Nov. 8	61	880
Hirner, Eugene H., Philadelphia, Pa. Relief bust of Columbus	23,005	Nov. 22	61	1159
Hirschfeld, Henry W., assignor to Meriden Britannia Company, Meriden, Conn. Spoon, &c.	21,383	Mar. 8	58	1262
Hoffa, Henry, Washington, D. C. Watchcase	21,748	Aug. 2	60	730
Hoffman, Elvira C., New York, N. Y. Dancing-dress	21,609	June 7	59	1600
Hoffmann, Charles. (See Svoboda and Hoffmann.)				
Hohenstein, Hugo, New York, N. Y. Lamp-shade	21,702	July 12	60	291
Holbrook, Will F., Seward, Nebr. Spoon	21,496	Apr. 26	59	624
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Cooking-stove	21,804	Aug. 30	60	1319
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Cooking-stove	21,805	Aug. 30	60	1319
Holland, George H., assignor to Bridge & Beach Manufacturing Company, St. Louis, Mo. Cooking-stove	21,806	Aug. 30	60	1319
Hollander, Leo, Salt Lake City, Utah Ter. Spoon	21,807	Aug. 30	60	1320
Holloway, Charles, Chicago, assignor to L. H. Aymé, La Grange, Ill. Statue	21,656	June 28	59	2063
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Lamp-fount	21,787	Aug. 23	60	1181
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Lamp-burner	21,429	Mar. 29	58	1698
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Lamp-burner	21,521	May 10	59	933
Homan, William C., assignor to Edward Miller & Company, Meriden, Conn. Lamp-burner	21,534	May 10	59	935
Honecker, John, Cleveland, Ohio. Hat-rack	21,781	Aug. 23	60	1181
Hopkins, Edwin F., assignor of one-half to G. E. Burbank, Woodstock, Ill. Medal	22,037	Dec. 6	61	1471
Hormann, Ferdinand, assignor to himself and F. Rohrbacher, Philadelphia, Pa. Globe for electric or other lights	21,391	Mar. 8	58	1262
Horn, Frederick F., Colorado Springs, Colo. Spoon	21,716	July 19	60	431
Horton, Louis R., assignor to J. B. & S. M. Knowles Company, Providence, R. I. Spoon	21,461	Apr. 12	59	293
Hough, Azel C., South Butler, N. Y. Desk-railing	22,024	Nov. 29	61	1308
Houston, Hugh B., Philadelphia, Pa., assignor to J. E. Caldwell & Co. Spoon	21,715	July 19	60	431
Houtain, Emile, Brussels, Belgium. Diaphragm for tobacco-pipes	21,552	May 17	59	1099
Hovey, Robert M., assignor to W. H. Jackson & Co., New York, N. Y. Fireplace-front	21,725	July 19	60	432
Hoy, Woodbury S., Philadelphia, Pa. Campaign-button	21,815	Aug. 30	60	1320
Howard & Son Company. (See Wientge, Charles C., assignor.)				
Howard Sterling Company. (See Wientge, Charles C., assignor.)				
Howard, William G., et al., executors. (See Ireland, David M., assignor.)				
Howe, Eugene L., Cleveland, Ohio. Harness-snap	21,398	Mar. 15	58	1420
Hughes, Joseph A., Corpus Christi, Tex. Spoon	21,783	Aug. 23	60	1181
Hull, Gurdon W., Wallingford, Conn. Castanet	21,953	Nov. 1	61	717
Hummel, Thomas, Jr., Peoria, Ill. Easel	21,665	June 28	59	2064
Huntington Glass Company. (See Proeger, Julius, assignor.)				
Huntoon, Albert J., Kansas City, Mo. Spinning top	21,753	Aug. 2	60	731

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Hurd, Louis F., Newark, N. J., assignor to L. W. Fairchild & Co., New York, N. Y. Match-box ..	21,890	Oct. 11	61	281
Hurd, Louis F., Newark, N. J., assignor to L. W. Fairchild & Co., New York, N. Y. Match-box ..	21,891	Oct. 11	61	281
Hurd, Louis F., Newark, N. J., assignor to L. W. Fairchild & Co., New York, N. Y. Match-box ..	21,892	Oct. 11	61	282
Hurd, Louis F., Newark, N. J., assignor to L. W. Fairchild & Co., New York, N. Y. Match-box ..	21,893	Oct. 11	61	282
Huss Brothers Company. (See Huss, William C., assignor.)				
Huss, William C., Cincinnati, Ohio. Wall-fixture for counters ..	21,370	Mar. 8	58	1262
Huss, William C., Cincinnati, Ohio. Wall-fixture for counters ..	21,907	Oct. 18	61	420
Huss, William C., assignor to Huss Brothers Company, Cincinnati, Ohio. Wall-fixture for counters ..	21,369	Mar. 8	58	1262
Huss, William C., assignor to Huss Brothers Company, Cincinnati, Ohio. Wall-fixture for counters ..	21,979	Nov. 8	61	879
Hussey, Cyrus, assignor to Toledo Moulding Company, Toledo, Ohio. Curtain-pole ..	22,078	Dec. 20	61	1783
I. B. Kleibert Rubber Company. (See Kleibert, Isaac B., assignor.)				
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	21,430	Mar. 29	58	1698
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	21,606	June 7	59	1600
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	21,607	June 7	59	1600
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of type ornaments ..	22,007	Nov. 22	61	1159
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	22,019	Nov. 29	61	1307
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	22,020	Nov. 29	61	1307
Ihlenburg, Herman, assignor to MacKellar, Smiths & Jordan Company, Philadelphia, Pa. Font of printing-type ..	22,021	Nov. 29	61	1308
Ireland, David M., Detroit, Mich., assignor to W. G. Howard and F. E. Lee, executors. Ornamental top for stoves ..	21,501	Apr. 26	59	624
Irons, Charles F., Providence, R. I. Badge ..	21,512	May 3	59	781
Irwin, Joseph A. and M. A., Iuka, Ill. Carpet-stretcher ..	21,674	June 28	59	2066
Irwin, Mary A. (See Irwin, Joseph A. and M. A.)				
Ives, Blakeslee & Williams Company. (See Ives, Edward R., assignor.)				
Ives, Edward R., Bridgeport, Conn., assignor to Ives, Blakeslee & Williams Company, New York, N. Y. Toy gun ..	21,431	Mar. 29	58	1698
J. B. & S. M. Knowles Company. (See Horton, Louis R., assignor.)				
J. D. Bergen Company. (See Bergen, James D., assignor.)				
J. L. Mott Iron Works. (See Hammann, Edward, assignor.)				
J. R. Torrey Razor Company. (See Torrey, Joseph R., assignor.)				
Jackson, Austin F., Taunton, Mass. Tea and coffee pot ..	21,291	Jan. 12	58	147
Jackson, Austin F., Taunton, Mass. Tea or coffee pot ..	21,297	Jan. 12	58	147
Jackson, Austin F., Taunton, Mass. Spoon, &c ..	21,298 to 21,302	Jan. 19	58	280
Jackson, Austin F., Taunton, Mass. Tea or coffee pot ..	21,331	Feb. 2	58	526
Jackson, Austin F., Taunton, Mass. Spoon, &c ..	21,513	May 3	59	784
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,061	Dec. 20	61	1781
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,062	Dec. 20	61	1781
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,063	Dec. 20	61	1781
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,064	Dec. 20	61	1781
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,065	Dec. 20	61	1781
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,066	Dec. 20	61	1782
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,067	Dec. 20	61	1782
Jackson, Austin F., assignor to Reed & Barton Corporation, Taunton, Mass. Handle for spoons, &c ..	22,068	Dec. 20	61	1782
Jackson, Johnson A. (See Hannals, Fred C., assignor.)				
Jackson & Co., Wm. H. (See Hovey, Robert M., assignor.)				
Jacobs, Jacob, Brooklyn, N. Y. Lens for illuminating-tiles, &c ..	21,861	Sept. 20	60	1746
Jameson, William A., Niagara Falls, N. Y. Spoon, &c ..	21,555	May 24	59	1250
Jameson, William A., Niagara Falls, assignor to Oneida Community, Limited, Kenwood, N. Y. Spoon, &c ..	21,632	June 21	59	1911
Jamouneau, William H., Newark, N. J. Spoon ..	21,296	Jan. 12	58	147
Jenkins, Wallace H., J. and J. Grist, Philadelphia, Pa. Edging ..	21,276	Jan. 5	58	1
Jewett & Co., Sherman S. (See Bark, Birger, assignor.)				
Jewett & Co., Sherman S. (See Walther, Charles F., assignor.)				
Johansen & Co., William. (See Selter, Albert, assignor.)				
Johnson, Martin A., Stoughton, Wis. Tongue cap ..	21,459	Apr. 12	59	292
Johnson, William L., Boston, Mass. Teething-cracker ..	21,337	Feb. 9	58	658
Jones, Nathaniel M. (See Curtis and Jones.)				
Joss, George N., Indianapolis, Ind., assignor to Eagle Machine Company, Lancaster, Ohio. Ventilator-grate ..	21,800	Aug. 23	60	1183
Josselyn, Benage S., Denver, Colo. Souvenir spoon ..	21,347	Feb. 16	58	809
Josselyn, Benage S., Denver, Colo. Spoon ..	21,469	Apr. 19	59	455
Josselyn, Benage S., Denver, Colo. Spoon ..	21,519	May 10	59	933
Joy, John M., Waterbury, Conn. Banner ..	21,927	Oct. 25	61	560
Judd, Edward A., assignor to Corbin Cabinet Lock Company, New Britain, Conn. Padlock-case ..	21,821	Aug. 30	60	1321
Judkins, Jerome B., Winchester, Mass. Zither ..	21,275	Jan. 5	58	1
Kahn & Bros., F. & L. (See Kahn, Lazard, assignor.)				
Kahn, Lazard, assignor to F. & L. Kahn & Bros., Hamilton, Ohio. Gas-stove ..	21,311	Jan. 26	58	390
Kahn, Lazard, assignor to F. & L. Kahn & Bros., Hamilton, Ohio. Gas-stove ..	21,332	Feb. 2	58	526
Kahn, Leopold, New York, N. Y. Bottle ..	21,669	June 28	59	2065
Kahn, Leopold, New York, N. Y. Ornamentation of sheet metal ..	21,696	July 5	60	153
Kain, William D., Amesbury, Mass. Indicator-body ..	21,523	May 10	59	934
Kaldenberg, Frederick J., New York, N. Y. Knife-handle ..	21,693	July 5	60	152
Kaysers, Julius, New York, N. Y. Glove ..	21,918	Oct. 25	61	550
Keller, Josiah O., Fort Wayne, Ind. Dental cabinet ..	21,666	June 28	59	2065
Kiechle, Brentano & Oberdorfer. (See McAdams, Charles R., assignor.)				
Kleinert, Isaac B., assignor to I. B. Kleinert Rubber Company, New York, N. Y. Dress-shield ..	21,310	Jan. 26	58	390
Koehn, Alfred, New York, N. Y. Lamp-bracket ..	21,818	Aug. 30	60	1330
Koehn, Alfred, New York, N. Y. Lamp-standard ..	21,820	Aug. 30	60	1331
Korn, George W., Chicago, Ill. Knife-handle ..	21,766	Aug. 9	60	888
Korn, George W., Chicago, Ill. Knife-handle ..	21,867	Sept. 27	60	1879
Koenig, Francis, assignor to R. G. Ledig, Philadelphia, Pa. Table ..	22,013	Nov. 22	61	1160
Koenig, Francis, assignor to R. G. Ledig, Philadelphia, Pa. Table ..	22,014	Nov. 22	61	1160
Koenig, Francis, assignor to R. G. Ledig, Philadelphia, Pa. Table ..	22,015	Nov. 22	61	1160
Kops, Daniel, assignor to L. Schiele & Co., New York, N. Y. Corset ..	21,978	Nov. 8	61	879
Kregel, Louis G., St. Louis, Mo. Coffin-pedestal ..	21,757	Aug. 2	60	731

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Kubin, William K., New York, N. Y. Badge	21,573	May 24	59	1252
La Ment, James H., East Troy, Pa. Lamp-chimney	21,556	May 21	59	1250
Ladd, Frank E., Springfield, Mass. Spoon	21,655	June 28	59	2063
Lanyon, Ned. V. (See Lanyon, William, Jr., assignor.)				
Lanyon, William, Jr., assignor to N. V. Lanyon, Pittsburg, Kans. Paper-weight	21,497	Apr. 26	59	624
Laplante, Francis, Boston, Mass. Brick or stone	22,076	Dec. 20	61	1783
Larson, John, and J. M. Van Slyke, Madison, Wis. Handle for spoons, &c	21,854	Sept. 13	60	1605
Larson, John, and J. M. Van Slyke, Madison, Wis. Handle for spoons, &c	21,855	Sept. 13	60	1605
Lautner, Alfred A., Limoges, France. Dish	21,388	Mar. 8	58	1262
Lawton, Thomas L., Philadelphia, Pa., assignor to Burlington Carpet Company, of New Jersey.				
Rug	21,904	Oct. 18	61	419
Lawton, Thomas L., Philadelphia, Pa., assignor to Burlington Carpet Company, of New Jersey.				
Rug	21,905	Oct. 18	61	420
Lazarus, Augustus A., et al. (See Lazarus, Mark, assignor.)				
Lazarus, Augustus A., et al. (See Lipper, Benjamin, assignor.)				
Lazarus, Augustus A., et al. (See Lipper and Courts, assignors.)				
Lazarus, Augustus A., et al. (See Schwarz, Isaac A., assignor.)				
Lazarus, Mark, assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Trimming	21,649	June 21	59	1912
Ledig, Reinhold G. (See Koenig, Francis, assignor.)				
Lee, Fred E., et al., executors. (See Ireland, David M., assignor.)				
Lehmann, Karl L., Chicago, Ill. Monument	21,956	Nov. 1	61	718
Lehnhardt, Albert, Jersey City, N. J. Stove-board	21,808	Aug. 30	60	1320
Leiter, Isaac H., New York, N. Y. Gimp	21,532	May 10	59	935
Leonardi, Sydney B., Tampa, Fla. Spoon	21,348	Feb. 16	58	809
Lewis, Eugene H., assignor to Michigan Sand Brick Company, St. Joseph, Mich., and Chicago, Ill.				
Building-block	21,522	May 10	59	933
Lexow, Charles, Rosebank, N. Y. Trimming	21,830	Sept. 6	60	1470
Liebhmann, Rudolph, New York, N. Y. Campaign-button	21,729	July 19	60	432
Lighton, John B., Syracuse, N. Y. Case for a coin-operated machine	22,080	Dec. 20	61	1784
Linde, George, Newark, N. J. Finger-ring	21,371	Mar. 8	58	1262
Lipper, Benjamin, et al. (See Lazarus, Mark, assignor.)				
Lipper, Benjamin, et al. (See Lipper and Courts, assignors.)				
Lipper, Benjamin, et al. (See Schwarz, Isaac A., assignor.)				
Lipper, Benjamin, assignor to himself, A. A. Lazarus, and I. A. Schwarz, Philadelphia, Pa. Dress-trimming	21,575	May 24	59	1252
Lipper, Benjamin, assignor to himself, A. A. Lazarus, and I. A. Schwarz, Philadelphia, Pa. Dress-trimming	21,576	May 24	59	1252
Lipper, Benjamin, assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Dress-trimming	21,658	June 28	59	2063
Lipper, Benjamin, assignor to himself, A. A. Lazarus, and I. A. Schwarz, Philadelphia, Pa. Dress-trimming	21,675	July 5	60	150
Lipper, Benjamin, assignor to himself, A. A. Lazarus, and I. A. Schwarz, Philadelphia, Pa. Dress-trimming	21,676	July 5	60	150
Lipper, Benjamin, assignor to himself, A. A. Lazarus, and I. A. Schwarz, Philadelphia, Pa. Dress-trimming	22,071	Dec. 20	61	1782
Lipper, Benjamin, and A. A. Courts, assignors to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Dress-trimming	21,341	Feb. 16	58	809
Lipper, Benjamin, and A. A. Courts, assignors to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Dress-trimming	21,677	July 5	60	150
Lipper & Co., M. W. (See Heing, Friedrich O., assignor.)				
Lipper & Co., M. W. (See Robinson, Edwin, assignor.)				
Lippincott, Jason E., Alexandria, Ind. Lamp-chimney	21,983	Nov. 8	61	880
Little, Robert H., assignor to E. D. Stiles, Chicago, Ill. Casing for coin-actuated vending-machines				
Loeb, Joseph, Philadelphia, Pa. Fringe	21,786	Aug. 23	60	1151
Logan, Samantha I., Louisville, Ky. Spoon	21,661	June 28	59	2064
Longenbelt, Flora D., Oneida, N. Y. Dial for clocks and watches	21,304	Jan. 19	58	247
Lowenthal, Nachman, Chambersburg, Pa. Shoe	21,290	Jan. 12	58	140
Ludwig, Adolph, Brooklyn, N. Y. Tray or receptacle	21,752	Aug. 2	60	731
Ludwig, Adolph, Brooklyn, N. Y. Spoon	21,621	June 14	59	1757
Lux, Samuel D., New York, N. Y. Box-cover	21,879	Oct. 4	61	146
MacKellar, Smiths & Jordan Company. (See Ihlenburg, Herman, assignor.)	21,923	Oct. 25	61	560
MacNamara, James W., Stillwater, Pa. Banner	21,373	Mar. 8	58	1262
MacNamara, James W., Blairsville, Pa. Flag	21,788	Aug. 23	60	1182
Magee, Frank A., Boston, Mass. Stove	21,713	July 12	60	292
Maillet, John W., Attleborough, Mass. Handle for spoons, &c	21,837	Sept. 6	60	1471
Maillet, John W., assignor to F. M. Whiting, North Attleborough, Mass. Spoon, &c	21,470	Apr. 19	59	455
Mapother, Dillon E., Louisville, Ky. Confection	21,760	Aug. 9	60	887
Mapother, Dillon E., Louisville, Ky. Glass vessel	23,075	Dec. 20	61	1783
Markell, Jacob, Brooklyn, assignor to H. Tappan, New York, N. Y. Perfumery-holder	21,925	Oct. 25	61	560
Marston, Louis H., assignor to Tonk Manufacturing Company, Chicago, Ill. Piano-stool	21,667	June 28	59	2065
Martindale, Roger G., Chicago, Ill. Advertising game-board	21,679	July 5	60	150
Matthews, Marshall J., Olean, N. Y. Crtain-roller bracket	21,929	Oct. 25	61	561
Maurer, Alexander C., Philadelphia, Pa. Fringe	22,049	Dec. 6	61	1472
May, Charles A., Trenton, N. J. Ewer	21,591	May 31	59	1425
Mayer, Wilhelm, Stuttgart, Germany. Memorial shield	21,862	Sept. 20	60	1746
McAdams, Charles R., assignor to Kiechle, Breutano & Oberdorfer, Evansville, Ind. Stove-door	21,514	May 3	59	784
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-handle	21,499	Apr. 26	59	624
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-plate	21,508	Apr. 26	59	625
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin plate	21,774	Aug. 9	60	889
McCarthy, Oliver, assignor to Meriden Britannia Company, Meriden, Conn. Coffin-handle	21,775	Aug. 9	60	889
McGrath, Catharine A., et al., executors. (See Bell, Harold J., assignor.)				
McGrath, Louis J., et al., executors. (See Bell, Harold J., assignor.)				
McIntosh, Colin, Tacoma, Wash. Key-tag	21,338	Feb. 9	58	658
McKee, Henry S. (See Bennett and McKee.)				
McKee, William J., Pittsburg, Pa. Souvenir medal	21,425	Mar. 22	58	1561
McLeod, Adolphus A., Cheraw, S. C. Pan-handle	21,614	June 7	59	1601
McLewee, William S., Trenton, N. J. Lamp-shade	21,414	Mar. 22	58	1561
McLewee, William S., Trenton, N. J. Lamp-shade	21,577	May 24	59	1252
McLewee, William S., Trenton, N. J. Lamp-shade	21,581	May 24	59	1253
McLewee, William S., Trenton, N. J. Lamp-shade	21,588	May 31	59	1425
Meeker, Stephen J., Newark, N. J. Shade-roller bracket	21,627	June 21	59	1910
Meese, Jacob W., Harrisburg, Pa. Statue	21,533	May 10	59	935

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Mehl & Co., John. (See Henkel, John, assignor.)				
Meinecke, Christian W., Jersey City, N. J. Box	21,372	Mar. 8	58	1262
Meriden Britannia Company. (See Hirschfeld, Henry W., assignor.)				
Meriden Britannia Company. (See McCarthy, Oliver, assignor.)				
Meriden Britannia Company. (See Wilcox, George H., assignor.)				
Meriden Bronze Company. (See Yokel, Franz, assignor.)				
Meriden Silver Plate Company. (See Hiller, Louis C., assignor.)				
Merritt, Arthur, and E. F. Aucaigne, New York, N. Y. Clock-case	22,011	Nov. 22	61	1159
Meyer, Bertha, Kansas City, Mo. Spoon	21,739	Aug. 2	60	730
Michigan Sand Brick Company. (See Lewis, Eugene H., assignor.)				
Miller, Edwin L., Scranton, Pa. Badge	21,899	Oct. 18	61	419
Millis, Henry L., Millis, Mass. Campaign-horn	21,789	Aug. 23	60	1182
Montgomery, Harry C., Cleveland, Ohio. Sink-trap	21,776	Aug. 9	60	889
Montgomery, Harry C., Cleveland, Ohio. Sink-trap	21,873	Sept. 27	60	1880
Moore, William N., Joliet, Ill. Heating-stove	21,801	Aug. 23	60	1182
Morgan, Charles, <i>et al.</i> (See Morgan and Redlinger, assignors.)				
Morgan, Charles, and M. Redlinger, Jr., assignors to said C. Morgan, E. H. Morgan, and A. Baumgarten, Freeport, Ill. Box for coffee-mills	21,619	June 7	59	1601
Morgan, Edgar H., <i>et al.</i> (See Morgan and Redlinger, assignors.)				
Moses, Harry M., assignor to H. M. Moses Company, Richmond, Va. Spoon	21,987	Nov. 15	61	1009
Mott, Benjamin I., Brooklyn, N. Y. Bottle	21,711	July 12	60	292
Munger, Willie B., Harrisburg, Pa. Badge	21,846	Sept. 6	60	1472
Murphy, Thomas H., and P. M. Zoeggele, New Bedford, Mass. Bread-pan	21,710	July 12	60	243
Murray, William T., New York, N. Y. Bottle or flask	22,085	Dec. 27	61	1941
Murray, Daniel I., Dayton, Ohio. Spoon	21,595	May 31	59	1425
Myers, Samuel E., New York, N. Y. Spoon	21,462	Apr. 12	59	293
Myers, Theodore A., Wheeling, W. Va. Toy whistle	21,408	Mar. 15	58	1420
Myers, Theodore B., St. Paul, Minn. Spoon	21,894	Oct. 11	61	282
N. O. Nelson Manufacturing Company. (See Graham, William H., assignor.)				
Nelson, Octavius E. (See Strom, Olaf, assignor.)				
Neugass, Moritz, New York, N. Y. Hat or cap	21,325	Feb. 2	58	526
New Jersey Car Spring and Rubber Company. (See Voorhees, John J., assignor.)				
Nicholas, Harry R. H., Newark, N. J. Cigar and match holder	21,991	Nov. 15	61	1010
Norman, Thomas W., Boston, Mass. Picture-frame	21,626	June 21	59	1910
North & Judd Manufacturing Company. (See Herrick, Frank J., assignor.)				
Nosker, Orren G. (See Whitson and Nosker.)				
Nuttall, Zelia, Dresden, Germany. Table	21,802	Aug. 30	60	1319
Nuttall, Zelia, Dresden, Germany. Table	21,803	Aug. 30	60	1319
Nuttall, Zelia, Dresden, Germany. Chair	21,849	Sept. 6	60	1473
O'Connor, John S., White Mills, Pa. Ornamentation of glassware	21,424	Mar. 22	58	1561
Oberfelder, Max, Chicago, Ill. Bottle	21,509	Apr. 26	59	625
Ohle, August C., assignor to H. H. Bell's Sons, New York, N. Y. Napped fabric	21,999	Nov. 22	61	1158
Oliver, Frederick, assignor to Belding Brothers & Co., Northampton, Mass. Hosiery	21,326	Feb. 2	58	526
Oliver, Mary A., Oswego, N. Y. Bottle	21,279	Jan. 5	58	1
Oliver, Mary A., Oswego, N. Y. Bottle-holder	21,280	Jan. 5	58	1
Oneida Community. (See Jameson, William A., assignor.)				
Oppenheimer, Simon, New York, N. Y. Veil	22,042	Dec. 6	61	1472
Oppenheimer, Simon, New York, N. Y. Veil	22,043	Dec. 6	61	1472
Osborn, Edward. (See Harvoy and Osborn.)				
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Match-box	21,768	Aug. 9	60	888
Osborne, Charles, assignor to Whiting Manufacturing Company, New York, N. Y. Metal border	21,848	Sept. 6	60	1473
Osborne, Frank N., New York, N. Y., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon or similar article	21,596	May 31	59	1425
Page, Albert A., assignor to Sargent & Company, New Haven, Conn. Bracket for meat-cutters	21,386	Mar. 8	58	1262
Palmer, Charles H., Jr., Amesbury, Mass. Carriage-body	21,935	Oct. 25	61	561
Palmer, Isaac E., Middletown, Conn. Hammock	21,434	Mar. 29	58	1698
Palmer, Stephen, Lansingburg, N. Y. Sash-pulley case	22,026	Nov. 29	61	1308
Pangborn, Frederic W., Jersey City, N. J. Piano-case	22,089	Dec. 27	61	1942
Patterson, William F., Jersey City, N. J. Window-shade	22,087	Dec. 27	61	1942
Paul, Archibald W., Wheeling, W. Va. Lantern	21,732	July 26	60	570
Peck Bros. & Co. (See Totbam, James, assignor.)				
Peets, Cyrus B., New Haven, assignor to Rogers & Brother, Waterbury, Conn. Spoon, &c.	21,385	Mar. 8	58	1262
Pegler, Charles, Elgin, Ill. Book-rest and holder for umbrellas, &c.	22,010	Nov. 22	61	1159
Peiffer, Alfred H., assignor to Simons Brother & Company, Philadelphia, Pa. Souvenir spoon	21,409	Mar. 15	58	1420
Perkins, Stephen W. (See Putnam, Henry O., assignor.)				
Perry, William H., Concord, N. H. Monument	21,410	Mar. 15	58	1420
Perry, William H., Concord, N. H. Monument	21,432	Mar. 29	58	1698
Perry, William H., Concord, N. H. Monument	21,433	Mar. 29	58	1698
Perry, William H., Concord, N. H. Monument	21,451	Apr. 5	59	153
Perry, William H., Concord, N. H. Monument	21,474	Apr. 19	59	455
Perry, William H., Concord, N. H. Monument	21,475	Apr. 19	59	456
Perry, William H., Concord, N. H. Monument	21,536	May 10	59	935
Perry, William H., Concord, N. H. Monument	21,571	May 24	59	1252
Pettibone, Charles, Chicago, Ill. Badge	21,886	Oct. 11	61	281
Petzold, Adolph, Philadelphia, Pa., assignor to J. Bromley & Sons. Rug	21,294	Jan. 12	58	147
Pfenninger, Jacob, St. Louis, Mo. Brevet	21,450	Apr. 5	59	152
Piaget, Louis A., Paterson, N. J. Badge	21,612	June 21	59	1912
Pierce, Robert F. Y., Mount Holly, N. J., and O. W. Spratt, Philadelphia, Pa., assignors to the Baptist Young Peoples Union of America, Chicago, Ill. Badge	21,308	Jan. 19	58	280
Pinkus, Frederick S., New York, N. Y. Table-cloth	21,928	Oct. 25	61	561
Pinkus, Frederick S., New York, N. Y. Sheet	22,051	Dec. 6	61	1473
Pistorius, Henry A., assignor of two-thirds to C. and G. E. Stickney, Newburyport, Mass. Breast-pin	22,061	Dec. 27	61	1940
Pitkin, Lorraine J., Chicago, Ill. Badge	22,038	Dec. 6	61	1471
Plumb, William H., Ansonia, Conn. Sachet or pincushion	21,490	Apr. 19	59	457
Pomeroy, Julian, Springfield, Mass. Whip	21,817	Aug. 30	60	1320
Poole, Edward, Philadelphia, Pa., assignor to J. Bromley & Sons. Table-cover	21,327	Feb. 2	58	526
Poole, Edward, Philadelphia, Pa., assignor to J. Bromley & Sons. Table-cover or curtain	21,329	Feb. 2	58	526
Popkin, Abraham, New York, N. Y. Cloak	21,335	Feb. 2	58	526
Pouyat, Emile, assignor to Société la Ceramique, J. Pouyat, Limoges, France. Dish	21,828	Aug. 30	60	1322
Prahar & Brother. (See Schaeffer, Ulrich E., assignor.)	21,406	Mar. 15	58	1420
Prahar, Louis B., Brooklyn, N. Y. Buckle	21,384	Mar. 8	58	1262

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Prabar, Louis B., Brooklyn, N. Y. Buckle	21,392	Mar. 8	58	1262
Prabar, Louis B., Brooklyn, N. Y. Buckle	21,448	Apr. 5	59	152
Prange, Leo, Brooklyn, N. Y. Button	{ 21,314 to 21,323 }	Jan. 26	58	390
Proeger, Julius, Greensburg, Pa., assignor to Huntington Glass Company, Huntington, W. Va. Glass vessel	22,001	Nov. 22	61	1158
Provenzano, Joseph N., New York, N. Y. Corner for pocketbook-flaps, &c	21,471	Apr. 19	59	455
Puddefoot, Charles, Detroit, Mich. Corkscrew	21,761	Aug. 9	60	827
Pullman's Palace Car Company. (See Rapp, August, assignor.)				
Putaam, Henry O., assignor to one-half to S. W. Perkins, Sunfield, Mich. Fork for potato-diggers	21,934	Oct. 25	61	561
Quinby, Albert O. (See Bates and Quinby.)				
Quinby, Albert O. and T. H. Bates, Fresno, Cal. Medal	21,703	July 12	60	291
R. Wallace & Sons Manufacturing Company. (See Chulee, Harry L., assignor.)				
R. Wallace & Sons Manufacturing Company. (See Wallace, Henry L., assignor.)				
Rand, George B., Dubuque, Iowa. Badge	21,790	Aug. 23	60	1182
Rankin, Thomas I., assignor to Abram Cox Stove Company, Philadelphia, Pa. Heating-stove	21,393	Mar. 8	58	1262
Rapp, August, assignor to Pullman's Palace Car Company, Chicago, Ill. Ornamentation of car interiors	21,996	Nov. 15	61	1011
Rathbone, John S., Mystic, Conn. Spoon	22,030	Dec. 6	61	1470
Rathbone, John S., Mystic, Conn. Spoon	22,031	Dec. 6	61	1470
Reading Hardware Company. (See Schwendner, Max, assignor.)				
Redheffer, Samuel F., Chicago, Ill. Game-board	21,415	Mar. 22	58	1561
Redlinger, Mathias. (See Morgan and Redlinger.)				
Reed, Alanson H., Chicago, Ill. Piano pedal	21,537	May 10	59	935
Reed & Barton Corporation. (See Jackson, Austin F., assignor.)				
Reensiera, Gustaf L., Boston, Mass. Paper-weight	22,002	Nov. 22	61	1158
Regular Army and Navy Union of Ohio. (See Richards, Eugene H., assignor.)				
Regular Army and Navy Union of Ohio. (See Roche, James F., assignor.)				
Regna, Emma M., Harrison, N. Y. Badge	21,618	June 7	59	1601
Reichert, Louis, Scranton, Pa. Badge	21,779	Aug. 16	60	1045
Reinagel, George H., Brooklyn, assignor to Firemen's Publishing Company, New York, N. Y. Badge or similar article	21,744	Aug. 2	60	730
Rhind, Frank, Meriden, Conn. Lamp-burner	21,770	Aug. 9	60	888
Richards, Edmund L., Brooklyn, N. Y. Spoon	21,868	Sept. 27	60	1879
Richards, Eugene H., Boston, Mass., assignor to Regular Army and Navy Union of Ohio. Badge	21,640	June 21	59	1911
Richards, Eugene H., Boston, Mass., assignor to Regular Army and Navy Union of Ohio. Badge	21,641	June 2	59	1911
Richardson, Chauncey E., Duluth, Minn. Spoon, &c	21,602	June 7	59	1599
Richardson, Henry C., Merrimac, Mass. Lady's boot	21,954	Nov. 1	61	717
Richardson, Ithiel S., Chicago, Ill. Sign	21,336	Feb. 2	58	526
Richardson, Jeremiah J., Brooklyn, assignor to Richardson & Morgan Company, New York, N. Y. Fireplace-heater	21,515	May 3	59	724
Richardson & Morgan Company. (See Richardson, Jeremiah J., assignor.)				
Richter, Carl, Chicago, Ill. Bottle	21,495	Apr. 19	59	454
Rickert, August, Newark, N. J. Watch-chain	21,426	Mar. 22	58	1561
Rickert, August, Newark, N. J. Watch-chain	21,557	May 24	59	1250
Rindskopf, Abraham P. and H. P., Brooklyn, N. Y. Dress-shield	21,662	June 23	59	2464
Rindskopf, Henry P. (See Rindskopf, Abraham P. and H. P.)				
Ripson, John D., Thorold, Canada. Burial-casket	21,339	Feb. 9	58	658
Ritchie, Francis. (See Bascom and Ritchie.)				
Ritchie, Francis, Troy, N. Y., assignor to I. A., F. L., and H. R. Sheppard, Philadelphia, Pa. Cooking-stove	21,520	May 10	59	933
Ritchie, Francis, Troy, N. Y., assignor to I. A., F. L., and H. R. Sheppard, Philadelphia, Pa. Cooking-stove	21,615	June 7	59	1601
Ritchie, Francis, New York, N. Y., assignor to I. A., F. L., and H. R. Sheppard, Philadelphia, Pa. Cooking-stove	21,654	June 21	59	1913
Roberts, James, Boston, Mass., assignor to S. A. Woods Machine Company. Cutter-head hood for planers	21,850	Sept. 6	60	1473
Robinson, Benjamin F. (See Robinson, Fernando A. and B. F.)				
Robinson, Edwin, Camden, N. J. Trimming	21,659	June 28	59	2064
Robinson, Edwin, Camden, N. J., assignor to M. W. Lipper & Co., Philadelphia, Pa. Trimming	22,045	Dec. 6	61	1472
Robinson, Edwin, Camden, N. J., assignor to M. W. Lipper & Co., Philadelphia, Pa. Trimming	22,046	Dec. 6	61	1472
Robinson, Edwin, Camden, N. J., assignor to M. W. Lipper & Co., Philadelphia, Pa. Trimming	22,047	Dec. 6	61	1472
Robinson, Fernando A. and B. F., Clarksburg, W. Va. Spoon	21,374	Mar. 8	58	1362
Roche, James F., Boston, Mass., assignor to Regular Army and Navy Union of Ohio. Badge	21,704	July 12	60	291
Rockwood, Frank B. (See Rockwood, Frederick S. and F. B.)				
Rockwood, Frederick S. and F. B., Elmhurst, Ill. Bottle	22,058	Dec. 13	61	1650
Rodiger, William, Chicago, Ill. Inkstand	22,003	Nov. 22	61	1154
Rodiger, William, Chicago, Ill. Inkstand	22,004	Nov. 22	61	1158
Roe, Fayette W., Omaha, Nebr. Watch-chain	21,281	Jan. 5	58	1
Roebber, William, New York, N. Y. Inkstand	21,387	Mar. 8	58	1262
Roehr, Ludwig J., Newark, N. J., assignor to Bassett Jewelry Co., New York, N. Y. Locket	22,074	Dec. 20	61	1783
Roehsler, Charles F. (See Girsch and Roehsler.)				
Rogers & Brother. (See Peets, Cyrus B., assignor.)				
Rogers & Brother. (See Shannon, Edward W., assignor.)				
Rohrbacher, Frederick. (See Hornmann, Ferdinand, assignor.)				
Rose, Louis A., Paris, France, assignor to L. Straus & Sons, New York, N. Y. Ornamentation of glass vessels	21,727	July 19	60	432
Rosenblatt, Emil H., New York, N. Y. Spoon	22,032	Dec. 6	61	1470
Rosenstein, Albert, Lancaster, Pa. Handle for canes or umbrellas	{ 21,350 to 21,356 }	Feb. 16	58	810
Rosenstein, Albert, Lancaster, Pa. Handle for canes or umbrellas	21,361	Feb. 23	58	952
Roulet, George U., Toledo, Ohio. Spoon, &c	22,059	Dec. 20	61	1781
Rowland, Charles L., Brooklyn, N. Y. Mouth-piece for gas-retorts	21,435	Mar. 29	58	1698
Rudisill, William W., Altoona, Pa. Spoon	21,284	Jan. 5	58	1
Runkle, Howard A., Reading, Pa. Drip-cup	21,590	May 31	59	1425
Russell & Erwin Manufacturing Company. (See Christesen, Rudolph W. E., assignor.)				
S. A. Woods Machine Company. (See Roberts, James, assignor.)				
Sachs, Joseph, New York, N. Y. Auxiliary fire-alarm box	22,090	Dec. 27	61	1942
Sackett, William P., assignor to Bailey, Banks & Biddle, Philadelphia, Pa. Badge	21,394	Mar. 8	58	1262
Sacks, Henry M., Madison, N. J. Trimming	21,832	Sept. 6	60	1470
Sacks, Henry M., Madison, N. J. Trimming	21,833	Sept. 6	60	1471
Sadler, Samuel, St. Louis, Mo. Washing-machine tub	21,997	Nov. 15	61	1911
Sanborn, George O., Petaluma, Cal. Bottle	21,524	May 10	59	934

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Sargent & Company. (See Page, Albert A., assignor.)				
Sargent & Company. (See Stevens, William E., assignor.)				
Schaeffer, Ulrich F., New York, assignor to Prahar & Brother, Brooklyn, N. Y. Buckle.....	21,395	Mar. 8	58	1262
Scheffner, August, Jr., Elberfeld, Germany. Fabric.....	21,343	Feb. 16	58	809
Scheuer, Max, New York, N. Y. Purse or pocketbook.....	21,974	Nov. 8	61	878
Scheuer, Max, New York, N. Y. Pocketbook or purse.....	22,039	Dec. 6	61	1471
Schiele & Co., Lewis. (See Kops, Daniel, assignor.)				
Schimmel, Gustav R., Detroit, Mich. Nursing-bottle.....	22,052	Dec. 6	61	1473
Schlechter, Gustavus A., Reading, Pa. Badge.....	21,745	Aug. 2	60	730
Schlechter, Gustavus A., Reading, Pa. Badge.....	21,866	Sept. 27	60	1879
Schlechter, Gustavus A., Reading, Pa. Spoon.....	22,033	Dec. 6	61	1470
Schloss, Henry W., New York, N. Y. Dress-trimming.....	21,794	Aug. 23	60	1183
Schloss, Joseph, assignor to H. Wallach's Sons, New York, N. Y. Campaign-shirt.....	21,664	June 28	59	2064
Schloss, Joseph W., New York, N. Y. Trimming.....	21,648	June 21	59	1912
Schloss, Joseph W., New York, N. Y. Trimming.....	21,831	Sept. 6	60	1470
Schloss, Joseph W., New York, N. Y. Dress-trimming.....	22,048	Dec. 6	61	1472
Schmid, Albert, Allegheny, assignor to Westinghouse Electric and Manufacturing Company, Pitts- burg, Pa. Frame for electric machines.....	21,416	Mar. 22	58	1561
Schmidt, Jacob C., Reading, Pa. Spoon.....	21,540	May 17	59	1093
Schneider, Henry W., Little Oley, Pa. Inkstand.....	21,990	Nov. 15	61	1010
Schoenhut, Albert, Philadelphia, Pa. Trumpet.....	21,841	Sept. 6	60	1472
Schoenhut, Albert, Philadelphia, Pa. Trumpet.....	21,826	Sept. 6	60	1472
Schoonmaker, Edward T., New York, N. Y. Andiron.....	21,726	July 19	60	432
Schott, William, Brooklyn, N. Y. Needle-holder.....	21,417	Mar. 22	58	1561
Schupmann, Ludwig, Aix-la-Chapelle, assignor to Urania-Uhren und Säulen-Commandit-Ges. Bres- lau & Dr. Von Orth, Berlin, Germany. Casing for urania columnus.....	21,865	Sept. 27	60	1879
Schwab, Samuel M., Jr., New York, N. Y. Decorative fabric.....	21,734	July 26	60	570
Schwab, Samuel M., Jr., New York, N. Y. Decorative fabric.....	21,735	July 26	60	570
Schwab, Samuel M., Jr., New York, N. Y. Pattern for printed fabric.....	21,858	Sept. 13	60	1606
Schwarz, Isaac A., et al. (See Lazarus, Mark, assignor.)				
Schwarz, Isaac A., et al. (See Lipper, Benjamin, assignor.)				
Schwarz, Isaac A., et al. (See Lipper and Courts, assignors.)				
Schwarz, Isaac A., assignor to himself, A. A. Lazarus, and B. Lipper, Philadelphia, Pa. Dress- trimming.....	21,578	May 24	59	1252
Schwarz, Isaac A., assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Trimming.....	21,646	June 21	59	1912
Schwarz, Isaac A., assignor to A. A. Lazarus, I. A. Schwarz, and B. Lipper, Philadelphia, Pa. Trimming.....	21,647	June 21	59	1912
Schwarz, Louis, Brooklyn, N. Y. Box.....	21,955	Nov. 1	61	717
Schwendner, Max, assignor to Reading Hardware Company, Reading, Pa. Esentecheon-plate.....	22,025	Nov. 29	61	1308
Scott, George W., Washington, D. C. Cane-handle.....	21,976	Nov. 8	61	879
Sealy, Alvin A. (See Connolly and Sealy.)				
Selter, Albert, Hoboken, N. J., assignor to W. Johansen & Co., New York, N. Y. Picture-frame.....	21,733	July 26	60	570
Semler, George, West Orange, N. J. Cuspidor.....	21,358	Feb. 23	58	952
Sercombe, Orville G., Louisville, Ky. Bottle.....	21,375	Mar. 8	53	1262
Sexton & Son, S. B. (See Bascom, Henry C., assignor.)				
Seyler, Ernest, Norwich, Conn. Bath-tub.....	21,436	Mar. 29	58	1698
Shafer, Mary C., Elgin, Ill. Badge.....	21,951	Nov. 1	61	717
Shannon, Edward W., assignor to Rogers & Brother, Waterbury, Conn. Spoon.....	21,472	Apr. 19	59	455
Shaw, William, Ballard Vale, Mass. Spoon.....	21,657	June 28	59	2063
Shepard, Charles G., and P. Adams; said Adams assignor to W. J. Shepard, Buffalo, N. Y. Toy savings-bank.....	21,594	May 31	59	1125
Shepard, Walter J. (See Shepard and Adams, assignors.)				
Sheppard, Franklin L., et al. (See Ritchie, Francis, assignor.)				
Sheppard, Howard R., et al. (See Ritchie, Francis, assignor.)				
Sheppard, Isaac A., et al. (See Ritchie, Francis, assignor.)				
Shieller, George W., Brooklyn, N. Y. Spoon or fork handle.....	21,633	June 21	59	1911
Shillitto, Francis W., assignor to American Buckle and Cartridge Company, West Haven, Conn. Suspender-ring.....	21,860	Sept. 20	60	1746
Siegel, Hermann, New York, N. Y. Ornamentation of glassware.....	21,333	Feb. 2	58	526
Sievert, Henry H., Chicago, Ill. Seat and back for water-closets.....	21,438	Mar. 29	53	1698
Simons Brother & Co. (See Weihman, Henry A., assignor.)				
Simons Brother & Company. (See Peiffer, Alfred H., assignor.)				
Simons, Edwin S., Philadelphia, Pa. Thimble.....	21,746	Aug. 2	60	730
Sisson, Charles, Providence, R. I. Tape.....	21,292	Jan. 12	58	147
Sisson, Charles, Providence, R. I., assignor to Chipman, Calley & Co., Rockland, Mass. Tape.....	22,027	Nov. 29	61	1308
Skinner, Joseph W., La Crosse, Wis. Shoe-chaper plate.....	21,694	July 5	60	152
Slater, John, Burslem, England. Dish.....	21,309	Jan. 19	58	280
Slensby, Patrick, Brooklyn, N. Y. Needle-threader frame.....	21,600	Jan. 31	59	1426
Sloan, Robert I., and R. D. Gallagher, Chicago, Ill. Railway-car body.....	21,524	Aug. 30	60	1321
Smail, Mary A., Dime, Pa. Chandelier-pendant.....	21,543	May 17	59	1098
Smedes, Levi K., assignor to Taylor Company, New York, N. Y. Burial-casket.....	21,582	May 24	59	1253
Smith, Celia M., Ithaca, N. Y. Statuette.....	21,680	July 5	60	150
Smith, Charles W., Norwalk, Ohio. Curtain-pole bracket.....	21,930	Oct. 25	61	561
Smith, Charles W., Norwalk, Ohio. Curtain-pole bracket.....	21,931	Oct. 25	61	561
Smith, Charles W., Norwalk, Ohio. Curtain-pole bracket.....	21,932	Oct. 25	61	561
Snyder, Harry B., Chicago, Ill. Handle for canes, &c.....	22,069	Dec. 20	61	1722
Snyder, Harry B., Chicago, Ill. Handle for canes, &c.....	22,070	Dec. 20	61	1722
Société la Ceramique, J. Poyat. (See Poyat, Emile, assignor.)				
Sommer, William C., Springfield, Ill. Spoon, &c.....	22,034	Dec. 6	61	1470
Southard, Barron D., Chicago, Ill. Electric-motor frame.....	21,981	Nov. 8	61	880
Southworth, Dean, Braintree, Mass. Spoon.....	21,463	Apr. 12	59	293
Spadone, Henry E., New York, N. Y. Rubber mat.....	21,730	July 19	60	432
Sparmaker, Frank P., Philadelphia, Pa. Watch-charm.....	21,749	Aug. 2	60	731
Spratt, Orlando W. (See Pierce and Spratt.)				
Starkey, Sydney, East Liverpool, Ohio. Vase, &c.....	21,877	Oct. 4	61	145
Stearn Gauge and Lantern Company. (See Wright, Frederick K., assignor.)				
Steele, George N., Wickford, R. I. Tape.....	21,903	Oct. 18	61	419
Stevens, William E., assignor to Sargent & Company, New Haven, Conn. Coffin-trimmings.....	{ 21,359 } { 21,360 }	Feb. 23	58	952
Stickney, Caleb, et al. (See Pistorius, Henry A., assignor.)				
Stickney, George E., et al. (See Pistorius, Henry A., assignor.)				
Stiles, Everett D. (See Little, Robert H., assignor.)				
Stiles, Sidney L., Watseka, Ill. Hinge.....	21,558	May 24	59	1250
Stocking, George B., Tacoma, Wash. Spoon, &c.....	22,060	Dec. 20	61	1781

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Stockstrom, Charles A. (See Stockstrom, Louis, assignor.)				
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Vapor-stove	21,651	June 21	59	1913
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Vapor-stove	21,652	June 21	59	1913
Stockstrom, Louis, assignor of one-half to C. A. Stockstrom, St. Louis, Mo. Vapor-stove	21,653	June 21	59	1913
Straus & Sons, L. (See Rose, Louis A., assignor.)				
Strom, Olaf, assignor of one-half to O. E. Nelson, Brooklyn, N. Y. Match-stand	21,511	May 3	59	783
Strich, William, and P. M. Zeidler, New York, N. Y. Piano-caso	22,079	Dec. 20	61	1784
Stumpf, Emil, Elberfeld, Germany. Fabric	21,342	Feb. 16	58	809
Sturm, Henry, Arlington, N. J. Ornamentation of fabrics	21,795	Aug. 23	60	1183
Supe, Otto, Sault Ste. Marie, Mich. Spoon	21,740	Aug. 2	60	730
Svoboda, Ferdinand, and C. Hofmann, Chicago, Ill. Barber's sign	21,782	Aug. 23	60	1181
Sweeney, John J., Brooklyn, N. Y. Ornamentation of metal	21,437	Mar. 29	58	1698
Tappan, Herman. (See Markell, Jacob, assignor.)				
Tappan, Herman. (See Warren, John E., Jr., assignor.)				
Tatum, Charles A., assignor to Whitall, Tatum & Co., New York, N. Y. Bottle	21,285	Jan. 5	58	1
Taylor & Boggis Foundry Company. (See Clemes, William H., assignor.)				
Taylor Company. (See Smedes, Levi K., assignor.)				
Terbune, James L., Harrison, N. J. Badge	21,608	June 7	59	1600
Thissell, Earl A., and W. H. Wilder, Florence, Mass. Oil or gas stove	21,852	Sept. 6	60	1474
Thissell, Earl A., and W. H. Wilder, Florence, Mass. Stove	21,896	Oct. 11	61	282
Thissell, Earl A., and W. H. Wilder, Northampton, Mass. Oil or gas stove	21,985	Nov. 8	61	880
Thomas, Oscar G., Taunton, Mass. Stove or range	21,851	Sept. 6	60	1473
Thonet, August, assignor to Thonet Brothers, Vienna, Austria-Hungary. Chair	22,012	Nov. 22	61	1160
Thonet, August, assignor to Thonet Brothers, Vienna, Austria-Hungary. Chair	22,092	Nov. 29	61	1308
Thonet, August, assignor to Thonet Brothers, Vienna, Austria-Hungary. Chair	22,023	Nov. 29	61	1308
Thonet Brothers. (See Thonet, August, assignor.)				
Thiemler, Franz H., Chicago, Ill. Bottle	21,736	July 26	60	571
Thyng, Annie G., New York, N. Y., assignor to Cheney Brothers, South Manchester, Conn. Textile fabric	21,525	May 10	59	934
Thyng, Annie G., New York, N. Y., assignor to Cheney Brothers, South Manchester, Conn. Textile fabric	21,998	Nov. 22	61	1157
Tiffany & Co. (See Farnham, Paulding, assignor.)				
Tilton, George P., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon	21,357	Feb. 16	58	810
Tilton, George P., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon, &c	21,566	May 24	59	1251
Tilton, George P., assignor to Towle Manufacturing Company, Newburyport, Mass. Spoon	21,742	Aug. 2	60	730
Tim, Louis, New York, N. Y. Shirt envelope or holder	21,663	June 28	59	2064
Tisch, Louis, New York, N. Y. Trimming	21,834	Sept. 6	60	1471
Todd & Co., Edward. (See Freer, Charles S., assignor.)				
Toledo Moulding Company. (See Hussey, Cyrus, assignor.)				
Tonk Manufacturing Company. (See Marston, Louis H., assignor.)				
Tonk, Max, Chicago, Ill. Piano-stool	21,695	July 5	60	153
Torrey, Joseph R., assignor to J. R. Torrey Razor Company, Worcester, Mass. Razor-handle	21,634	June 21	59	1911
Totbam, James, assignor to Peck Bros. & Co., New Haven, Conn. Standard for wash-basin slabs	21,724	July 19	60	431
Towle Manufacturing Company. (See Osborne, Frank N., assignor.)				
Towle Manufacturing Company. (See Tilton, George P., assignor.)				
Traun, Heinrich, Hamburg, Germany. Sign	22,006	Nov. 22	61	1159
Trant, Justus A., New Britain, Conn. Clasp	21,400	Mar. 15	58	1420
Traut, Justus A., New Britain, Conn. Buckle	21,517	May 3	59	784
Treat, Charles H., Georgetown, Del., and A. B. Banghart, Baltimore, Md. Dish	21,583	May 24	59	1253
Tucker, George W., Waterbury, Conn. Picture-hook	21,870	Sept. 27	60	1879
Tugby, Thomas, Niagara Falls, N. Y. Brooch-pin	21,759	Aug. 9	60	887
Turner, Jonathan, New Bedford, Mass. Screw-stud	21,673	June 28	59	2066
Ulrich, Albert H., Evanston, Ill. Handle for spoons, &c	21,919	Oct. 25	61	559
Underhill, Francis M., assignor to Whitall, Tatum & Co., New York, N. Y. Jar	21,612	June 7	59	1601
Underhill, Francis M., assignor to Whitall, Tatum & Co., New York, N. Y. Jar or ointment-pot	21,628	June 21	59	1910
Urania-Uhren und Säulen-Commandit-Ges. Breslauer & Dr. Orth. (See Schupmann, Ludwig, assignor.)				
Van Eps, Henry R., Peoria, Ill. Gate	21,502	Apr. 26	59	624
Van Herck, Henri. (See Demarest and Van Herck.)				
Van Keuren, William J., Honesdale, Pa. Button	21,843	Sept. 6	60	1472
Van Slyke, James M. (See Larson and Van Slyke.)				
Van Slyke, James M., Madison, Wis. Spoon	21,717	July 19	60	431
Verpillier, Paul, Newark, N. J. Finger-ring	21,570	May 24	59	1252
Verschuur, Justus, Jersey City, N. J. Spoon	21,550	May 17	59	1099
Voorhees, John J., Jersey City, N. J., assignor to New Jersey Car Spring and Rubber Company, of New Jersey. Rubber mat	21,707	July 12	60	291
W. L. Libby & Son Company. (See Anderson, William C., assignor.)				
W. W. Kimball Company. (See Brandt, Oscar E., assignor.)				
W. W. Kimball Company. (See Hedgeland, Frederick W., assignor.)				
Wallace, Henry L., assignor to R. Wallace & Sons Manufacturing Company, Wallingford, Conn. Spoon	21,741	Aug. 2	60	730
Wallach's Sons, H. (See Schloss, Joseph, assignor.)				
Walther, Charles F., assignor to S. S. Jewett & Co., Buffalo, N. Y. Heating-stove	21,440	Mar. 29	58	1698
Ward, Frank K., Washington, D. C. Cream-skimmer	21,418	Mar. 22	58	1561
Ward, Frank K., Washington, D. C. Milk-mug	21,419	Mar. 22	58	1561
Ward, Frank K., Washington, D. C. Wagon-body	21,420	Mar. 22	58	1561
Ward, Frank K., Washington, D. C. Jar	21,464	Apr. 12	59	293
Ward, Frank K., Washington, D. C. Jar-stopper	21,465	Apr. 12	59	293
Ward, Frank K., Washington, D. C. Chair	21,503	Apr. 26	59	624
Warner, Augusta M., San Francisco, Cal. Game-board	21,401	Mar. 15	58	1420
Warner, De Ver H., Bridgeport, Conn. Corset	21,883	Oct. 4	61	146
Warner, De Ver H., Bridgeport, Conn. Corset	21,884	Oct. 4	61	146
Warren, John E., Jr., Newark, N. J., assignor to H. Tappan, New York, N. Y. Perfumery-holder	21,973	Nov. 8	61	878
Watts, John, et al. (See Harvey and Osborn, assignors.)				
Watts, Joseph, et al. (See Harvey and Osborn, assignors.)				
Ways, Charles H., Connellsville, Pa. Souvenir spoon	21,402	Mar. 15	58	1420
Webb, Joseph, Sewickley, Pa. Lamp globe or shade	21,819	Aug. 30	60	1321
Weber, Anton, assignor to Headley & Carrow Manufacturing Company, Philadelphia, Pa. Silver-smith's stock	21,396	Mar. 8	58	1262
Weber, Anton, assignor to Headley & Carrow Manufacturing Company, Philadelphia, Pa. Silver-smith's stock	21,510	Apr. 26	59	625
Weihman, Henry A., assignor to Simons Bro. & Co., Philadelphia, Pa. Metallic box	21,473	Apr. 19	59	455
Weihman, Henry A., assignor to Simons Bro. & Co., Philadelphia, Pa. Back for a brush or hand-mirror	21,629	June 21	59	1910

Alphabetical list of patentees of designs—Continued.

Name, residence, and design.	No.	Date.	Official Gazette.	
			Vol.	Page.
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Thimble.....	21,747	Aug. 2	60	730
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Handle for knives.....	21,785	Aug. 23	60	1181
Weihman, Henry A., assignor to Simons, Brother & Co., Philadelphia, Pa. Thimble.....	21,844	Sept. 6	60	1472
Weinberg, Charles, assignor to C. Weinberg & Co., New York, N. Y. Galloon.....	21,516	May 3	59	784
Weinberg & Co., C. (See Weinberg, Charles, assignor.)				
Welles, Howard W., Poughkeepsie, N. Y. Campaign-badge.....	21,814	Aug. 30	60	1320
Wesson, Daniel B. and J. H., Springfield, Mass. Pistol-check.....	21,823	Aug. 30	60	1321
Wesson, Joseph H. (See Wesson, Daniel B. and J. H.)				
Wesson, Joseph H., Springfield, Mass. Pistol-check.....	21,822	Aug. 30	60	1321
West, Augustine C., Cambridge, Mass. Oil or gas stove.....	22,016	Nov. 22	61	1160
West, George R., Pittsburg, Pa. Bottle.....	21,278	Jan. 5	58	1
Wester, Charles, New York, N. Y. Button-hook.....	21,792	Aug. 23	60	1182
Westinghouse Electric and Manufacturing Company. (See Schmid, Albert, assignor.)				
Westmeyer, Adolph, Pacific, Mo. Wire-stretcher shank.....	21,592	May 31	59	1425
Weston, Edward, Newark, N. J. Case for electrical measuring-instruments.....	{ 21,445 21,446 }	Apr. 5	59	152
Wettstein, Otto, Rochelle, Ill. Spoon, &c.....	21,334	Feb. 2	58	526
Whitall, Tatum & Co. (See Tatum, Charles A., assignor.)				
Whitall, Tatum & Co. (See Underhill, Francis M., assignor.)				
Whiting, Frank M. (See Maillot, John W., assignor.)				
Whiting, Frank M., North Attleborough, Mass. Spoon, &c.....	21,559	May 24	59	1250
Whiting Manufacturing Company. (See Osborne, Charles, assignor.)				
Whitney, Thomas J., Philadelphia, Pa. Comb-case.....	21,456	Apr. 12	59	292
Whitson, Peter E., and O. G. Nosker, Sheldon, Ill. Broom-rack.....	21,708	July 12	60	291
Wientge, Charles C., assignor to Howard & Son Company, Providence, R. I. Spoon.....	21,340	Feb. 9	58	652
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Spoon, &c.....	21,441	Mar. 29	58	1698
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Handle for spoons, &c.....	21,838	Sept. 6	60	1471
Wientge, Charles C., assignor to Howard Sterling Company, Providence, R. I. Back of a brush or similar article.....	21,847	Sept. 6	60	1473
Wightman, John, Nottingham, England. Ruffling and ruching.....	21,562	May 24	59	1251
Wightman, John, Nottingham, England. Ruffling and ruching.....	21,563	May 24	59	1251
Wilcox, Fred E., Syracuse, N. Y. Bedstead.....	21,856	Sept. 13	60	1665
Wilcox, George H., assignor to Meriden Britannia Company, Meriden, Conn. Cigar-tray.....	21,670	June 28	59	2065
Wilder, William H. (See Thissell and Wilder.)				
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Spoon.....	21,603	June 7	59	1600
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Spoon.....	21,604	June 7	59	1600
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Spoon.....	21,605	June 7	59	1600
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Bowl.....	21,755	Aug. 2	60	731
Wilkinson, George, assignor to Gorham Manufacturing Company, Providence, R. I. Handle for spoons, &c.....	21,839	Sept. 6	60	1471
Wilkinson, William, Philadelphia, Pa. Heater, water, or steam pipe.....	21,561	May 24	59	1251
Willet, Samuel R., Philadelphia, Pa. Swab-cup.....	22,086	Dec. 27	61	1941
Wills, George U., Philadelphia, Pa. Cribbage-board.....	21,376	Mar. 8	58	1262
Wilson, William R., Columbus, Ohio. Carriage-step.....	21,780	Aug. 16	60	1045
Windmayer, Alexander J., Fort Madison, Iowa. Pedestal.....	21,492	Apr. 19	59	456
Winteringer, James M., Allegheny, Pa. Hall-rack.....	21,282	Jan. 5	58	1
Wirt, Charles, Chicago, Ill. Insulator-bracket.....	{ 21,377 to 21,380 }	Mar. 8	58	1262
Wirt, Charles, Chicago, Ill. Insulator-bracket.....	21,439	Mar. 29	58	1698
Wirt, Charles, Chicago, Ill. Insulator-bracket.....	21,454	Apr. 12	59	292
Wirt, Charles, Chicago, Ill. Insulator-bracket.....	21,455	Apr. 12	59	292
Wixon, George R., Fairhaven, Mass. Handle for swords or the like.....	22,008	Nov. 22	61	1159
Wolf-sky, Louis, Chicago, Ill. Picture-frame bracket.....	21,452	Apr. 5	59	153
Wood, Walter A., assignor to T. B. Clark & Co., Honesdale, Pa. Ornamentation of glassware.....	21,466	Apr. 12	59	293
Wood, Warwick W., Winston, N. C. Tobacco plug.....	21,992	Nov. 15	61	1010
Wood, William A., Montreal, Canada. Thimble.....	21,901	Oct. 18	61	419
Wright, Frederick K., assignor to Steam Gauge and Lantern Company, Syracuse, N. Y. Lantern.....	21,421	Mar. 22	58	1561
Wright, Hallie L., Washington, D. C. Spoon.....	21,737	July 26	60	571
Wright, Robert S., Somerville, Mass. Couch, lounge, or sofa.....	21,362	Feb. 23	58	952
Wuest, Philip, Jr., assignor to C. J. and F. J. Heppie, Philadelphia, Pa. Frame for electric motors.....	21,630	June 21	59	1910
Yokel, Franz, assignor to Meriden Bronze Company, Meriden, Conn. Table-top.....	21,722	July 19	60	431
Yokel, Franz, assignor to Meriden Bronze Company, Meriden, Conn. Holder for lamp-founts.....	21,723	July 19	60	431
Yokel, Franz, assignor to Meriden Bronze Company, Meriden, Conn. Table-top.....	21,750	Aug. 2	60	731
Yokel, Franz, assignor to Meriden Bronze Company, Meriden, Conn. Table-top.....	21,751	Aug. 2	60	731
Yokel, Franz, assignor to Meriden Bronze Company, Meriden, Conn. Lamp.....	21,871	Sept. 27	60	1879
Young, Eben, New York, N. Y. Garment.....	21,564	May 24	59	1251
Young, Frank E., Canton, Ohio. Rectal dilator.....	21,551	May 17	59	1099
Young, Henry L. (See Baldwin, Fred B., assignor.)				
Zeidler, Paul M. (See Strich and Zeidler.)				
Zinn, Simon, New York, N. Y. Match-box.....	21,924	Oct. 25	61	560
Zoeggele, Philip M. (See Murphy and Zoeggele.)				

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Volume.	Page.
A. L. Causse Manufacturing Company, New York, N. Y. Confectionery	21,757	Sept. 20	60	1747
A. M. Collins Manufacturing Company, Philadelphia, Pa. Photographic-card mounts	21,932	Nov. 8	61	881
Aarons & Bro., Elias, New Orleans, La. Cigars	21,203	May 31	59	1421
Abegg & Rusch, New York, N. Y. Rugs and carpetings	22,235	Dec. 27	61	1943
Abraham, John S., Sydney, New South Wales. Pills	21,048	Apr. 26	59	628
Abraham, John S., Sydney, New South Wales. Pills	21,280	June 14	59	1754
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany. Photographic developers	22,153	Dec. 13	61	1651
Actien-Gesellschaft für Anilin-Fabrikation, Berlin, Germany. Photographic developers	22,154	Dec. 13	61	1651
Aich, Herman, New York, N. Y. Culinary vessels	21,490	July 19	60	435
Aich, Herman, New York, N. Y. Enamelled sheet-metal ware	21,624	Aug. 16	60	1048
Aigler, David, St. Louis, Mo. Dried raw vegetables and foods prepared thereof	22,081	Nov. 29	61	1310
Akam, Charles G., Chicago, Ill. Sewing-machines	21,481	July 19	60	434
Aktiebolaget Separator, Stockholm, Sweden. Centrifugal creamers	20,967	Apr. 12	59	295
Aktiebolaget Separator, Stockholm, Sweden. Centrifugal creamers	20,968	Apr. 12	59	295
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mulhausen, Germany, and Belfort and Paris, France. Sewing-cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair	20,543	Jan. 5	58	2
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mulhausen, Germany, and Belfort and Paris, France. Sewing-cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair	20,544	Jan. 5	58	2
Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie., Mulhausen, Germany, and Belfort and Paris, France. Sewing-cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair	20,786	Mar. 1	58	1098
Albaugh Nursery and Orchard Company, Tadmor, Ohio. Nursery-grown plum-trees	22,007	Nov. 29	61	1312
Albemale Chemical Company, New York, N. Y., and Nashville, Tenn. Proprietary preparations embodying a coal-tar derivative	22,036	Nov. 22	61	1163
Albert Dickinson Company, Chicago, Ill. Shelled rice pop-corn	20,592	Jan. 12	58	148
Albion Company, Providence, R. I., and New York, N. Y. Textile fabrics, such as cotton, linen, worsted, and silk goods and velvets and velveteens	22,232	Dec. 27	61	1943
Aldrich & Co., A. M., Boston, Mass. Pickles, catchups, and horse-radish	21,333	June 21	59	1916
Alexander, John W. and T. W., Burlington, Iowa. Laundry soap	21,839	Oct. 4	61	149
Alexander, Robert, Jersey City, N. J. Damp course cloth for building and roofing purposes	20,775	Mar. 1	58	1098
Alexander, Theophilus W. (See Alexander, John W. and T. W.)				
Alexe, Frank, St. Louis, Mo. Specific for neuralgia, rheumatism, and gout	21,234	May 31	59	1427
Allaire, Woodward & Company, Peoria, Ill. Medicinal tonics	22,257	Dec. 27	61	1945
Allaire, Woodward & Company, Peoria, Ill. Antiseptics	22,263	Dec. 27	61	1946
Allen & Co., Isaac D., Boston, Mass. Absorbent pads	21,577	Aug. 9	60	890
Allen, Field & Lawrence, Boston, Mass. Leather for the uppers of boots and shoes and for boots and shoes	20,959	Apr. 12	59	294
Allen, Field & Lawrence, Boston, Mass. Leather for the uppers of boots and shoes and for boots and shoes	21,235	May 31	59	1429
Allesop & Sons, Limited, Samuel, Burton-on-Trent, England. Malt liquors	21,204	May 31	59	1427
Aluacharis Company, Waukesha, Wis. Natural mineral waters	20,749	Feb. 23	58	952
Altshulz, Ernst, Cleveland, Ohio. Blackberry tonic	22,255	Dec. 27	61	1945
Alvarez, Casimiro, Havana, Cuba. Cigars	20,902	Mar. 29	58	1693
Alvarez, Casimiro, Havana, Cuba. Cigars	20,998	Apr. 19	59	460
Alvarez, Casimiro, Havana, Cuba. Cigars	21,691	Aug. 23	60	1178
Amann, Clemens, Sidney, Ohio. Baking powder	21,576	Aug. 9	60	890
American Enfourage Company, New York, N. Y. Certain named toilet articles	21,319	June 21	59	1914
American Evaporated Codfish Co., Red Bank, N. J. Prepared codfish	22,130	Dec. 6	61	1477
American Lead Pencil Company, New York, N. Y. Pencils, comprising lead-pencils and pencil and pen holders	21,480	July 19	60	434
American Lead Pencil Company, New York, N. Y. Lead-pencils	22,273	Dec. 27	61	1946
American Milk and Kumys Company, Rutherford, N. J., and New York, N. Y. Cream kumys	20,731	Feb. 16	58	810
American Milk and Kumys Company, Rutherford, N. J., and New York, N. Y. Fermented beverages or nutrient beverages of fermented milk	20,970	Apr. 19	59	459
American Optical Company, Southbridge, Mass. Spectacles and eyeglasses	22,012	Nov. 22	61	1161
American Pin Company, Waterbury, Conn., and New York, N. Y. Silvered, safety, and mourning pins	20,816	Mar. 8	58	1262
American Pin Company, Waterbury, Conn., New York, N. Y., Boston, Mass., and Chicago, Ill. Silvered metal pins and black pins	21,264	June 7	59	1603
American Safety Fuel Company, Jersey City, N. J., and New York, N. Y. Certain chemically-prepared fuel	22,160	Dec. 13	61	1652
American Shaft Holder Co., Wabash, Ind. Lubricants	22,050	Dec. 20	61	1787
American Shearer Manufacturing Company, Nashua, N. H. Hair and wool clippers	22,206	Nov. 22	61	1164
American Shearer Manufacturing Company, Nashua, N. H. Certain hair-clippers for toilet use	22,067	Nov. 29	61	1309
American Tailoring Co., St. Louis, Mo. Men's and boys' clothing, including coats, pants, vests, and overcoats	21,097	May 10	59	937
American Tin Plate Machine and Manufacturing Company, Philadelphia, Pa. Tin and terne plates	21,382	June 28	59	2069
American Tobacco Company, Newark, N. J., and New York, N. Y. Tobacco, cigars, cigarettes, cheroots, and snuff	22,094	Nov. 29	61	1312
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	21,590	Aug. 9	60	891
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	21,591	Aug. 9	60	891
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	21,592	Aug. 9	60	891
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	21,593	Aug. 9	60	891
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	22,224	Dec. 20	61	1788
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	22,225	Dec. 20	61	1788
American Wringer Company, Providence, R. I., New York, and Auburn, N. Y. Wringers	22,226	Dec. 20	61	1788
Ames & Frost Company, Chicago, Ill. Velocipedes and parts thereof and wheels for use in light vehicles	21,828	Oct. 4	61	149
Anderson, A. & J. M., Boston, Mass. Electric insulators	22,148	Dec. 6	61	1478

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Anderson Preserving Company, Camden, N. J. Canned or preserved fruits, vegetables, soups, oysters, catsup, and sauces.	20,980	Apr. 19	59	459
Anderson, William L., Alloway, N. J. Matches.	21,790	Sept. 27	60	1882
Anderson Brewing Company, Beaver Falls, Pa. Ale, porter, and stout.	21,556	Aug. 2	60	734
Angell, Albert A., Orange, N. J. Hair-pins.	20,793	Mar. 1	58	1098
Angier Chemical Company, Boston, Mass. Refined petroleum for internal and external use as a remedy for disease.	21,224	May 31	59	1428
Anglo-American Provision Company, Chicago, Ill. Hams.	20,599	Jan. 12	58	148
Anheuser-Busch Brewing Association, St. Louis, Mo. Lager-beer.	20,688	Feb. 9	58	658
Apptite Manufacturing Company, New York, N. Y. Remedy for indigestion, in the form of chow-chum, powders, pills, capsules, or liquid.	20,813	Mar. 8	58	1262
Arduvini, Raffaele, New Orleans, La. Remedy for the toothache.	21,829	Oct. 4	61	149
Arkell & Douglas, New York, N. Y. Refined petroleum.	21,060	May 3	59	785
Arkwright Medicine Co., St. Louis, Mo. Line of medicines.	21,731	Sept. 13	60	1607
Arlington Collar and Cuff Company, Arlington, N. J., and New York, N. Y. Waterproof collars and cuffs.	20,850	Mar. 15	58	1420
Arlington Collar and Cuff Company, Arlington, N. J., and New York, N. Y. Waterproof collars and cuffs.	20,851	Mar. 15	58	1420
Arlington Manufacturing Company, Arlington, N. J., and New York, N. Y. Material composed wholly or in part of pyroxyline or its compounds.	20,852	Mar. 15	58	1420
Arlington Collar and Cuff Company, Arlington, N. J., and New York, N. Y. Waterproof collars and cuffs.	20,869	Mar. 22	58	1562
Arlington Collar and Cuff Company, Arlington, N. J., and New York, N. Y. Waterproof collars and cuffs.	20,901	Mar. 29	58	1698
Armstrong, Thomas, Baltimore, Md. Soap for laundry and household use.	21,455	July 19	60	433
Armstrong, Thomas, Baltimore, Md. Washing-powder.	21,470	July 19	60	434
Armstrong, Thomas, Baltimore, Md. Scouring and cleaning powder.	21,471	July 19	60	434
Arnold, Firm of Friedrich, Greiz, Germany. Wool dress goods.	21,075	May 3	59	786
Arnold, Friedrich, Greiz, Germany. Wool dress goods.	20,925	Apr. 5	59	154
Arnstein, Samuel, New York, N. Y. Cigars.	21,135	May 17	59	1101
Art Lithographic Publishing Company, Munich, Germany. Art lithographs.	21,154	May 17	59	1102
Ashburnham Tin Plate Company, (Limited.) Barry Port, England. Tin plates.	22,144	Dec. 6	61	1478
Ashworth, Ellen, Soucerville, Mass. Elastic endless sleeve-bands.	20,668	Feb. 2	58	526
Assani, Baines Company, Cheswold, Del., and Baltimore, Md. Canned fruits and vegetables.	21,943	Nov. 8	61	882
Atkinson, Lewis E., Boston, Mass. Lubricating compounds, oils, and grease.	21,655	Aug. 23	60	1185
Atlas Tack Corporation, Boston, Mass. Spring-beds.	22,222	Dec. 20	61	1788
Atwood & Steele, Chicago, Ill. Baking-powder.	21,354	June 28	59	2069
Auchampugh, Julius C., Syracuse, N. Y. Remedy for diseases of the kidneys and genital organs.	21,850	Oct. 4	61	150
Aucoin, Breaux & Renouet, New Iberia, La. Cypress shingles.	21,168	May 24	59	1254
Ault & Wiborg Company, Cincinnati, Ohio. Printers' and lithographers' ink.	21,933	Nov. 8	61	881
Austin, Aronamous B., Fort Wayne, Ind. Boot and shoe polish.	20,978	Apr. 19	59	459
Avenarius & Co., R., Stuttgart, Germany. Mineral water.	22,220	Dec. 20	61	1788
Avérus Frères, Pauillac, France. Wines.	20,686	Feb. 9	58	658
Avérus Frères, Pauillac, France. Wines.	20,687	Feb. 9	58	658
Avila, Eduardo, New York, N. Y. Liquid extract of beef.	20,907	Apr. 19	59	460
Aymé, Louis H., Chicago, Ill. Statuettes.	21,931	Nov. 8	61	881
Baackes Wire Nail Company, Cleveland, Ohio. Wire nails.	21,329	June 28	59	2069
Bachman, Mortimer H., Stanton, Mich. Emulsion of witch-hazel for the skin.	21,320	June 21	59	1914
Baekeland, Leo H., New York, N. Y. Photographic dry-plates.	21,596	Aug. 9	60	892
Bailey & Co., Samuel R., Amesbury, Mass. Two-seated carriages.	20,981	Apr. 19	59	459
Baillie, Wilton A., Shreveport, La. Mixed paint and white lead.	21,027	May 10	59	936
Baker Chain and Wagon Iron Manufacturing Company, Allegheny, Pa. Chains, rings, clips, hooks, and other carriage-hardware.	21,496	July 19	60	435
Baker, Fred W., and H. Levy, Chicago, Ill. Preparation for destroying vermin on the human body.	21,365	June 28	59	2068
Baker Manufacturing Company, Evansville, Wis. Windmills.	22,056	Nov. 22	61	1164
Baldwin & Co., D. H., Cincinnati, Ohio. Pianos.	20,903	Mar. 29	58	1698
Baldwin Fertilizer Company, Savannah, Ga., and Port Royal, S. C. Artificial fertilizers.	21,520	July 26	60	572
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	21,169	May 24	59	1254
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	21,308	June 14	59	1760
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	21,309	June 14	59	1760
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	21,625	Aug. 16	60	1048
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	21,626	Aug. 16	60	1048
Ball, Webster C., Cleveland, Ohio. Watches and portable clocks.	22,181	Dec. 20	61	1785
Banning, Frederick D., Charleston, S. C. Shoe-dip or cattle-wash.	21,830	Oct. 4	61	149
Bapterosses & Cie., F., Paris, France. Buttons and beads.	21,086	May 10	59	936
Barnes, Joseph, Montreal, Canada. Table relish.	20,547	Jan. 5	58	2
Baron & Co., Baltimore, Md. Cigarettes.	21,021	Apr. 26	59	626
Barry, William B., Indianapolis, Ind. Saws.	21,902	Nov. 1	61	719
Bartholomay Brewery Company, Rochester, N. Y. Lager-beer.	22,254	Dec. 27	61	1945
Barton, Robert R., Catlettsburg, Ky. Account-books.	21,491	July 19	60	435
Bay State Corset Company, Springfield, Mass. Corsets for ladies' use.	21,482	July 19	60	434
Beach Soap Co., Lawrence, Mass. Laundry and toilet soap.	21,738	Sept. 13	60	1607
Bean, La Due & Clawson, Buffalo, N. Y. Coats, pantaloons, overalls, shirts, and gentlemen's furnishing goods.	21,677	Aug. 23	60	1187
Bean & Vail Brothers, Philadelphia, Pa. Perfumery.	21,473	July 19	60	434
Bean & Vail Brothers, Philadelphia, Pa. Perfumery.	21,474	July 19	60	434
Bean & Vail Brothers, Philadelphia, Pa. Perfumery.	21,542	Aug. 2	60	732
Beaumont & Co., S., Roubaix, France. Hair-pins.	21,184	May 24	59	1255
Beck & Co., Joseph, New York, N. Y. Brandy.	20,732	Feb. 16	58	810
Beckel & Co., Joseph, New York, N. Y. Corsets.	21,457	July 19	60	433
Beckermann & Co., New York, N. Y. Tailors' trimmings, including buttons, buckles, clasps, and hooks and eyes.	21,226	June 14	59	1758
Beckmann, Oscar A., Louisville, Ky. Fluid antiseptics and deodorants.	20,665	Feb. 2	58	526
Bedford Mineral Springs Company, Bedford, Pa. Mineral-spring water.	21,109	May 10	59	938
Beche, Ernest W., New York, N. Y. Flour made from banana fruits.	20,545	Jan. 5	58	2
Beeman & McCarthy Company, Syracuse, N. Y. Dress-bindings.	21,521	July 26	60	573
Beermann, Henry C., Atlanta, Ga. Tonic beverages.	20,818	Mar. 8	58	1262
Belden, Alfred G., New York, N. Y. Olive oil.	20,984	Apr. 19	59	459
Beldin, Clinton A., Jamaica, N. Y. Remedy for the crop.	21,565	Aug. 2	60	734
Bell's Sons, Henry H., Milton and New York, N. Y. Eider-down cloth of a wavy appearance.	21,095	Aug. 30	60	1323
Benger & Co., Limited, F. B., Strandways, Manchester, England. Food for infants and invalids.	21,702	Aug. 30	60	1323
Benjamin Brooke & Company, Philadelphia, Pa. Laundry soap.	21,671	Aug. 23	60	1186
Benjamin Brooke & Company, Philadelphia, Pa. Laundry soap.	21,676	Aug. 23	60	1187
Benner, Clarence A., Philadelphia, Pa. Toy.	21,852	Oct. 4	61	150

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Benson, Christian L., Chicago, Ill. Canned fish, fruits, and vegetables.	21,856	Oct. 11	61	283
Benswanger, Emanuel, Philadelphia, Pa. Lager-beer.	21,985	Nov. 15	61	1013
Bergstresser, Edwin L., Lykens, Pa. Remedy for dyspepsia or stomach troubles.	20,983	Apr. 19	59	459
Berkshire Manufacturing Company, Limited, Philadelphia, Pa. Gingham.	20,971	Apr. 12	59	295
Berlin Machine Works, Beloit, Wis., New York, N. Y., Chicago, Ill., and Cincinnati, Ohio. Wood-working machinery or machines.	21,391	June 28	59	2070
Bernstein, Benny, New York, N. Y. Locking devices for securing two opposite members of articles or things.	20,577	Jan. 12	58	148
Berry, Goss & Co., Boston, Mass. Clothes-sprinklers.	21,185	May 24	59	1255
Besly, Charles H., Chicago, Ill. Lubricating and machine oil and grease.	21,669	Aug. 23	60	1186
Betterton & Co., Knoxville, Tenn. Whisky.	21,281	June 14	59	1758
Bethner, Edward W., Montreal, Canada. Rainproof fabrics for garments.	22,233	Dec. 27	61	1943
Bickmore Gail Cure Company, Old Town, Me. Salve.	21,456	July 19	60	433
Biechele Soap Co., Joseph, Canton, Ohio. Castile-soap.	21,363	June 28	59	2067
Biechele Soap Co., Joseph, Canton, Ohio. Castile-soap.	21,361	June 28	59	2067
Binder, Fredrick H., Chicago, Ill. Bitters.	22,258	Dec. 27	61	1946
Bippus & Breidenbach, Dayton, Ohio. Toilet soap, face-powder, face-cream, tooth-powder, and perfumes.	21,522	July 26	60	573
Bippus, Charles W., and C. H. Breidenbach, Dayton, Ohio. Cosmetic or liquid face preparation.	21,225	May 31	59	1429
Binney Catarrhal Powder Company, Omaha, Nebr. Catarrhal and like remedies.	21,095	May 10	59	937
Blach & Sons, Julius, Birmingham, Ala. Men's, boys', and children's clothing, hats, and furnishing goods.	20,811	Mar. 8	58	1262
Black & Sons, Joseph, Philadelphia, Pa. Hosiery.	21,831	Oct. 4	61	149
Blackburn, Joseph E., Bellaire, Ohio. Baking-powder and yeast.	21,419	July 5	60	155
Blake & Johnson, Waterbury, Conn. Piano and organ hardware.	21,965	Nov. 8	61	884
Blanc, Frederic N., New York, N. Y. Mineral water.	20,601	Jan. 12	58	148
Blank & Co., Barmen, Germany. Braids, cords, and bindings.	22,089	Nov. 29	61	1311
Blankenheym & Nolet, Rotterdam, Netherlands. Geneva cordials, brandies, gins, and whiskies.	21,170	May 24	59	1254
Bliss, Mary M., Pawtucket, R. I. Corsets.	21,035	Apr. 26	59	627
Bliven & Carrington, New York, N. Y. Lubricating-oils.	21,049	Apr. 26	59	628
Blondeau et Cie, New York, N. Y. Cosmetics, salves, and ointments.	21,085	May 10	59	936
Blondeau, Pichonnier & Duboncheron, Limoges, France. Porcelain, crockery, earthenware, faience, or glass.	20,700	Feb. 9	58	658
Blood, Henry H., Virginia City, Nev. Capsules for medicinal use.	21,851	Oct. 4	61	150
Bloomington, Emanuel W., New York, N. Y. Buttons, braids, bindings, and buckles.	20,982	Apr. 19	59	459
Bloomington Canning Company, Bloomington, Ill. Canned fruits and vegetables.	22,082	Nov. 29	61	1311
Bloomington Canning Company, Bloomington, Ill. Canned vegetables and fruits.	22,132	Dec. 6	61	1477
Bluffton Manufacturing Co., Bluffton, Ind. Washing-machines.	22,006	Nov. 15	61	1014
Blumenthal, A. & S., New York, N. Y. Ribbon and dress-belt.	20,885	Mar. 22	58	1562
Blumenthal & Co., F., New York, N. Y. Leather of all kinds.	21,096	May 10	59	937
Boake, Roberts & Co., A., London, England. Preservative for beer.	21,782	Sept. 27	60	1881
Boas Brothers, New York, N. Y. Enameled hollow ware.	22,221	Dec. 20	61	1788
Bode, Christoph F., New York, N. Y. Bottled wines and whiskies.	20,945	Apr. 5	59	156
Boehm & Co., Saml. C., New York, N. Y. Whisky.	21,807	Oct. 4	61	147
Boehm & Co., Saml. C., New York, N. Y. Whisky.	21,808	Oct. 4	61	147
Boker & Co., Hermann, New York, N. Y. Shears, scissors, and pocket-knives.	21,248	June 7	59	1602
Boker & Co., Hermann, New York, N. Y. Razors and pocket and carving knives.	21,478	July 19	60	434
Bokschizky, I., & S. Rotkowitz, New York, N. Y. Remedies for coughs, diseases of the blood, corns, and toothache, and dyspepsia-pills.	20,727	Feb. 16	58	810
Bolander, Henry M. H., Chicago, Ill. Snuff.	20,854	Mar. 22	58	1562
Boldrick, Callaghan Company, Lebanon and Calvary, Ky. Whisky.	21,162	May 24	59	1254
Boldrick, Callaghan Company, Lebanon and Calvary, Ky. Whisky.	21,163	May 24	59	1254
Bomar, William A., Metropolis, Ill. Sash locks and fasteners.	21,840	Oct. 4	61	149
Bonesfeet & Turner, Springfield, S. D. Flour and meal.	21,925	Nov. 1	61	720
Bonner's Sons, Robert, New York, N. Y. Literary publications.	21,334	June 21	59	1916
Booth, Emory T., Brooklyn, N. Y. Compound of fruit and cascara-bark for the cure of dyspepsia and other diseases.	21,460	July 19	60	433
Booth, George, Detroit, Mich. Bath-tubs.	21,806	Oct. 4	61	147
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,120	May 17	59	1100
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,121	May 17	59	1100
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,122	May 17	59	1100
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,123	May 17	59	1100
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,124	May 17	59	1100
Borgfeldt & Co., Geo., New York, N. Y. Dishes and plates.	21,125	May 17	59	1100
Boss Washing Machine Company, Cincinnati, Ohio. Hand-power washing-machines.	21,651	Aug. 23	60	1185
Bossle, Louis, Philadelphia, Pa. Powder for causing the smoking out of rats, rabbits, &c.	21,670	Aug. 23	60	1186
Boston Cash Register Company, Northampton, Mass. Key-operated cash-registering machines having visual indicators.	21,236	May 31	59	1429
Boston Woven Hose and Rubber Company, Boston, Mass. Rubber belting.	21,713	Aug. 30	60	1324
Boston Woven Hose and Rubber Company, Boston, Mass. Pneumatic tires for bicycles.	21,967	Nov. 8	61	884
Botania Co., New York, N. Y. Medical remedy for internal and external use.	22,112	Dec. 6	61	1475
Botts, Marguerite V., Philadelphia, Pa. Toilet preparations, not including face-powder.	21,672	Aug. 23	60	1186
Bowes, William M., New York, N. Y. Razor-strops.	22,237	Dec. 27	61	1944
Bowman Thompson & Company, Limited, Liverpool and Lestock Gralam, England. Certain named drugs and chemicals.	20,596	Jan. 12	58	148
Bradshaw Manufacturing Company, Boston, Mass. Bicycles made partly of wood.	21,068	May 3	59	785
Brannstein Frères, Paris, France. Cigarette-paper.	21,362	June 28	59	2067
Breese, Alfred, London, England. Braces and hose-holders.	21,968	Nov. 8	61	884
Breidenbach, Charles H. (See Bippus and Breidenbach.)				
Bretz & Curtis Manufacturing Company, Philadelphia, Pa. Bicycle saddles or seats.	21,101	May 10	59	937
Brewer, William N., Cleveland, Ohio. Chewing-gum.	21,020	Apr. 26	59	626
Bridge & Beach Manufacturing Company, St. Louis, Mo. Cooking-stoves.	21,029	Apr. 26	59	626
Brievogelle, Eugene Z., New York, N. Y. Remedies for rheumatism and gout.	22,178	Dec. 13	61	1651
Bright, Joseph T., and W. D. Howe, Lexington, Ky. Aerated phosphated beverages.	21,197	May 24	59	1256
Brinckerhoff, Henry, New York, N. Y. Remedy for neuralgia, rheumatism, headache, and fevers.	21,791	Sept. 27	60	1882
Broch & Thiebes Cutlery Co., St. Louis, Mo. Razors.	21,472	July 19	60	434
Bunson & Fitzgerald, Hartford, Conn. Meats and fish.	22,239	Dec. 27	61	1944
Brook and Brothers, Jonas, Meltham, England, and New York, N. Y. Cotton thread.	21,054	Apr. 26	59	628
Brook and Brothers, Jonas, Meltham, England, and New York, N. Y. Cotton thread.	21,055	Apr. 26	59	628
Brooklyn Shield Co., Brooklyn, N. Y. Armpit-shields.	20,911	Mar. 29	58	1698
Brooklyn Shield Co., Brooklyn, N. Y. Armpit-shields.	20,970	Apr. 12	59	295
Brown, Charles M., Grinnell, Iowa. Hair-restorative and dandruff-cure.	20,546	Jan. 5	58	2
Brown Co., J. L., Pittsburg, Pa. Stove-mats.	22,002	Nov. 15	61	1014
Brown, Marie, and C. Quesnel, New York, N. Y. Fountain-pens.	21,297	June 14	59	1759

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Brown, Maynard D., Glasgow, Scotland. Proprietary medicine for the cure of rheumatism, dyspepsia, and diseases of the blood	21,878	Oct. 18	61	422
Brown, Robert B., New York, N. Y. Compound of suet or beef-fat and cotton-seed oil for cooking purposes	20,944	Apr. 5	59	156
Bruton & Condon, Davidson county, near Nashville, Tenn. Snuff	21,012	Apr. 19	59	461
Bruton & Condon, Nashville, Tenn. Snuff	21,604	Aug. 16	60	1046
Bryant, Frank, Stoneham, Mass. Leather boots and shoes	22,093	Nov. 29	61	1312
Bryden Horse Shoe Company, Catasauqua, Pa. Animal-shoes	21,866	Oct. 18	61	421
Bucklen, Herbert E., Chicago, Ill. Pills	20,689	Feb. 9	58	658
Buehler-Phelan Manufacturing Co., St. Louis, Mo. Leads, colors, and oils	20,740	Feb. 23	58	952
Buffalo Milling Company, Limited, Lewisburg, Pa. Wheat-flour	21,906	Nov. 1	61	719
Buffalo Wheel Company, Buffalo, N. Y. Bicycles	21,458	July 19	60	433
Bühning & Co., C., Hamburg, Germany. Water-filters	21,274	June 7	59	1604
Buick & Sherwood, Detroit, Mich. Water-closet tanks and back-boards therefor, water-closet seats, and bent-wood rims for bath-tubs	20,753	Feb. 23	58	952
Buntin Drug Co., Terre Haute, Ind. Antiseptic, antizymotic, deodorizing, and parasiticide compounds	21,192	May 24	59	1256
Burbank & Ryder, Boston and Middleborough, Mass. Substitute for shellac	20,960	Apr. 12	59	294
Burgoyne, Burdidge, Cyriax & Farries, London, England. Hypnotic compounds for internal and external use	21,295	June 14	59	1759
Burham Brick, Lime and Cement Company, Limited, Burham and London, England. Cement	20,950	Apr. 5	59	156
Burk & McFetridge, Philadelphia, Pa. Newspapers	20,623	Jan. 19	58	280
Burlington Blanket Company, Burlington, Wis. Horse blankets or covers	21,249	June 7	59	1602
Burnett & Co., Robert, London, England. Gin	21,699	Aug. 30	60	1323
Burnham, Elmer S., New York, N. Y. Clam bouillon	20,829	Mar. 15	58	1420
Burns, Samuel F., New York, N. Y. Ale	21,867	Oct. 18	61	421
Burrows, William E., Providence, R. I. Tooth-powder	21,428	July 12	60	293
Burt & Co., Edwin C., New York, N. Y. Boots, shoes, and slippers	21,975	Nov. 15	61	1012
Burt Shirt Manufacturing Co., Poughkeepsie, N. Y. Men's shirts	21,133	May 17	59	1101
Burton Bros. & Co., New York, N. Y. Cotton goods, such as silesias, sateens, cambrics, and twills	21,937	Nov. 8	61	881
Burton Bros. & Co., New York, N. Y. Linings embracing silesias, sateens, caobrics, and twills	22,158	Dec. 13	61	1651
Burwell, Robert P., Richmond, Va. Bitters	21,637	Aug. 16	60	1049
Butler Brothers, Chicago, Ill., and New York, N. Y. Books offiction, history, biography, travels, and poetry	20,904	Mar. 29	58	1698
Butler, James, New York, N. Y. Oats, wheat, and buckwheat	21,030	Apr. 25	59	627
Butler, James, New York, N. Y. Tomato catsup	21,258	June 7	59	1602
Butler, James, New York, N. Y. Flour	21,344	June 21	59	1917
Butz, John D., Wilkes-Barré, Pa. Stove-polish	21,136	May 17	59	1101
C. A. Brockett Cement Company, Kansas City, Mo., and Fort Scott, Kans. Hydraulic cement	20,600	Jan. 12	58	148
C. D. Smith Drug Company, St. Joseph, Mo. Whisky	21,737	Sept. 13	60	1607
C. M. Webber & Company, Chicago, Ill. Canned fish, fruits, vegetables, and dried fruits	21,343	June 21	59	1916
C. T. Roenitz Leather Company, Sheboygan, Wis. Leather and boots and shoes made thereof	21,003	Apr. 19	59	461
C. W. Kopf Company, New York, N. Y., and Boston, Mass. Compressed pea-soup	21,508	July 19	60	436
C. W. Kopf Company, New York, N. Y., and Boston, Mass. Compressed pea-soup	21,509	July 19	60	436
Cable Specialty Co., Pittsburg, Pa. Remedy for rheumatism, neuralgia, and headache	21,293	June 14	59	1759
Cafazol Co., Boston, Mass. Headache medicine	21,069	May 3	59	785
Cahill & Hall Elevator Company, San Francisco, Cal. Operating machinery for passenger and freight elevators	22,001	Nov. 15	61	1014
Calculagraph Company, East Orange, N. J., and New York, N. Y. Machines for making calculations and recording the results	21,747	Sept. 13	60	1608
Calumet Baking Powder Company, Chicago, Ill. Baking-powder	21,792	Sept. 27	60	1822
Campbell, Achnach & Co., Glasgow, Scotland. Waterproof goods of india-rubber and cloth fabrics and garments made therefrom	20,690	Feb. 9	58	658
Casani, Joseph, Philadelphia, Pa. Cough-tablets	20,676	Feb. 2	58	526
Candy Bros., St. Louis, Mo. Candies	22,191	Dec. 20	61	1786
Canfield Rubber Company, Bridgeport, Conn., and New York, N. Y. Dress-shields	21,118	May 17	59	1100
Canfield Rubber Company, Bridgeport, Conn., and New York, N. Y. Dress-shields	21,119	May 17	59	1100
Capital Drug Company, Augusta, Me. Remedy for asthma, hay fever, bronchitis, croup, and nasal catarrh	21,150	May 17	59	1102
Capital Drug Company, Augusta, Me. Medicinal remedies in the form of tablets, plasters, pills, ointments, suppositories, and powders	21,962	Nov. 8	61	883
Capitol Manufacturing Company, Springfield, Mass. Harness-soap	20,946	Apr. 5	59	156
Carborundum Company, Monongahela City, Pa. Crystalline substance used as an abradant and for other purposes	21,317	June 21	59	1914
Carleton & Huckins, Danvers, Mass. Children's school-shoes	21,126	May 17	59	1101
Carse & Ohlweiler, Rock Island, Ill. Mineral waters	21,475	July 19	60	434
Case, Alfred W., Highland Park, Conn. Flange-packings	21,605	Aug. 16	60	1046
Cash Buyers' Union, Chicago, Ill. Hardware	21,513	July 26	60	572
Cash Buyers' Union, Chicago, Ill. Sewing-machines	21,650	Aug. 23	60	1185
Ceballos & Co., J. M., New York, N. Y. Lard	21,296	June 14	59	1759
Ceballos & Co., J. M., New York, N. Y. Lard	21,523	July 26	60	573
Ceballos & Co., J. M., New York, N. Y. Lard	21,732	Sept. 13	60	1607
Celluloid Company, Newark, N. J. Waterproof collars and cuffs	21,573	Aug. 9	60	890
Celluloid Company, Newark, N. J. Waterproof collars and cuffs	21,619	Aug. 16	60	1047
Celluloid Company, Newark, N. J. Plastic material composed in part of pyroxyline	21,682	Aug. 23	60	1187
Celluloid Company, Newark, N. J. Plastic material composed in part of pyroxyline	21,683	Aug. 23	60	1187
Central Oilgas Stove Company, Northampton and Boston, Mass. Oil and gas stoves	21,250	June 7	59	1602
Central Oilgas Stove Company, Northampton and Boston, Mass. Oil or gas stoves	21,703	Aug. 30	60	1323
Chadborn & Coldwell Manufacturing Company, Newburg, N. Y. Lawn-mowers	20,936	Apr. 5	59	155
Challenge Corn Planter Company, Grand Haven, Mich. Ice-chests, coolers, and refrigerators	21,810	Oct. 4	61	147
Champion Chemical Works, Chicago, Ill. Powdered lye	21,809	Oct. 4	61	147
Chancellor, Charles W., Baltimore, Md. Deodorizing-powder	21,963	Nov. 8	61	843
Chandler & Co., Hannibal H., Chicago, Ill. Periodical publications	22,228	Dec. 27	61	1943
Chandler & Rudd Company, Cleveland, Ohio. Candies	21,017	Apr. 19	59	462
Chapman, Mrs. Stephen D., Ovilla, Tex. Fluid remedy for consumption and all diseases of the lungs	21,459	July 19	60	434
Chapman & Smith Company, Chicago, Ill. Cleaned currants	21,354	June 28	59	2067
Charles, Albert A. and G. W., Kokomo, Ind. Canned tomatoes	20,886	Mar. 22	58	1562
Charles, George W. (See Charles, Albert A. and G. W.)				
Charles Marvin Stock Food Company, Newport, Ky., and Franklin, Pa. Prepared food for horses and cattle	20,973	Apr. 12	59	295
Charles Truax, Greene & Company, Chicago, Ill. Demulcents	20,636	Jan. 26	58	390
Charles Truax, Greene & Company, Chicago, Ill. Antiseptics	20,637	Jan. 26	58	390
Charles Truax, Greene & Company, Chicago, Ill. Antiseptics	21,388	June 28	59	2069

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Charles Truax, Greene & Company, Chicago, Ill. Antipyretics and sedatives.	21,399	July 5	60	154
Chase & Co., L. C., Boston, Mass. Plushes.	20,896	Mar. 29	58	1698
Chavanty, François, Paris, France. Vegetable ferment for the manufacture of wines.	21,627	Aug. 16	60	1048
Cieselbrough Manufacturing Company, New York, N. Y. Vaseline.	21,727	Sept. 6	60	1476
Chicago Consolidated Bottling Company, Chicago, Ill. Ginger-ale.	22,124	Dec. 6	61	1476
Chicago Dispocura Company, Chicago, Ill. Medicine for the treatment of drunkenness, opium, morphine, and tobacco habits and kindred diseases.	21,311	June 14	59	1760
Chipman, William A., New York, N. Y. Kerosene.	20,630	Jan. 26	58	390
Chipman, William A., New York, N. Y. Kerosene.	20,632	Feb. 9	58	654
Christy Knife Company, Fremont, Ohio. Bread and cake knives.	20,610	Jan. 19	58	280
Chryst, Mathew J., Syracuse, N. Y. Flavoring extracts for foods.	20,955	Apr. 12	59	294
Church, Andrew S., New York, N. Y. Straw lumber.	21,744	Sept. 13	60	1608
Church, Edward G., Kansas City, Mo. Asphalt.	21,379	June 28	59	2069
Cincinnati Soap Co., Cincinnati, Ohio. Medicated soap.	21,832	Oct. 4	61	149
Citra Fruit Company, Citra, Fla. Oranges.	20,611	Jan. 19	58	280
Citra Fruit Company Citra, Fla. Oranges.	20,612	Jan. 19	58	280
Clark Bros. Lamp, Brass, and Copper Company, New York, N. Y. Lamps and accessories pertaining thereto.	21,648	Aug. 16	60	1050
Clark Thread Company, Newark, N. J. Cotton thread.	20,608	Jan. 19	58	280
Clark Thread Company, Newark, N. J. Cotton thread.	20,609	Jan. 19	58	280
Clark Thread Company, Newark, N. J. Spool-cotton.	20,616	Jan. 19	58	280
Clarke, Frederic W., Boston, Mass. Leather and boots and shoes.	20,578	Jan. 12	58	148
Clay, Edward C., Chicago, Ill. Preparation to beautify the complexion.	20,937	Apr. 5	59	155
Cleveland Tin Plate Co., Cleveland, Ohio. Tin and roofing plates.	21,656	Aug. 23	60	1185
Clinton Pharmaceutical Company, Syracuse, N. Y. Antiseptics.	21,228	May 31	59	1429
Clippinger, David A., Chicago, Ill. Remedy against blood-poisoning.	20,951	Apr. 5	59	156
Cochran, William L., Burlington, Iowa. Remedy for gonorrhea, gleet, leucorrhea, and the like.	21,548	Aug. 2	60	733
Cockle & Co., James, London, England. Pills for human use.	22,047	Nov. 22	61	1164
Cohn, Alfred L., New York, N. Y. Photographic paper.	22,009	Nov. 22	61	1161
Colebrookdale Iron Company, Pottstown, Pa. Sad-irons for domestic use.	22,139	Dec. 6	61	1477
Collins, William A., Chicago, Ill. Liniments, ointments, and unguents.	20,780	Mar. 1	58	1098
Columbia Cash Register Company, Miamisburg, Ohio. Cash-registering machines.	21,717	Sept. 6	60	1475
Companhia Geral D'Agricultura dos Vinhos do Alto Douro, Oporto, Portugal. Portuguese wines.	21,716	Sept. 6	60	1475
Confectioners' Vegetable Colours and Fruit Essences Company, Limited, London, England. Extract or coloring material for pastry.	21,127	May 17	59	1101
Conger, Estate of Walter M., Jr., Newark, N. J. Tea trays.	21,036	Apr. 26	59	627
Conklin Manufacturing Co., Charles A., Atlanta, Ga. Tin or terne plates.	21,999	Nov. 15	61	1014
Conover, Richard S., Sayreville, N. J. Oranges.	20,673	Feb. 2	58	526
Conrad Seipp Brewing Company, Chicago, Ill. Beer.	21,634	Aug. 16	60	1049
Cook, Lyman & Seixas, Chicago, Ill. Hats.	20,972	Apr. 12	59	295
Cook's Sons, Adam, New York, N. Y. Lubricating oil for bicycles.	21,891	Oct. 25	61	562
Cooper, Charles J., Newark, N. J. Cigars.	21,476	July 19	60	434
Co-Operative Foundry Company, Rochester, N. Y. Stoves, ranges, and furnaces.	22,052	Nov. 22	61	1164
Coppel, Firm of Alexander, Solingen, Germany, and New York, N. Y. Razors.	21,352	June 21	59	1918
Corbin & Son, B. A., Webster, Mass. Boots and shoes.	21,226	May 31	59	1429
Cork Faced Collar Company, Lincoln, Ill. Horse-collars, riding-saddles, gig-saddles, back-pads, and all parts of harness.	21,557	Aug. 2	60	731
Coronet Corset Company, Jackson, Mich., and New York, N. Y. Corsets, waists, and suspenders.	21,758	Sept. 20	60	1747
Costa, Alexander R., New Orleans, La. Bitters.	20,548	Jan. 5	58	2
Coulter, Charles L., New York, N. Y. Vaporizers, volatilizers, and inhalers.	22,155	Dec. 13	61	1651
Coventry Machinists' Company, Limited, Coventry, England. Bicycles.	21,201	May 24	59	1256
Covert, James C., West Troy, N. Y. Balsam, catarrh-snuff, and ointment.	20,643	Jan. 26	58	390
Cowan, Agnes, Belfast, Ireland. Whisky.	21,514	July 26	60	572
Cowan, Magill & Co., Knoxville, Tenn. Men's pantaloons and overalls.	21,685	Aug. 23	60	1187
Craighill & Co., E. A., Lynchburg, Va. Veterinary remedies, including condition-powders for horses and cattle.	21,492	July 19	60	435
Crandaill & Godley, New York, N. Y. Cleaned currants or similar prepared fruits or vegetables.	20,938	Apr. 5	59	155
Creedmoor Cartridge Company, Barberton, Ohio. Loaded and unloaded shot-shells and cartridge-shells.	20,575	Jan. 12	58	148
Crescent Orange Grove Company, Citra, Fla., and Steubenville, Ohio. Oranges.	21,982	Nov. 15	61	1013
Crippen, Robert W. (See Crippen, Warren H. and R. W.)				
Crippen, Warren H. and R. W., Wichita, Kans. Remedy for rheumatism.	20,798	Mar. 1	58	1098
Crolley, Harry W., Cincinnati, Ohio. Remedy for gonorrhea, gleet, and like diseases.	22,268	Dec. 27	61	1946
Crossley, Joseph, Trenton, N. J. Enameled and buff building bricks or blocks.	21,728	Sept. 6	60	1476
Crozer & Son, Samuel A., Upland, Pa. Cheviots.	22,087	Nov. 29	61	1311
Culshaw, William H., Chicago, Ill. Puzzle.	20,954	Apr. 12	59	294
Culver, Newton H., Detroit, Mich. Fireproof backing slabs and sheets.	21,227	May 31	59	1429
Cunfew, Charles H., Providence, R. I. Stove-polish.	21,061	May 3	59	785
Curtis, Daniel W., Syracuse, N. Y. Polishing-powder, not including stove-polish.	21,989	Nov. 15	61	1013
Cushman Bros., New York, N. Y. Gelatine.	20,837	Mar. 15	58	1420
Cushman & Co., Albany, N. Y. Rye and bourbon whisky.	21,010	Apr. 19	59	461
Daehn, Charles, Milwaukee, Wis. Cigars.	21,893	Oct. 25	61	562
Dallemard & Co., Chicago, Ill. Whisky.	21,237	May 31	59	1430
Danbury Pharmacal Association, Danbury, Conn. Substitute for cod-liver oil.	21,533	Aug. 2	60	732
Daniel, John B., Atlanta, Ga. Specific for throat and lung troubles.	20,841	Mar. 15	58	1420
Daniels & Co., Geo. F., Boston, Mass. Women's, misses', and children's lace and button shoes.	21,177	May 24	59	1255
Daniels, William H., Dubuque, Iowa. Remedies for diseases of the stomach, liver, bladder, and skin.	21,355	June 28	59	2067
Dávalos & Co., L. Gonzales, Chicago, Ill. Toasted and ground coffee.	20,745	Feb. 23	58	952
David B. Crockett Company, Bridgeport, Conn., and New York, N. Y. Liquid-pigment filler.	21,879	Oct. 18	61	422
Davidson, Latham A., West Milford, W. Va. Specific for cholera infantum.	20,985	Apr. 19	59	459
Davis Chemical Co., Ypsilanti, Mich. Laxative.	21,056	Apr. 26	59	628
Davis, Clarence E., and A. Schindele, St. Joseph, Mo. Cough remedy.	20,579	Jan. 12	58	148
Davis & Co., H. C., Jr., Norfolk, Va. Toilet and laundry soap.	21,493	Jan. 19	60	435
Davis, Estes H., Elmira, N. Y. Remedy for gonorrhea and gleet.	21,961	Nov. 8	61	883
Davis, Francis P., New York, N. Y. Tonics, remedies for diseases of the liver and blood and for bilious disorders.	22,195	Dec. 20	61	1786
Davis, Robert M., Denver, Colo. Remedy for catarrh and all diseases of the throat, lungs, and bowels.	21,762	Sept. 20	60	1747
Davison, Henry C., New York, N. Y. Impression-paper.	21,868	Oct. 18	61	421
Davison, Otto G., Peoria, Ill. Chewing-gum.	21,955	Nov. 8	61	883
Day, Asa W., St. Louis, Mo. Babbitt metal.	21,709	Aug. 30	60	1324
De Grauw, Aymar & Co., New York, N. Y. Oars, handspikes, and capstan-bars.	21,081	May 10	59	936
De Vine, James, New York, N. Y. Soap-powder.	20,754	Feb. 23	58	952

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
De Witt, Elden C., Chicago, Ill. Cough-cure	20,750	Feb. 23	58	952
Dearth & Smith, Jasper, Ala. Remedies put up in the form of a powder, liquid, and salve for catarrh, sore eyes, and diseases of the blood	21,276	June 7	59	1604
Deere & Company, Moline, Ill. Plows	20,974	Apr. 12	59	225
Delafield, McGovern & Co., New York, N. Y. Sparkling and still wines and distilled liquors	20,856	Mar. 22	58	1562
Delafield, McGovern & Co., New York, N. Y. Whisky, rum, gin, cordials, and California wines and brandy	21,811	Oct. 4	61	147
Delnow, Merrill F., Lynn, Mass. Soap for belt-dressing	21,923	Nov. 1	61	720
Denison & Co., W. B., New York, N. Y. Mirrors having their backs silvered, or colored white or some other color	20,773	Feb. 23	58	932
Detroit Stay Company, Detroit, Mich. Covered dress-stays	21,783	Sept. 27	60	1841
Devoo Manufacturing Company, New York, N. Y. Refined oil	20,770	Feb. 23	58	952
Diamond Lustre Polish Co., Boston Mass. Metal-burnishing powder	21,031	Apr. 26	59	627
Diamond Paste Company, Albany, N. Y. Dry paste	20,905	Mar. 29	58	1698
Diamond, Patrick, Philadelphia, Pa. Washing-blue	21,903	Nov. 1	61	719
Diamond, Patrick, Philadelphia, Pa. Washing-blue	22,136	Dec. 6	61	1477
Diaz y Hermano, Havana, Cuba. Cigars	21,658	Aug. 23	60	1185
Dick, Herman E., Chicago, Ill. Toilet soap	21,366	June 28	59	2068
Dick, Herman E., Chicago, Ill. Rubber stamps	21,367	June 28	59	2068
Dicks, Firm of F. A., Natchez, Miss. Aque cure	22,110	Dec. 6	61	1475
Dieckerhoff, Raffloer & Co., New York, N. Y., and Barmen, Germany. Tailors' braids	20,567	Jan. 5	58	2
Dienelt & Co., Julius, Alexandria, Va. Toilet preparations, pills, and powders	22,032	Nov. 22	61	1163
Dieter, John P., Chillicothe, Ohio. Roasted coffee	21,558	Aug. 2	60	734
Dinkelaker, William, Sindelfingen, Germany. Cotton and linen textile goods	21,022	Apr. 26	59	626
Disborongh, William A., Dallas, Tex. Axle-grease	20,537	Jan. 5	58	2
Dives, Pomeroy & Stewart, Reading, Pa. Sewing-machines	21,321	June 21	59	1914
Dixon, George E., St. Paul, Minn. Antipyretic	21,841	Oct. 4	61	149
Dixon, Charles H., Port Norris, N. J. Soap for cleaning and polishing metals and glass-and for toilet and laundry use	20,857	Mar. 22	58	1562
Doan, Horace A., Philadelphia, Pa. Coffee	20,691	Feb. 9	58	653
Doan, Horace A., Philadelphia, Pa. Coffee	20,765	Feb. 23	58	952
Doble, William H., Quincy, Mass. Dried currants	21,712	Aug. 30	60	1324
Doble, William H., Quincy, Mass. Dried currants	21,669	Oct. 18	61	421
Dodson, Hills Manufacturing Company, St. Louis, Mo. Tomato catsup	21,793	Sept. 27	60	1882
Dodson, Hills Manufacturing Company, St. Louis, Mo. Tomato catsup	21,794	Sept. 27	60	1882
Dodson, Hills Manufacturing Company, St. Louis, Mo. Tomato catsup	21,795	Sept. 27	60	1882
Dolloff, Estate of William F., New York, N. Y. Remedy for rheumatism	21,176	May 24	59	1255
Domestic Sewing Machine Company, New York, N. Y. Monthly fashion paper or magazine	21,880	Oct. 18	61	422
Donnelly, George A., New York, N. Y. Chewing-gum	20,733	Feb. 16	58	810
Dongherty, Andrew, New York, N. Y. Playing-cards	22,010	Nov. 22	61	1161
Douglas & Kingsland, Middletown, Conn. Stove-polish	21,110	May 10	59	938
Downey & Co., W. C., Washington, D. C. Nose and throat douche	21,628	Aug. 16	60	1048
Dr. David Kennedy Corporation, Kingston, N. Y. Medicated plasters	21,524	July 26	60	573
Dr. David Kennedy Corporation, Kingston, N. Y. Remedy for diseases of the stomach and bowels and other painful disorders	21,525	July 26	60	573
Dr. David Kennedy Corporation, Kingston, N. Y. Remedy for diseases of the eye	21,559	Aug. 2	60	734
Dr. David Kennedy Corporation, Kingston, N. Y. Worm-sirup	21,657	Aug. 23	60	1185
Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Wearing-apparel, outer and under wear, bedding, and the materials of which they are made	21,497	July 19	60	435
Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Wearing-apparel, outer and under wear, bedding, and the materials of which they are made	21,498	July 19	60	435
Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Wearing-apparel, outer and under wear, bedding, and the materials of which they are made	26,499	July 19	60	435
Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Underwear and the knit and woven fabrics of which it is composed	21,500	July 19	60	436
Dr. Jaeger's Sanitary Woolen System Company, New York, N. Y. Wearing-apparel, outer and under wear, bedding, and the materials of which they are made	21,639	Aug. 16	60	1049
Dr. Seth Arnold Medical Corporation, Woonsocket, R. I. Cough medicines	21,761	Sept. 20	60	1747
Draper, Oscar M., North Attleborough, Mass. Ornamental watch and neck chains	21,870	Oct. 18	61	421
Drexler, William. (See Spitteler and Drexler.)				
Driscoll & Co., John T., Boston, Mass. Carbonated drinks	21,950	Nov. 8	61	882
Driscoll & Co., John T., Boston, Mass. Carbonated drinks	21,983	Nov. 15	61	1013
Dryfoos & Co., A., New York, N. Y. Whisky	20,961	Apr. 12	59	294
Dubois Watch Case Company, New York, N. Y. Watchcases	20,644	Jan. 26	58	390
Duffy, Mountfort & Greene Cider Company, Newark, N. Y. Apple-cider and cider-vinegar	20,817	Mar. 8	58	1262
Duffy, Mountfort & Greene Cider Company, Newark, N. Y. Cider vinegar	21,944	Nov. 8	61	892
Duncan, Alderdice & Company, Limited, Newry, Ireland. Whisky	21,275	June 7	59	1604
Dunham, Buckley & Co., New York, N. Y. Gloves	21,581	Aug. 9	60	891
Dunham, Carrigan & Hayden Company, San Francisco, Cal., and New York, N. Y. Iron and steel, including hammer-steel and cast and pick steel	21,313	June 21	59	1914
Dunham, Carrigan & Hayden Company, San Francisco, Cal., and New York, N. Y. Valves	21,322	June 21	59	1914
Dunlevy & Bro., Pittsburg, Pa. Lard	20,631	Jan. 26	58	390
Durell, George B., Harriman, Tenn. Hoes	21,013	Apr. 19	59	461
Durgin, William B., Concord, N. H. Gold, silver, plated, flat, and table ware and jewelry	21,369	June 28	59	2068
Durham Fertilizer Company, Durham, N. C., and Richmond, Va. Natural and artificial fertilizers	21,550	Aug. 2	60	733
Durham Fertilizer Company, Durham, N. C., and Richmond, Va. Natural and artificial fertilizers	21,551	Aug. 2	60	733
Durham Fertilizer Company, Durham, N. C., and Richmond, Va. Natural and artificial fertilizer	21,598	Aug. 9	60	892
Dyerman, George W., Columbus, Ohio. Soft or liquid soap	22,204	Dec. 20	61	1787
Dyson, Arthur, London, England. Printed tickets	22,179	Dec. 20	61	1785
E. Godel & Sons, Peoria, Ill. Lard	20,928	Apr. 5	59	154
E. C. Atkins & Company, Indianapolis, Ind., Memphis and Chattanooga, Tenn., and Minneapolis, Minn. Saws of all kinds	21,623	Aug. 16	60	1048
E. P. Gleason Manufacturing Company, New York and Brooklyn, N. Y., and Chicago, Ill. Liquid enamel for use on glass	22,024	Nov. 22	61	1162
E. P. Gleason Manufacturing Company, New York and Brooklyn, N. Y., and Chicago, Ill. Liquid enamel for use on glass	22,025	Nov. 22	61	1162
East New York Boot, Shoe, and Leather Manufacturing Company, Albany, N. Y. Leather, boots, shoes, and other foot-wear	21,773	Sept. 20	60	1748
Eastern Electric Cable Company, Boston, Mass. Electric insulated wire	21,763	Sept. 20	60	1747
Eaton, Dikeman & Co., Lee, Mass. Blotting-paper	21,612	Aug. 16	60	1047
Eaton, Dikeman & Co., Lee, Mass. Blotting-paper	21,613	Aug. 16	60	1047
Eaton, Frederic, Boston, Mass. Preparations for the cure of piles and kindred diseases	21,857	Oct. 11	61	283
Eberhard Manufacturing Company, Cleveland, Ohio. Saddlery hardware	21,019	Apr. 26	59	626
Eberhard Manufacturing Company, Cleveland, Ohio. Malleable castings	21,059	Apr. 26	59	623

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Eberhardt & Ober Brewing Company, Allegheny, Pa. Lager-beer	21,881	Oct. 18	61	422
Eburnea Co., Lancaster, England. Artificial ivory and articles made or formed thereof	21,008	Apr. 19	59	461
Eburnea Co., Lancaster, England. Artificial ivory and articles made or formed thereof	21,053	Apr. 26	59	628
Eigenbrot Brewing Company, Baltimore, Md. Lager-beer	21,776	Sept. 27	60	1881
Eisendrath, William N., Chicago, Ill. Cordovan leather	21,697	Aug. 30	60	1323
Eisner & Mendelson Company, New York, N. Y. Hydraulic and other cements	21,853	Oct. 4	61	150
Electricon Metal Company, Newark, N. J. and New York, N. Y. Antifriction metal	21,708	Aug. 30	60	1324
Electro Silicon Company, New York, N. Y. Silver polish in the form of powder and soap	21,820	Oct. 4	61	148
Electrolibration Company, Birmingham, Ala. Electro-curative apparatus	21,892	Oct. 25	61	562
Elfteth & Ott, Philadelphia, Pa. Lager and other beers	21,719	Sept. 6	60	1475
Elgin National Watch Company, Chicago, Ill. Watches	21,461	July 19	60	433
Elgin National Watch Company, Chicago, Ill. Watches	21,462	July 19	60	433
Elgin National Watch Company, Chicago, Ill. Watches	21,463	July 19	60	433
Elgin National Watch Company, Chicago, Ill. Watches	21,464	July 19	60	433
Elgin National Watch Company, Chicago, Ill. Watches	21,465	July 19	60	433
Elgin National Watch Company, Chicago, Ill. Watches	21,801	Sept. 27	60	1882
Elliott, Rebecca E., Indianapolis, Ind. Preparation for straightening and improving the hair	20,742	Feb. 23	58	952
Ellison, Henry, Jr., Cleckheaton, England. Disinfectants, deodorizers, and vermin-destroyers	20,825	Mar. 8	58	1262
Elmenhorst & Co., New York, N. Y. Coffee	20,926	Apr. 5	59	154
Emerson, James E., Beaver Falls, Pa. Corrugated toothed metal fence-pickets	20,741	Feb. 23	58	952
Empire State Wine Co., Penn Yan, N. Y. Wines	20,842	Mar. 15	58	1420
Engelhard & Sons, A., Louisville, Ky. Plug-tobacco	21,953	Nov. 8	61	883
Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Household, druggists', and butchers' hardware	21,552	Aug. 2	60	733
Enterprise Manufacturing Company of Pennsylvania, Philadelphia, Pa. Meat choppers and presses	21,599	Aug. 9	60	893
Erb & Co., D. S., Boyertown, Pa. Cigars	20,787	Mar. 1	58	1098
Escher & Co., Sonneberg, Germany. Bones	20,936	Apr. 19	59	459
Eskridge, Solomon, Rockwood, Tenn. Liniment	21,958	Nov. 8	61	883
Estes, Webster C., New York, N. Y. Painter's smalt	21,887	Oct. 25	61	562
Eucalyptus Manufacturing Company, Los Angeles, Cal. Eucalyptus products	20,870	Mar. 22	58	1562
Eucrasay Co., Cleveland, Ohio. Remedies for drunkenness	20,891	Mar. 22	58	1562
Eustis Manufacturing Company, Jersey City, N. J., and New York, N. Y. Cookers, baking-dishes, and coffee-makers	21,427	July 5	60	156
Everitt, Walter E., Buffalo, N. Y. Liniment	20,527	Apr. 5	59	154
Excelsior Rubber Works, New York, N. Y. Dental rubber	21,882	Oct. 18	61	422
F. A. Poth Brewing Company, Philadelphia, Pa. Lager-beer	21,692	Aug. 30	60	1323
F. & M. Schaefer Brewing Company, New York, N. Y. Lager-beer	21,004	Apr. 19	59	461
Fagny, Elvire P., Rheims, France Champagne-wines	20,858	Mar. 22	58	1562
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	20,613	Jan. 19	58	280
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	20,614	Jan. 19	58	240
Fahys Watch Case Company, Sag Harbor, N. Y. Watchcases	20,990	Apr. 19	59	460
Fairweather, William, Chicago, Ill. Ointments	22,043	Nov. 22	61	1113
Fair & Winebrenner, Baltimore, Md. Canned oysters	22,081	Nov. 29	61	1311
Farbenfabriken, vormals Fr. Bayer & Co., Elberfeld, Germany. Remedies for rheumatism and similar complaints	20,759	Feb. 23	58	952
Färberei Glauchan, vormals Otto Seyfert, Glauchan, Germany. Dyes or colors	21,842	Oct. 4	61	150
Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Remedy for phthisic	20,617	Jan. 19	58	280
Farbwerke, vormals Meister, Lucius & Brüning, Höchst-on-the-Main, Germany. Remedy for phthisic	20,618	Jan. 19	58	280
Farnum & Co., John, Philadelphia, Pa. Cotton goods, including tickings, chevots, gingham, and sheetings	21,186	May 24	59	1255
Farnum & Co., John, Philadelphia, Pa. Gingham	21,205	May 31	59	1427
Farnum & Co., John, Philadelphia, Pa. Gingham	21,370	June 28	59	2068
Farnum & Co., John, Philadelphia, Pa. Gingham	21,700	Aug. 30	60	1323
Farren, Emma R., Paterson, N. J. Disinfectant	21,443	July 12	60	294
Fay, Joseph S., Magnolia Springs, Fla., and Boston, Mass. Certain natural mineral-spring water	20,755	Feb. 23	58	952
Fayerweather & Ladew, New York, N. Y. Sole-leather	20,692	Feb. 9	58	658
Feldenhelm, Albert, Portland, Oreg. Gold, silver, and plated articles, flat ware, and jewelry	20,640	Jan. 26	58	390
Feldmann, Ernst, New York, N. Y. Sherry-wine	21,466	July 19	60	433
Fernolie Chemical Company, New York, N. Y., and Charleston, S. C. Liquid bug-poison and sheep-dip for destroying vermin on animals	20,743	Feb. 23	58	952
Ferraz Sobrinho & Co., Rio Janeiro, Brazil, and New York, N. Y. Petroleum	22,161	Dec. 13	61	1652
Ferraz Sobrinho & Co., Rio Janeiro, Brazil, and New York, N. Y. Salted and pickled meats	22,169	Dec. 13	61	1653
Ferris & De Long, New York, N. Y. Garment-stays	21,368	June 28	59	2068
Ferris, Frank A., New York, N. Y. Smoked meats such as hams and bacon	22,129	Dec. 6	61	1477
Fible & Crabb Distilling Company, Eminence, Ky. Whisky	21,078	May 3	59	786
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen thread	20,705	Feb. 9	58	658
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen thread	21,315	June 21	59	1914
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen thread	21,316	June 21	59	1914
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen and hemp yarn and thread	21,356	June 28	59	2067
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen and hemp yarn and thread	21,392	June 28	59	2070
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton, Mass. Linen thread	21,420	July 5	60	155
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton and Boston, Mass. Linen thread	20,892	Mar. 22	58	1562
Finlayson, Bousfield & Co., Johnstone, Scotland, and Grafton and Boston, Mass. Linen thread	21,145	May 17	59	1102
Fischer & Burnett Lumber Company, Reno, Miss., Memphis, Tenn., and New York, N. Y. Sawed lumber	22,098	Nov. 29	61	1312
Fish, Charles S., Salamanca, N. Y. Cigars	21,137	May 17	59	1101
Fisher, Alexander M., Chillicothe, Mo. Medicated snuff	21,930	Nov. 1	61	720
Fitzherbert, James G., Newark, N. J. Eye-washes	21,245	June 7	59	1603
Flacus Bros., Wheeling, W. Va. Catchup	21,314	June 21	59	1914
Flexible Door and Shutter Company, Portland, Me., and Worcester, Mass. Flexible doors, blinds, and shutters	21,259	June 7	59	1602
Florence Manufacturing Company, Northampton, Mass., New York, N. Y., and Chicago, Ill. Dentifrice	21,477	July 19	60	434
Florence Manufacturing Company, Northampton, Mass., New York, N. Y., and Chicago, Ill. Dentifrice	21,733	Sept. 13	60	1607
Floto's Sons, George, Brooklyn, N. Y. Chicory	21,720	Sept. 6	60	1475
Flowers, Joseph C., and C. S. Witwer, Joliet, Ill. Toilet preparation for beautifying the complexion	21,659	Aug. 23	60	1185
Fly Bnton Co., Maumee, Ohio. Fly-paper	21,510	July 19	60	436
Fobes, Hayward & Company, Incorporated, Boston, Mass. Confectionery	20,645	Jan. 26	58	390
Foerderer, Robert H., Philadelphia, Pa. Shoes	20,721	Feb. 16	58	810

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Foltz, Frederick P., Abingdon, Ill. Liniments and ointments	22,121	Dec. 6	61	1476
Foots & Jenks, Jackson, Mich. Toilet preparations	21,067	May 3	59	785
Forchheimer & Co., M., Mobile, Ala. Wheat-flour	21,116	May 10	59	938
Forney, Matthias N., New York, N. Y. Monthly publication	21,721	Sept. 6	60	1475
Forster, William, New York, N. Y. Beer	21,858	Oct. 11	61	2-3
Forster, William, New York, N. Y. Beer	21,859	Oct. 11	61	2-3
Foster-Hilson Company, New York, N. Y. Cigars and cigarettes	21,605	Aug. 16	60	1016
Foster-Hilson Company, New York, N. Y. Cigars	21,843	Oct. 4	61	159
Foster, Milburn & Co., Buffalo, N. Y. Cough sirup	21,373	Jan. 28	60	2068
Fottrell, Jane, Brooklyn, N. Y. Artificial wax	20,549	Jan. 5	58	2
Fould, Herman B., New York, N. Y. Dentifrices	22,259	Dec. 27	61	1946
Fowler, Frank C., Moodus, Conn. Pills for diseases of the digestive organs and kindred diseases	22,120	Dec. 6	61	1476
Fowler, Frank C., Moodus, Conn. Suppositories	22,123	Dec. 6	61	1476
Fowler, Green L., Clarksburg, Mo. Medicines for the cure of blood diseases	22,114	Dec. 6	61	1475
Fox & Company, Samuel, Limited, Stocksbridge Works, near Sheffield, England. Umbrellas, umbrellaribs, stretchers, and frames of metal	20,632	Jan. 26	58	390
Frank Fehr Brewing Company, Louisville, Ky. Beer	21,526	July 26	60	573
Fraser, Thomas E., New York, N. Y. Emulsion of cod-liver oil, creosote, and pancreatine	20,712	Feb. 16	58	810
Fred Krug Brewing Company, Omaha, Nebr. Lager-beer	21,620	Aug. 16	60	1047
Frederick King & Company, (Limited,) London, England. Soup preparations	20,782	Mar. 1	58	1098
Freund, George, Durango, Colo. Firearms, ammunition, and fishing-tackle	20,804	Mar. 1	58	1098
Frictionless Metal Company, Chattanooga, Tenn. Alloy	20,952	Apr. 5	59	156
Fry & Co., Henry A., Philadelphia, Pa. Coffee	20,913	Mar. 29	58	1698
Frye & Co., J. C., Boston, Mass. Wheat-flour	20,760	Feb. 23	58	952
Fuchs & Lang, New York, N. Y. Bronze paints	21,242	May 31	59	1430
Fulford, George T., Brockville, Canada. Pills	20,622	Jan. 19	58	280
Fulford, George T., Brockville, Canada. Pills	20,838	Mar. 15	58	1420
Gabriel & Schall, New York, N. Y. Powdered barytes	20,789	Mar. 1	58	1098
Gannett, William H., Augusta, Me. Remedy for nervous disorders	21,516	July 26	60	572
Gannett, William H., Augusta, Me. Remedy for nervous disorders	21,583	Aug. 9	60	891
Gardner, Clara, Vincennes, Ind. Remedy for heart disease, rheumatism, and kindred ailments	20,664	Feb. 2	58	525
Gavin & Co., E. F., Chicago, Ill. Confectionery or candies	20,939	Apr. 5	59	155
Gebhart & Son, M., Baltimore, Md. Topical remedies	21,372	June 28	59	2068
Gedney, James W., New York, N. Y. Gelatine capsules	21,434	July 12	60	2093
Geisenheimer & Co., New York, N. Y. Coal-tar oils	21,534	Aug. 2	60	732
Gempp & Co., William T., St. Louis, Mo. Soap for staining and cleansing leather	20,550	Jan. 5	58	2
Genesee Salt Company, New York, N. Y. Salt	21,198	May 24	59	1256
Geo. D. Ellis & Sons Company, Philadelphia, Pa. Tanners' and curriers' tools, such as fleshers, workers, and hairing and currier knives	20,819	Mar. 8	58	1262
George Fowler, Son & Company, Limited, Kansas City, Kans. Lard, hams, and breakfast-bacon	20,777	Mar. 1	58	1098
Gérard, Charles, and J. S. Letord, Kansas City, Mo. Aluminium solder for dental plates and other uses	20,920	Apr. 5	59	154
Gerstle, Leopold, Highland Park, Tenn. Medical preparation of sarsaparilla	22,059	Nov. 29	61	1309
Gerstle, Leopold, Highland Park, Tenn. Remedy for the diseases of women	22,060	Nov. 29	61	1309
Gibbs & Company, Limited, London, England. Cement	21,371	June 28	59	2068
Gibson, James F., Providence, R. I. Sedlitz-powders	21,764	Sept. 20	60	1747
Giesecke Boot and Shoe Manufacturing Company, Jefferson City, Mo. Boots and shoes made of leather	21,413	July 5	60	155
Gill, George W., Jacksonville, Fla. Mattresses and other upholstery	21,701	Aug. 30	60	1323
Gillies & Co., Edwin J., New York, N. Y. Chicory	20,860	Mar. 22	58	1562
Gillingham Portland Cement Company, Limited, London and Gillingham, England. Portland cement	22,244	Dec. 27	61	1944
Girard & Cie., L., Epernay, France, and New York, N. Y. Champagne	21,298	June 14	59	1759
Glasgo Yarn Mills Company, Glasgo, Conn. Thread	21,062	May 3	59	785
Glastenbury Knitting Company, Addison, Conn. Knitted underwear	22,188	Dec. 20	61	1785
Glazier-Strong Oil Store Co., Chelsea, Mich. Stoves, heaters, and furnaces	20,991	Apr. 19	59	460
Glendale Elastic Fabrics Company, Easthampton and Boston, Mass. Elastic woven fabrics	20,788	Mar. 1	58	1098
Glonde, Ephram, Rondont, N. Y. Medicine to purify the blood and to cure rheumatism	21,277	June 7	59	1604
Glovine Manufacturing Co., Ashley, Pa. Liquid preparation for cleaning gloves	21,585	Aug. 9	60	891
Goddard & Sons, J. W., New York, N. Y. Braids	20,602	Jan. 12	58	148
Goddard & Sons, J. W., New York, N. Y. Material for coat-lining composed of cotton, silk, wool, or a mixture thereof	20,633	Jan. 26	58	390
Goddard & Sons, J. W., New York, N. Y. Braid	20,655	Jan. 26	58	390
Goddard & Sons, J. W., New York, N. Y. Woolen coat-linings	20,656	Jan. 26	58	390
Goddard & Sons, J. W., New York, N. Y. Woolen coat-linings	20,657	Jan. 26	58	390
Goddard & Sons, J. W., New York, N. Y. Italian cloths, mohair serges, and similar goods	21,889	Oct. 25	61	562
Goetting, Adolf L., New York, N. Y. Liquid dressing for curling, crimping, and frizzing the hair	21,193	May 24	59	1256
Goldstein, Philip, Newark, N. J. Leather shoe-laces	21,171	May 24	59	1251
Gollatz, August H. F., Lancaster, Pa. Stomach-bitters	20,897	Mar. 29	58	1698
Goodbar, White, Branch & Co., St. Louis, Mo. Men's hats	21,883	Oct. 18	61	422
Gordon & Co., London, England. Liquors and cordials	21,734	Sept. 13	60	1607
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,917	Nov. 1	61	720
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,918	Nov. 1	61	720
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,919	Nov. 1	61	720
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,920	Nov. 1	61	720
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,921	Nov. 1	61	720
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,945	Nov. 8	61	882
Gossage & Sons, Wm., Widnes and Liverpool, England. Soap	21,946	Nov. 8	61	882
Gossage & Sons, Wm., Widnes and Liverpool, England. Laundry and toilet soap	22,201	Dec. 20	61	1786
Gossage & Sons, Wm., Widnes and Liverpool, England. Laundry and toilet soap	22,202	Dec. 20	61	1787
Gottlieb, William, Philadelphia, Pa. Insect and vermin exterminators	21,802	Sept. 27	60	1882
Graef & Schmidt, New York, N. Y. Knives, scissors, and forks	21,560	Aug. 2	60	734
Graves & Co., I. A., Watertown, N. Y. Wheat-flour	21,582	Aug. 9	60	891
Graves & Sons, C. H., Boston, Mass. Whisky	22,076	Nov. 29	61	1310
Great Divide Publishing Company, Denver, Colo. Monthly magazine	21,770	Sept. 20	60	1748
Green, Shipton, New York, N. Y. Flour	21,871	Oct. 18	61	421
Green, Shipton, New York, N. Y. Flour	21,872	Oct. 18	61	421
Green, Shipton, New York, N. Y. Flour	22,242	Dec. 27	61	1941
Grell, William F., New York, N. Y. Liniment	21,511	July 26	60	572
Greyer, Julius, Cincinnati, Ohio. Cosmetic	21,426	July 5	60	156
Gribble & Nash, New York, N. Y. Camphor	21,956	Nov. 8	61	883
Griggs, Cooper & Co., St. Paul, Minn. Roasted and self-settling coffee	21,483	July 19	60	434
Grobet Frères, Vallorbe, Switzerland. Files, chisels, scrapers, graters, and similar tools	21,904	Nov. 1	61	719
Groetzinger & Co., J., Allegheny, Pa. Harness, sole, and belting leather	21,686	Aug. 23	60	1162

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Groff, Charles R., St. Paul, Minn. Baking-powder	21,023	Apr. 26	59	626
Guinde, Hypolite B., New Orleans, La. Table-sauce for fish, meats, &c.	20,603	Jan. 12	58	148
Guinle, Hypolite B., New Orleans, La. Sausage-meat, mustard, and pickles.	20,744	Feb. 23	58	952
Gumaer, Frederick F., and L. Gustam, New York, N. Y. Parlor-matches.	20,683	Feb. 9	58	658
Gunn & Sons, G., Baltimore, Md. Whisky	21,220	May 31	59	1429
Gunn, Firm of Mrs. B. J., New York, N. Y. Improved and reformed baby-clothes	21,287	June 14	59	1758
Gunn, Firm of Mrs. B. J., New York, N. Y. Improved patterns for baby-garments and undergarments	21,288	June 14	59	1758
Gustam, Leon. (See Gumaer and Gustam.)				
Guthmann, Carpenter & Telling, Chicago, Ill. Leather boots and shoes	20,920	Apr. 5	59	154
Gyne Vita Manufacturing Co., Philadelphia, Pa. Medicine for the local treatment of diseases peculiar to women	21,884	Oct. 18	61	422
Hafertepn Bros., Hamilton, Ohio. Liquid remedy for rheumatism	20,908	Mar. 29	58	1698
Hagemann Brewing Company, San Francisco, Cal. Beer	21,739	Sept. 13	60	1607
Habne & Co., Newark, N. J. Games, game-boards, puzzles, dolls, rattles, balls, bats, and the like, excluding toy wheels	21,978	Nov. 15	61	1012
Hake, Edward G., New Cuiberland, Pa. Cosmetics, both liquid and powder, and a liquid dentifrice	22,018	Nov. 22	61	1162
Hall, Frank W., Madison, Wis. Packages containing threaded needles	20,572	Jan. 12	58	148
Hall & Hayward Company, Louisville, Ky. Manufactured candy of all kinds	20,843	Mar. 15	58	1420
Hall & Hayward Company, Louisville, Ky. Confectionery	21,024	Apr. 26	59	626
Hall & Hayward Company, Louisville, Ky. Confectionery	21,025	Apr. 26	59	626
Hall & Hayward Company, Louisville, Ky. Confectionery	21,026	Apr. 26	59	626
Hall & Hayward Company, Louisville, Ky. Candies, licorice, and chewing-gum	21,194	May 24	59	1256
Hall & Hayward Company, Louisville, Ky. Nuts	21,302	June 14	59	1759
Hall, William H., New York, N. Y. Dentifrice	20,552	Jan. 5	58	2
Hall, William H., New York, N. Y. Soap	21,812	Oct. 4	61	147
Hallworth & Son, J., Manchester, England. Braiddings and trimmings for wearing-apparel	21,260	June 7	59	1603
Hammesfahr, Firm of Gottlieb, Solingen-Foche, Germany. Steel knives, forks, and scissors and analogous small metal articles	21,240	May 31	59	1430
Hampten Watch Company, Canton, Ohio. Watches	22,180	Dec. 20	61	1785
Hance Bros. & White, Philadelphia, Pa. Bronchial lozenges or throat-tablets	20,604	Jan. 12	58	148
Hance Bros. & White, Philadelphia, Pa. Flavoring extracts	22,133	Dec. 6	61	1477
Hance Bros. & White, Philadelphia, Pa. Flavoring extracts	22,134	Dec. 6	61	1477
Hanes & Co., P. H., Winston, N. C. Chewing-tobacco	22,058	Nov. 22	61	1164
Hann & Bro., Otto, New York, N. Y. Chemical preservative	21,854	Oct. 4	61	150
Hanna & Abbott Manufacturing Company, Columbus, Ohio. Liquid paint	20,935	Apr. 5	59	155
Hannach, Norman, Pittsburg, Pa. Linen shirts	21,569	Aug. 9	60	890
Hanrahan, Joseph F., Chicago, Ill. Refrigerators and refrigerator-cars	21,301	June 14	59	1759
Hard & Pike, New York, N. Y. Writing-paper, envelopes, and fine card-board	21,754	Sept. 20	60	1747
Harrington, Jeremiah A., Boston, Mass. Hats, caps, and bonnets	21,380	June 28	59	2069
Harris, Abram W., Providence, R. I. Lubricating-oil	21,561	Aug. 2	60	734
Harris & Shafer, Washington, D. C. Gold, silver, and plated articles, flat ware, and jewelry	20,820	Mar. 8	58	1262
Harris, William F., Adrian, Ill. Fluid remedy for constipation, diseases of the liver, kidneys, bowels, skin, and blood	21,678	Aug. 23	60	1187
Harrod Milling Co., Harrod, Ohio. Wheat-flour	22,086	Nov. 29	61	1311
Hart & Duff Hat Company, St. Louis, Mo. Hats and caps	21,243	May 31	59	1430
Hart & Duff Hat Company, St. Louis, Mo. Hats and caps	21,282	June 14	59	1758
Hart & Duff Hat Company, St. Louis, Mo. Hats and caps	21,283	June 14	59	1758
Hart & Duff Hat Company, St. Louis, Mo. Hats and caps	21,284	June 14	59	1758
Hartley & Graham Co. Bridgeport, Conn. Powder measures and rammers	21,765	Sept. 20	60	1747
Harvard Dry Plate Co., Cambridge, Mass. Photographic dry-plates	20,647	Jan. 26	58	399
Harvard Dry Plate Co., Cambridge, Mass. Photographic dry-plates	20,706	Feb. 9	58	658
Harvard Dry Plate Co., Cambridge, Mass. Photographic dry-plates	20,707	Feb. 9	58	658
Haslage, William C., Pittsburg, Pa. Root-beer extract	20,734	Feb. 16	58	310
Haslam's Limited, Manchester, England. Velveteens	21,393	June 28	59	2070
Hattie & Mylins, Halifax, Canada. Pills	21,299	June 14	59	1759
Hauthaway & Sons, C. L., Boston, Mass. Liquid cement	21,151	May 17	59	1102
Haviland, Theodore, Limoges, France. China-ware	22,100	Dec. 6	61	1474
Hayden & Derby Manufacturing Company, New York, N. Y. Stationary and locomotive injectors and ejectors	21,221	May 31	59	1428
Hazard & Sons, Thomas T., New York, N. Y. Fancy worsteds, corkscrews, union cassimeres, chevots, safetins, and cottonades	20,767	Feb. 23	58	952
Hazeltine Co., Toledo, Ohio. Ointment, face-cream, and other cosmetics	20,827	Mar. 8	58	1262
Healey, Emily. (See Healey, Mary and E.)				
Healey, Mary and E., Washington, D. C. Mat gold for gilding and the porcelain to which it is applied	21,199	May 24	59	1256
Heath & Sons, H. R., Fort Dodge, Iowa. Rolled oats or oatmeal	20,669	Feb. 2	58	526
Heaton-Peninsular Button Fastener Company, Providence, R. I. Machine for attaching buttons to boots and shoes	20,553	Jan. 5	58	2
Hedges, James, Chicago, Ill. Pig and hog bladders	22,272	Dec. 27	61	1946
Hedderman, Edward, Lynn, Mass. Remedy for colds and throat and lung troubles	22,116	Dec. 6	61	1475
Heinzerling, John, Baltimore, Md. Ginger ale	22,227	Dec. 20	61	1788
Heller & Merz Company, New York, N. Y., and Newark, N. J. Wash-blue in balls	21,129	May 17	59	1101
Heller & Merz Company, New York, N. Y., and Newark, N. J. Shoe-dressing	21,130	May 17	59	1101
Henderson, Harvey M., Chicago, Ill. Liver-tonic	21,641	Aug. 16	60	1049
Henderson, Harvey M., Chicago, Ill. Cough balsam	22,193	Dec. 20	61	1786
Henderson, Laws & Co., Baltimore, Md. Crackers and cakes	21,300	June 14	59	1759
Hennessy, John D., New York, N. Y. Bread	21,444	July 12	60	294
Henninger, William A., Havana, Ill. Preparation for soda-water	21,607	Aug. 16	60	1046
Henry Disston & Sons, Incorporated, Philadelphia, Pa. Saws, tools, files, and steel	21,515	July 26	60	572
Henry Sears Company, Chicago, Ill. Safety-bicycles	22,223	Dec. 20	61	1788
Hernsdorf, Louis, Chemnitz, Germany. Hosiery, textile gloves, and underwear	22,231	Dec. 27	61	1943
Herrick & Co., G. W., Lynn, Mass. Boots, shoes, and foot-wear made of leather and cloth	20,781	Mar. 1	58	1098
Herzog, Albert, New York, N. Y. Silks, velvets, satins, plushes, cords, and ribbons	20,717	Feb. 16	58	810
Hespos, Louis H., St. Louis, Mo. Washing-machines	20,708	Feb. 9	58	658
Hesse, Christian, Minonk, Ill. Topical remedy	21,536	Aug. 2	60	732
Heyden, F. von, Nachfolger, Radeben, near Dresden, Germany. Chemical products	21,846	Oct. 4	61	150
Heyman Brothers, New York, N. Y. Whisky	20,823	Mar. 8	58	1262
Heywood Boot and Shoe Company, Worcester, Mass. Boots and shoes	20,861	Mar. 22	58	1562
Heywood Boot and Shoe Company, Worcester, Mass. Shoes and shoe-lasts	21,134	May 17	59	1101
Hickman, Herbert, Jersey City, N. J. Fire-lighters	22,208	Dec. 20	61	1787
Higgin & Co., Thomas, Liverpool, England. Chloride of sodium or common salt	21,600	Aug. 9	60	892

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Highland Mineral Spring Water Company, Lewiston, Me., and New York, N. Y. Natural mineral water	20,992	Apr. 19	59	460
Hilbert & Co., A. J., Milwaukee, Wis. Flavoring extracts	21,505	July 19	60	436
Hill & Co., C. E., Carthage, Ind. Yeast	20,722	Feb. 16	58	810
Hill, George A., New York, N. Y. Remedies for neuralgia, rheumatism, headache, hay-fever, asthma, and female complaints	21,335	June 21	59	1916
Hirsch & Bondheim, St. Louis, Mo. Smoking-pipes	21,578	Aug. 9	60	890
Hitchcock & Co., W. G., New York, N. Y. Broad silks, ribbons, and silk threads	21,415	July 5	60	155
Hitchner & Co., Pittston, Pa. Biscuits, crackers, wafers, cakes, and similar articles	21,608	Aug. 16	60	1046
Hite, James F., Owensborough, Ky. Toilet cream for the skin	21,964	Nov. 8	61	883
Hobson, Seaman & Co., Francis, Sheffield, England. Steel in bars, rods, and sheets for tools, dies, and for other purposes	21,182	May 24	59	1255
Hofert, Wladimir, New York, N. Y. Remedies for gout and rheumatism	20,728	Feb. 16	58	810
Holbrook, A. & C. W., Providence, R. I. Glue	21,435	July 12	60	293
Holbrook, A. & C. W., Providence, R. I. Leather, including belting	21,445	July 12	60	294
Hollenden Hotel Company, Cleveland, Ohio. Cigars	21,896	Oct. 25	61	562
Holmberg, Eric, Södertälje, Sweden. Matches	20,662	Feb. 2	58	526
Honeoye Falls Mineral Spring Company, Buffalo, N. Y. Mineral water	20,551	Jan. 5	58	2
Hood, William, Chicago, Ill. Incandescent electric lamps	20,646	Jan. 26	58	390
Hopkins, Maria W., Brooklyn, N. Y. Salt from Great Salt Lake for bathing purposes	21,429	July 12	60	293
Horn, Albert, Buffalo, N. Y. Liniment	21,400	July 5	60	154
Horstmann Bros. & Co., Philadelphia, Pa. Naval, military, society, and theatrical uniforms	21,304	June 14	59	1760
Hotchkiss, Edward G., Gloucester, Mass. Whole, cut, and boneless fish	22,083	Nov. 29	61	1311
Howard Bros., Chester, Pa. Vinegar	21,111	May 10	59	938
Howard Furnace Company, Syracuse, N. Y. Heating-furnaces	22,003	Nov. 15	61	1014
Howards & Sons, London, England. Internal and external remedies for diseases	21,357	June 28	59	2067
Howarth, Dennis, Chester, Pa. Turkish towels	21,323	June 21	59	1915
Howe & Dills, Carlisle, Ky. Local anesthetic for painless extraction of teeth	21,230	May 31	59	1429
Howe, William D. (See Bright and Howe.)				
Hubert, Ferdinand, Troy, N. Y. Bread	20,862	Mar. 22	58	1562
Hudnnt, Benjamin G., Terre Haute, Ind. Corn products used for brewing purposes	21,714	Aug. 30	60	1324
Hudnnt, Richard, New York, N. Y. Remedy for general debility and for diseases of the genital organs	21,535	Aug. 2	60	732
Humanitas Company, Lakewood, N. Y. Remedies for alcoholism, morphine, opium, and tobacco habit, consumption, and for diseases of the throat and lungs	21,183	May 24	59	1255
Hunt & Co., Salt Lake City, Utah Ter. Diphtheria specific	21,401	July 5	60	154
Hurl & Co., George B., New York, N. Y. Writing-paper and envelopes	20,756	Feb. 23	58	952
Hurd & Co., George B., New York, N. Y. Writing-paper and envelopes	20,766	Feb. 23	58	952
Hurl & Co., George B., New York, N. Y. Writing-paper and envelopes	21,132	May 17	59	1101
Hurl & Co., George B., New York, N. Y. Writing-paper and envelopes	21,138	May 17	59	1101
Hurl & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,155	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,156	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,157	May 17	59	1102
Hurl & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,158	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,159	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,160	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,161	May 17	59	1102
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,187	May 24	59	1255
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,206	May 31	59	1427
Hurd & Co., Geo. B., New York, N. Y. Writing-paper and envelopes	21,402	July 5	60	154
Hurd & Co., Geo. B., New York, N. Y. Fine writing-paper and envelopes	21,403	July 5	60	154
Hurd & Lawrie, Brooklyn, N. Y. Washing-powder	21,188	May 24	59	1255
Hyman, Manie, Denver, Colo. Cigars	21,270	June 7	59	1603
Imperial Metal Card Company, Boston, Mass. Labels or clips for indicating the price of cigars	21,447	July 12	60	294
Impro Natural Stone Filter Company, Newark, N. J., and New York, N. Y. Water filters and coolers	21,117	May 17	59	1100
Indian River and Lake Worth Pineapple Growers Association, Eden, Fla. Pineapples	21,446	July 12	60	294
Indiana Rubber and Insulated Wire Company, Jonesborough, Ind. Insulated wires, insulated electric cables, and insulating material	20,916	Mar. 29	58	1698
Indianapolis Drug Co., Indianapolis, Ind. Baking-powder	20,593	Jan. 12	58	148
Indianapolis Drug Co., Indianapolis, Ind. Castor-oil	21,436	July 12	60	293
Inland Crystal Salt Company, Salt Lake City, Utah Ter., and Kansas City, Mo. Dairy and table salt	20,648	Jan. 26	58	390
Interior Conduit and Insulation Company, New York, N. Y. Electrical conduit-tubes	20,709	Feb. 9	58	658
Iowa Farming Tool Company, Fort Madison, Iowa. Hoes, forks, rakes, and other agricultural hand implements	21,771	Sept. 20	60	1748
Irwin, Arthur A., Boston, Mass. Base-ball players' gloves and mitts	22,230	Dec. 27	61	1943
Isaac, Hermann, New York, N. Y. Cigarette-paper	20,582	Jan. 12	58	148
Isaacs, Albert C., Baltimore, Md. Steel ingots, slabs, blooms, billets, bars, rods, &c.	21,449	July 12	60	294
J. C. McNeil Company, Akron, Ohio. Metallic wheelbarrows	21,602	Aug. 9	60	892
J. G. Brill Company, Philadelphia, Pa., and Chicago, Ill. Motor-trucks for street-cars	20,704	Feb. 9	58	658
J. J. & W. Wilson, Limited, Kendal, England. Clothing for men, women, and boys, and for hats, caps, and flannel shirts	21,099	May 10	59	937
J. J. & W. Wilson, Limited, Kendal, England. Piece goods of woollen, silk, linen, cotton, jute, and mixed materials, rugs, horse-clothing, wools, worsteds, yarns, and threads	21,100	May 10	59	937
J. & M. Schwabacher, Limited, New Orleans, La. Wheat-flour	21,255	June 7	59	1602
J. & P. Coats, Limited, Paisley, Scotland. Spool-cotton or cotton thread	20,625	Jan. 19	58	280
J. & P. Coats, Limited, Paisley, Scotland. Spool-cotton or cotton thread	20,626	Jan. 19	58	280
J. S. Smith, Druce & Company, Limited, London, England. Gin	21,294	June 14	59	1759
J. T. Robertson Soap Company, Manchester, Conn. Soap and other cleaning and detergent preparations	21,425	July 5	60	156
Jackson, Joseph, Paris, France. Dressing for the hair	21,987	Nov. 15	61	1013
Jacobs & Isenberg, Wheeling, W. Va. White muslin	21,088	May 10	59	936
Jacobs & McCafferty, Brooklyn, N. Y. White lead	22,066	Nov. 29	61	1309
Jacoby & Wester, New York, N. Y. Edge tools, cutlery, and instruments and implements of steel for surgical, toilet, domestic, and other purposes	20,953	Apr. 5	59	156
James Chambers, Limited, New York, N. Y. Boots and shoes	21,102	May 10	59	937
Jamison, Alcimus B., New York, N. Y. Anal or rectal salve	21,063	May 3	59	785
Jay, Tom S., London, England. Skins and fur and clothing made or lined with skins or trimmed with fur	20,790	Mar. 1	58	1098
Jaynes, Ida D., Milwaukee, Wis. Misses' and children's outer and under garments	21,570	Aug. 9	60	890
Jefferson Glass Co., Washington, Pa. Plate or cathedral glass	21,704	Aug. 30	60	1323
Jersey City Packing Company, Jersey City, N. J. Lard	20,844	Mar. 15	58	1420
Jersey City Printing Company, Jersey City, N. J. Packages of printed labels	21,777	Sept. 27	60	1881

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
John Kress Brewing Company, New York, N. Y. Lager-beer	20,834	Mar. 15	58	1420
John Kress Brewing Company, New York, N. Y. Lager-beer	20,880	Mar. 22	58	1562
John Kress Brewing Company, New York, N. Y. Beer	20,881	Mar. 22	58	1562
John M. Moore Shoe Company, Atlanta, Ga. Fine shoes, slippers, and shoe-uppers	21,358	June 28	59	2067
John R. Dickey Drug Company, Bristol, Va. Medicinal eye-water	22,261	Dec. 27	61	1946
Johnson, Boling A., Chicago, Ill. Paper, envelopes, cards, blank books, and paper badges	21,601	Aug. 9	60	892
Johnson, Clark & Co., New York, N. Y., and Orange, Mass. Sewing-machines and attachments	20,832	Mar. 15	58	1420
Johnson, James W., New Brunswick, N. J., and New York, N. Y. Medicated cotton	21,629	Aug. 16	60	1048
Johnson, James W., New Brunswick, N. J., and New York, N. Y. Medicated cotton	21,630	Aug. 16	60	1048
Johnson & Johnson, New York, N. Y. Antiseptic blankets	20,576	Jan. 12	58	148
Johnston & Murphy, Newark, N. J. Boots and shoes	21,207	May 31	59	1427
Johnston, Willis, Washington, D. C. Condensed milk	21,660	Aug. 23	60	1185
Johnston, Willis, Washington, D. C. Rolled oats	22,167	Dec. 13	61	1652
Johnston, Willis, Washington, D. C. Ground coffee	22,240	Dec. 27	61	1944
Jones & Co., W. H., Boston, Mass. Rye whisky	20,605	Jan. 12	58	148
Jones & Co., W. H., Boston, Mass. Whisky	21,421	July 5	60	155
Jones & Co., W. H., Boston, Mass. Whisky	21,537	Aug. 2	60	732
Jones, Flora A., South Bend, Ind. Toilet wash for the complexion	20,921	Apr. 5	59	154
Jones & Hill Company, Elkhart, Ind. Chewing gum	21,112	May 10	59	938
Jones of Blughampton, Blughampton, N. Y. Weighing-scales	20,672	Feb. 2	58	526
Jones & Pringle Company, Elkhart, Ind. Chewing gum	20,583	Jan. 12	58	148
Jordan, Marsh & Co., Boston, Mass. Perfumery, soap, and toilet and tooth powder	20,830	Mar. 15	58	1420
Jordan, Marsh & Co., Boston, Mass. Perfumery, soap, and toilet and tooth powder	20,831	Mar. 15	58	1420
Jowitt & Son, J., Stanley, N. J. Waterproofed carbolized paper	21,310	June 14	59	1760
Kamame Medicine Co., Detroit, Mich. Pills	20,084	Feb. 9	58	658
Kansas Salt Company, Hutchinson, Kans. Salt for table and other use	21,195	May 24	59	1256
Katharmon Chemical Company, St. Louis, Mo. Proprietary medicines	21,996	Nov. 15	61	1014
Kayser, William J., Milwaukee, Wis. Fabric-cleansing compounds of semi-liquid or liquid form	21,050	Apr. 26	59	628
Keasbey & Mattison, Ambler, Pa. Remedy for rheumatism, cystitis, and other diseases resulting from excess of acid in the secretions	22,327	Nov. 22	61	1163
Keasbey & Mattison, Ambler, Pa. Remedy for dyspepsia	22,117	Dec. 6	61	1474
Keller, Alvin H., Sioux Falls, S. D. Adhesive plasters	21,566	Aug. 2	60	734
Kelly & Co., Thomas, Boston, Mass. Woolen bed, horse, and wrapper blankets	20,871	Mar. 22	58	1562
Kemp & Co., W. H., New York, N. Y. Powdered paints	22,026	Nov. 22	61	1163
Kendall Manufacturing Company, Providence, R. I. Toilet and laundry soap	20,649	Jan. 26	58	390
Kendall Manufacturing Company, Providence, R. I. Toilet, laundry, and scouring soaps and washing fluids and powders	21,404	July 5	60	154
Kendall Manufacturing Company, Providence, R. I. Laundry soap	22,164	Dec. 13	61	1652
Kennard Novelty Company, Baltimore, Md. Game played with board, dice, and pieces	20,624	Jan. 19	58	280
Kentucky Veterinary Medicine Company, Mount Sterling, Ky. Veterinary remedies	22,271	Dec. 27	61	1946
Kerr & Co., William B., New York, N. Y., and Newark, N. J. Gold and silver plated flat and table ware and jewelry	20,912	Mar. 29	58	1698
Kerr Thread Company, East Newark, N. J. Thread for crocheting, embroidering, knitting, and sewing	20,638	Jan. 26	58	390
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,327	June 21	59	1915
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,328	June 21	59	1915
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing and for making buttonholes	21,329	June 21	59	1915
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,330	June 21	59	1915
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,331	June 21	59	1915
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,353	June 21	59	1918
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,383	June 28	59	2069
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,411	July 5	60	155
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,412	July 5	60	155
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,664	Aug. 23	60	1186
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,665	Aug. 23	60	1186
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,666	Aug. 23	60	1186
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	21,667	Aug. 23	60	1186
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous material	21,976	Nov. 15	61	1012
Kerr Thread Company, East Newark, N. J. Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing	22,103	Dec. 6	61	1474
Kersten & v. N. Rosenegk, Henrico county, near Richmond, Va. Beer	21,002	Apr. 19	59	461
Ketchum, David W., Evanston, Ill. Rosin	22,243	Dec. 27	61	1944
Ketchum Wagon Company, Marshalltown, Iowa. Carts and carriages	20,735	Feb. 16	58	810
Keyless Lock Company, Indianapolis, Ind. Post-office letter-boxes, drawers, and the like	22,057	Nov. 22	61	1164
Keyser, William S., Pensacola, Fla. Sawed timber	21,448	July 12	60	294
Keystone Chemical Company, Camden, N. J. Liquid detergent for toilet, bath, and household purposes	21,336	June 21	59	1916
Kidder, Samuel Boston, Mass. Metal polish	21,673	Aug. 22	60	1186
Kimber, Charles, London, England. Illuminating or burning oil	21,450	July 12	60	294
King Manufacturing Co., New York, N. Y. Axle-grease	22,096	Nov. 29	61	1312
King, William C., Norfolk, Va. Tea, coffee, and spices	21,543	Aug. 2	60	733
Kingsley, Charles B., Northampton, Mass. Remedy for the cure of headache, colds, neuralgia, or similar ailments	21,051	Apr. 26	59	628
Kinkead, Allan, Virginia City, Nev. Medical capsules	21,098	May 10	59	937
Kirby, Beard & Company, Limited, Birmingham, England. Pins	21,289	June 14	59	1758
Kirschbaum & Co., Ab., Philadelphia, Pa. Outer garments for men and children	21,778	Sept. 27	60	1281
Klas, Hilarius, Aumsville, Oreg. Peach-bitters	20,899	Mar. 29	58	1698
Klein, Aron, Hamilton, Ohio. Remedy for diseases of the liver, kidneys, and stomach	22,038	Nov. 22	61	1163
Kleindienst, Henry, Detroit, Mich. Medicinal compounds the basis of which is formed of vegetable extracts	22,113	Dec. 6	61	1475
Klindworth, Adolph C., New York, N. Y. Flour	21,979	Nov. 15	61	1012

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Knapp, Henry W. (See Monteith, Seeley, and Knapp.)				
Knobel & Co., H., New York, N. Y. Tailors' buttons and buckles	20,568	Jan. 5	58	2
Knowles, Henry, London, England. Earthen sanitary pipes	21,898	Oct. 25	61	562
Koch & Co., N., Milwaukee, Wis. Shoes and analogous articles of foot-wear	22,107	Dec. 6	61	1474
Koch & Co., N., Milwaukee, Wis. Boots, shoes, slippers, rubbers, sandals, and analogous foot-wear	22,189	Dec. 20	61	1786
Koch Sons & Company, New York, N. Y., and Berlin, Germany. Photograph and autograph albums and scrap-books	22,007	Nov. 22	61	1161
Kochs, Theodore A., Chicago, Ill. Barbers' chairs	20,573	Jan. 12	58	148
Koenig Medicine Company, Chicago, Ill. Line of proprietary medicines	21,103	May 10	59	937
Kolin, Joseph, Chicago, Ill. Bitter wine	21,609	Aug. 16	60	1046
Kollock, Logan & Co., Lynn, Mass. Shoes for children's wear	22,017	Nov. 22	61	1162
Korn, Francis, New York, N. Y. Necklaces made of medicinal substances, to be worn by infants	20,898	Mar. 29	58	1698
Krnedelbach, Carl, New York, N. Y. Bitters	20,900	Mar. 29	58	1698
Kuhn Bros., San Diego, Cal. Clothing, neckties, and underwear	20,768	Feb. 23	58	952
Kunhardt & Co., New York, N. Y. Wheat-flour	20,723	Feb. 16	58	810
Kunkelmann & Co., Rheims, France. Champagne	21,729	Sept. 6	60	1476
Kunkelmann & Co., Rheims, France. Champagne	22,247	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,248	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,249	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,250	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,251	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,252	Dec. 27	61	1945
Kunkelmann & Co., Rheims, France. Champagne	22,253	Dec. 27	61	1945
Kurum Chemical Co., St. Paul, Minn. Tablets for throat and lung diseases	21,722	Sept. 6	60	1475
Kuschewsky, Solomon L., New York, N. Y. Whisky	22,125	Dec. 6	61	1476
Kyle & Co., Joseph, Columbus, Ga. Men's shirts	20,887	Mar. 22	58	1562
L. A. Weyburn Company, Rockford, Ill. Plowshares	21,826	Oct. 4	61	148
L. J. Rose & Company, Limited, San Gabriel, Cal., and London, England. Wines and brandies	21,217	May 31	59	1428
L. J. Rose & Company, Limited, San Gabriel, Cal., and London, England. Fruits, nuts, oranges, lemons, olive-oil, and pickled olives	21,387	June 28	59	2069
Ladd & Coffin, New York, N. Y. Perfumes, powders, soaps, and toilet articles generally	21,437	July 12	60	293
Lafayette Mineral Spring Company, Derry, N. H. Mineral-spring water	20,554	Jan. 5	58	2
Lahaan, Reimer, Monmouth, Ill. Cigars	21,189	May 24	59	1256
Lammers, Carl A., Denver, Colo. Beer	21,527	July 26	60	573
Lamy, Ferdinand C., Saranac Lake, N. Y. Metal spoons, forks, knife-handles, and the like	21,899	Oct. 25	61	562
Landesman, Max, New York, N. Y. Tartan, lace-net, and all other cotton dress goods	20,975	Apr. 12	59	286
Landsman, Ernestina, New York, N. Y. Liniment	20,650	Jan. 26	58	390
Lary, Morris, New York, N. Y. Pillows	22,236	Dec. 27	61	1944
Lassiter, Richard T., New York, N. Y. Compound for the cure of rheumatism and rheumatic gout	21,631	Aug. 16	60	1048
Latham, Thomas, New York, N. Y. Moth-extermiators	20,569	Jan. 5	58	2
Latimer Medicine Co., Philadelphia, Pa. Medicinal tablets	20,565	Jan. 5	58	2
Lauffer, John, Toledo, Ohio. Medicinal compounds for external use	21,784	Sept. 27	60	1881
Lavolette, Joseph G., Montreal, Canada. Medicine for coughs, bronchitis, asthma, and like diseases	20,910	Mar. 29	58	1698
Le Francis, Peter, Cambridge, Mass. Cigars	21,479	July 19	60	434
Lea & Perrins, Worcester, England. Sauce for meats, fish, game, gravies, and soups	21,208	May 31	59	1427
Leary, William A., Holyoke, Mass. Fountain-pens	22,151	Dec. 13	61	1651
Leech, John J., New York, N. Y. Caramels	20,585	Jan. 12	58	148
Leggett & Co., Francis H., New York, N. Y. Wheat-flour	21,178	May 24	59	1255
Lehn & Fink, New York, N. Y. Saccharate similar to saccharine	22,171	Dec. 13	61	1653
Lehn & Fink, New York, N. Y. Antipretics and antineuralgics	22,264	Dec. 27	61	1946
Lemcke, Gesine, and E. C. Ruppel, Brooklyn, N. Y. Toilet lotion for the skin	20,783	Mar. 1	58	1098
Leprince, Maurice, Bourges, France. Pills	21,926	Nov. 1	61	720
Lester & Wasley, Norwich, Conn. Machinery for pasting and folding envelopes and making paper boxes	22,074	Nov. 29	61	1310
Letord, Joseph S. (See Gérard and Letord.)				
Levi Bros. & Blum, New York, N. Y. Dress-shields	21,417	July 5	60	155
Levi, Jacob, Paterson, N. J. Shirts, overalls, and pantaloons for mechanics' working-clothes	21,071	May 3	59	786
Levy Co., A., New York, N. Y. Boys' and children's suits	21,337	June 21	59	1916
Levy & Co., A., New York, N. Y. Boys' and children's suits	21,927	Nov. 1	61	720
Levy & Co., A., New York, N. Y. Boys' and children's suits	21,935	Nov. 8	61	881
Levy, Henry. (See Baker and Levy.)				
Lewinson, Isidore, New York, N. Y. Washing-blue	21,948	Nov. 8	61	882
Lewis, Edith, Hot Springs, Ark. Toilet cream, lotions, and powder deodorants	21,779	Sept. 27	60	1881
Lewis, John G., Jefferson City, Mo. Pants and overalls	21,718	Sept. 6	60	1475
Lewis Medicine Co., A. H., Bolivar, Mo. Liver-regulator and blood-purifier	21,202	May 24	59	1256
Lewis, William H., Philadelphia, Pa. Silver polish	21,338	June 21	59	1916
Libby, McNeill & Libby, Chicago, Ill. Canned meats, extract of beef, and soups	20,794	Mar. 1	58	1098
Liberty Manufacturing Company, New York, N. Y. Single-keyed type-writers	21,998	Nov. 15	61	1014
Liddle & Carter, Cedar Rapids, Iowa. Overalls, shirts, coats, vests, and pantaloons	20,586	Jan. 12	58	148
Liebe, Johannes P., Dresden, Germany. Prepared foods, malt extracts, and medicated wines	21,517	July 26	60	572
Liebmam, Mario, New York, N. Y. Cotton-seed oil, crude and refined	21,052	Apr. 26	59	628
Liesegang, Eduard, Dusseldorf, Germany. Photographic paper	21,430	July 12	60	293
Lilly, Alonzo, Baltimore, Md. Dentifrice	20,999	Apr. 19	59	460
Lippmann, Philipp, New York, N. Y. Corset-springs	21,104	May 10	59	938
Little, Joseph D., Springfield, Ohio. Fertilizing composition	20,845	Mar. 15	58	1420
Liuyra Manufacturing Co., Nashville, Tenn. Ointments, pills, and medicated soap	21,860	Oct. 11	61	283
Liunsamlet Tin Plate Company, Morrison, England. Tin plates,terne plates, and black plates	20,571	Jan. 5	58	2
Lockwood, Frederick J., Bridgeport, Conn. Salves, ointments, and liniments	22,192	Dec. 6	61	1476
Loeb & Co., William, Providence, R. I. Fingor-rings	22,101	Dec. 6	61	1474
Logan, William B., Cincinnati, Ohio. Hair-tonic	20,940	Apr. 5	59	155
Long & Bro., S. S., New York, N. Y. Eggs	20,693	Feb. 9	58	658
Long, Charles T., Lebanon, Ohio. Flour	20,584	Jan. 12	58	148
Long Island Brewery, Brooklyn, N. Y. Lager-beer	20,615	Jan. 19	58	250
Long Island Brewery, Brooklyn, N. Y. Lager-beer	21,680	Aug. 23	60	1187
Long Island Brewery, Brooklyn, N. Y. Lager-beer	21,681	Aug. 23	60	1187
Long Island Brewery, Brooklyn, N. Y. Lager-beer	21,789	Sept. 27	60	1882
López, Ramón, Havana, Cuba. Cigars	21,661	Aug. 23	60	1186
Loring, Abbott, Boston, Mass. Medicated belts, pills, and salts	21,845	Oct. 4	61	150
Los Nietos and Ranchito Walnut Growers Association, Rivera, Cal. English walnuts	20,895	Mar. 22	58	1562
Lowell Manufacturing Company, Boston, Mass. Carpets	22,234	Dec. 27	61	1943
Lowrey & Co., J. S., New York, N. Y. Underwear, including hosiery	21,766	Sept. 20	60	1748

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Ludwig, Redlich & Co., New York, N. Y. Solid table and other silverware	21,423	July 5	60	156
Lueders, George H., St. Paul, Minn. Liquid for flavoring tobacco and cigar-boxes	21,954	Nov. 8	61	883
Lurie, Joseph S., Kansas City, Mo. Certain named toilet preparations	21,544	Aug. 2	60	733
Luttgens, Henry A., Manchester, N. J. Shaft and pole couplings for vehicles	20,663	Feb. 2	58	526
Luyties Homeopathic Pharmacy Company, St. Louis, Mo. Tablets for use in dyspepsia and stomach troubles	21,780	Sept. 27	60	1881
Lyon, Hall & Co., Baltimore, Md. Fabric for window-shades	21,303	Apr. 19	59	1759
Lyon, Hall & Co., Baltimore, Md. Oil fabrics	21,614	Aug. 16	60	1047
Lysholm, Jörgen B., Trondhjem, Norway. Norwegian brandy	21,501	July 19	60	436
Lysholm, Jörgen B., Trondhjem, Norway. Norwegian brandy	21,502	July 19	60	436
M. A. Gedney Pickling Company, Minneapolis, Minn. Vinegar, pickles, catsups, chow-chow, mustard, and sauces	21,742	Sept. 13	60	1607
MacLaren, Alexander F., Stratford, Canada. Fancy full-cream Canadian cheese	21,000	Apr. 19	59	460
MacFadden, George, Philadelphia, Pa. Food for animals	21,803	Sept. 27	60	1882
Mackenzie, James A., Minneapolis, Minn. Stringed musical instrument	20,539	Jan. 5	58	2
Macowsky, Isaac, New York, N. Y. Writing pens	21,170	May 24	59	1255
Magic Clothes Cleaner Co., Portland, Me. Cleaning compound for removing grease from clothing	21,011	Apr. 19	59	461
Magie Brothers, Chicago, Ill. Lubricating oil and grease	22,159	Dec. 13	61	1651
Magnesia Sectional Covering Co., Ambler, Pa. Non-heat-conducting coverings for steam and other pipes and boilers	22,005	Nov. 15	61	1014
Mahr & Sons, John C., New York, N. Y. Butter and eggs	21,290	June 14	59	1758
Majestic Manufacturing Company, St. Louis, Mo. Heaters, ranges, and stoves	22,004	Nov. 15	61	1014
Majestic Perfume Co., New York, N. Y. Perfumery	21,251	June 7	59	1602
Manegold & Co., Jos., Montgomery, Ala. Apple, grape, and orange cider	20,888	Mar. 22	58	1562
Manley & Turner, Elmira, N. Y. Polish for wood and metal work	20,930	Apr. 5	59	154
Mansfield, Lott, Boston, Mass. Medicinal tonic	22,033	Nov. 22	61	1163
Maple City Soap Works, Monmouth, Ill. Soap for laundry and household use	22,163	Dec. 13	61	1652
Mares, Frank M., Chicago, Ill. Line of proprietary medicines	20,779	Mar. 1	58	1098
Markendorf, Martin, Louisville, Ky. Cough-balm and remedy for throat and lung diseases	20,555	Jan. 5	58	2
Markendorf, Martin, Louisville, Ky. Catarrh-cream	20,556	Jan. 5	58	2
Markendorf, Martin, Louisville, Ky. Pills	20,557	Jan. 5	58	2
Marshall & Co., W. G., Cleveland, Ohio. Cigars	20,988	Apr. 19	59	459
Marshall, Ernest C., Boston, Mass. Remedies for coughs, colds, and all diseases of the throat and lungs	22,269	Dec. 27	61	1946
Marshall, Harry C., New York, N. Y. Edge tools	21,622	Aug. 16	60	1048
Martin & Co., E. Rémy, Ronillac, France. Brandy	20,561	Jan. 5	58	2
Martin & Co., H. N., Greenville, Ky. Plug chewing-tobacco	21,345	June 21	59	1917
Martin Wagner Company, Baltimore, Md. Canned fruits and vegetables	20,846	Mar. 15	58	1420
Mason & Co., Marcus, New York, N. Y. Coffee-polishers	21,164	May 24	59	1254
Mason & Co., Marcus, New York, N. Y. Coffee-bullers	21,165	May 24	59	1254
Massanetta Park and Springs Company, Washington, D. C. Mineral water	22,080	Nov. 29	61	1310
Massman, Isaac, New Orleans, La., and Philadelphia, Pa. Rye and bourbon whisky	21,418	July 5	60	155
Mátos, Louis A., Philadelphia, Pa. Medicine in tablet, lozenge, or other solid form	21,416	July 5	60	155
Mattes & Lutz, Besigheim, Germany. Underwear	20,746	Feb. 23	58	952
Maxim, Jennie A., Pittsfield, Mass. Dermal preparations, dermal soaps, curling cream, hair tonic, and tooth-powders	22,267	Dec. 27	61	1946
May & Co., Madame, Boston, Mass. Toilet soap, cosmetics, cream, lotion, hair dye and bleach, and similar preparations	21,210	May 31	59	1427
May & Fieberger, Akron, Ohio. Hot-air furnaces	21,241	May 31	59	1430
Mayer & Loewenstein, New York, N. Y. Varnish	21,949	Nov. 8	61	8-2
Mayer, Sons & Co., Philadelphia, Pa. Rye whisky	22,127	Dec. 6	61	1476
McAllister, Francis W., Baltimore, Md. Eyeglasses and spectacles	22,102	Dec. 6	61	1474
McAvey Brewing Company, Chicago, Ill. Tonics	21,785	Sept. 27	60	1881
McAvey Brewing Company, Chicago, Ill. Beer	21,786	Sept. 27	60	1881
McBrayer, Estate of William H., Lawrenceburg, Ky. Whisky	20,808	Mar. 1	58	1098
McBrayer, Estate of William H., Lawrenceburg, Ky. Whisky	20,809	Mar. 1	58	1098
McBrayer, Estate of William H., Lawrenceburg, Ky. Whisky	20,810	Mar. 1	58	1098
McBride & Hall, Brooklyn, N. Y. Worm-powders	22,041	Nov. 22	61	1163
McClain, Edward L., Greenfield, Ohio. Sweat collars or pads	22,071	Nov. 29	61	1310
McClellan, Charles H., Troy, N. Y. Shirts, collars, cuffs, and blouses	21,821	Oct. 4	61	148
McCloskey, John, New Orleans, La. Mead	21,506	July 19	60	436
McConnell & Company, Limited, Ancoats, Manchester, England. Cotton yarns	21,798	Sept. 27	60	1882
McCord, Brady Company, Omaha, Neb. Cheese	21,621	Aug. 16	60	1047
McCorry & Taylor, Pueblo, Colo. Medicinal compound the basis of which is the chlorides of gold and sodium	21,529	July 26	60	573
McCutcheon & Co., James, New York, N. Y. Linen fabrics	20,863	Mar. 22	58	1562
McDaid, George D. (See Olney and McDaid.)				
McFarland, Eleanor, Columbus, Ohio. Medical compound for external and internal use for skin and blood diseases	21,640	Aug. 16	60	1049
McGrath, Henry J., Baltimore, Md. Canned oysters, fruits, and vegetables	20,666	Feb. 2	58	526
McGrath, Henry J., Baltimore, Md. Canned oysters, fruits, and vegetables	21,144	May 17	59	1101
McIntosh-Huntington Company, Cleveland, Ohio. Bicycles, velocipedes, and accessory articles	20,574	Jan. 12	58	148
McIntosh-Huntington Company, Cleveland, Ohio. Bicycles, velocipedes, and accessory articles	21,873	Oct. 18	61	421
McIntyre, Frederick S., Denver, Colo. Oleoresins	20,769	Feb. 23	58	952
McKee, John A., Toronto, Canada. Pills used in kidney complaints	21,679	Aug. 23	60	1187
McKee, John L., Chicora, Pa. Proprietary medicine for the cure of headache	20,987	Apr. 19	59	459
McKesson & Robbins, New York, N. Y. Remedies for internal, and external use	20,873	Mar. 22	58	1562
McKesson & Robbins, New York, N. Y. Boxes, bottles, tubes, atomizers, and powder-distributors used for dispensing powders, liquids, and semi-liquids	21,072	May 3	59	786
McKesson & Robbins, New York, N. Y. Boxes, bottles, tubes, atomizers, and powder-distributors used for dispensing powders, liquids, and semi-liquids	21,530	July 26	60	573
McKesson & Robbins, New York, N. Y. Pills, capsules, and tablets	21,755	Sept. 20	60	1747
McKesson & Robbins, New York, N. Y. Boxes, bottles, atomizers, tubes, and distributors for dispensing powders, liquids, and semi-liquids	21,905	Nov. 1	61	719
McKibbin & Co., St. Paul, Minn. Men's hats	20,800	Mar. 1	58	1098
McKibbin & Co., St. Paul, Minn. Men's hats	20,801	Mar. 1	58	1098
McKibbin & Co., St. Paul, Minn. Men's hats	20,802	Mar. 1	58	1098
McKinnie & Chessman Manufacturing Co., Pittsburg, Pa. Remedy for the cure of rheumatism, gout, and lumbago	21,273	June 7	59	1604
McKnight & Co., Wichita, Kans., and New York, N. Y. Edge tools and cutlery of all kinds	20,976	Apr. 12	59	296
McMartin's Sons, J. I., Johnstown, N. Y. Gloves and mittens	21,147	May 17	59	1102
Mechanical Fabric Company, Providence, R. I. Card-cloth	20,538	Jan. 5	58	2
Meikleham, William J., Highlands, Colo., and Cohoes, N. Y. Bread, biscuits, cakes, and crackers	21,861	Oct. 11	61	283
Meisselbach & Bro., A. F., Newark, N. J. Can-openers	21,082	May 10	59	936

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Merchant & Co., Philadelphia, Pa. Tin and terne plates	21,705	Aug. 30	60	1324
Meredith-Jones & Sons, J. Wrexham, England. Leather of all kinds, skins unwrought and wrought, and articles made of leather	21,070	May 3	59	785
Mereness, Lyman D., Sharon Springs, N. Y. Pills and granules	22,198	Dec. 20	61	1786
Mersick & Co., C. S., New Haven, Conn. Tin and terne plates	20,651	Jan. 26	58	390
Mersick & Co., C. S., New Haven, Conn. Tin and terne plates	21,374	June 28	59	2068
Mersick & Co., C. S., New Haven, Conn. Tin and terne plates, including roofing-plates and bright plates	21,507	July 19	60	436
Merz, Frederick, Brooklyn, N. Y. Medicinal plasters	21,730	Sept. 6	60	1476
Messner & Co., Ch., Trossingen, Germany. Mouth-harmonicas	21,001	Apr. 19	59	460
Mexican Amole Soap Company, Peoria, Ill. Soap and soap powders	22,203	Dec. 20	61	1787
Meyer Brothers Drug Company, St. Louis and Kansas City, Mo., and Dallas, Tex. Whisky	20,670	Feb. 2	58	526
Meyer Brothers Drug Company, St. Louis and Kansas City, Mo., and Dallas, Tex. Ethyl nitrite	21,146	May 17	59	1102
Meyer Brothers Drug Company, St. Louis and Kansas City, Mo., and Dallas, Tex. Corks	21,209	May 31	59	1427
Meyer Brothers Drug Company, St. Louis and Kansas City, Mo., and Dallas, Tex. Bourbon whisky	22,126	Dec. 6	61	1476
Meyer, Hermann J., Chicago, Ill. Remedy for diseases of the blood, stomach, and nervous system	20,872	Mar. 22	58	1562
Meyerhof, Marx & Simonsen, Manchester, England. Velveteens	20,587	Jan. 12	58	148
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	20,694	Feb. 9	58	658
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	20,695	Feb. 9	58	658
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	20,696	Feb. 9	58	658
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	20,697	Feb. 9	58	658
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	20,698	Feb. 9	58	658
Meyerhof, Marx & Simonsen, Manchester, England. Velveteen	21,238	May 31	59	1430
Meyerhof, Marx & Simonsen, Manchester, England. Skirt-facing	21,642	Aug. 16	60	1049
Miami Powder Company, Xenia, Ohio. Sporting-powder	21,252	June 7	59	1602
Midland Coffee and Spice Company, St. Joseph, Mo. Roasted coffee	21,484	July 19	60	434
Miller, Thomas D., Ingersoll, Canada. Cheese	21,261	June 7	59	1603
Miller & Co., John, Boston, Mass. Whisky	21,266	June 7	59	1603
Miller & Co., John, Boston, Mass. Whisky	21,545	Aug. 2	60	733
Miller & Co., John, Boston, Mass. Whisky	21,748	Sept. 13	60	1608
Miller, Frank J., Buffalo, N. Y. Tea and coffee	21,942	Nov. 8	61	882
Miller, George M., Detroit, Mich. Liquid anesthetic for dentists' use	22,109	Dec. 6	61	1475
Miller, Hall & Hartwell, Troy, N. Y. Men's shirts, collars, and cuffs	21,405	July 5	60	154
Miller & Miller, Baltimore, Md. Tongues, hams, shoulders, breasts, and bacon sides	20,762	Feb. 23	58	952
Miller & Miller, Baltimore, Md. Tongues, hams, shoulders, breasts, bacon sides, and lard	20,763	Feb. 23	58	952
Miller & Newton, South Bend, Ind. Medicine for the blood and digestive system	21,089	May 10	59	936
Milton Bradley Company, Springfield, Mass. Scissors	20,628	Mar. 15	58	1420
Minkota Milling Company, Duluth, Minn. Wheat-flour	21,940	Nov. 8	61	881
Missoula Mercantile Company, Missoula, Demersville, Corvallis, Stevensville, and Victor, Mont. Hats and caps	20,761	Feb. 23	58	952
Missoula Mercantile Company, Missoula, Stevensville, Victor, Corvallis, and Demersville, Mont. Dress and negligée shirts	21,723	Sept. 6	60	1475
Mitchell & Co., A., Calhoun, La. Veterinary powders	21,698	Aug. 30	60	1323
Mohr & Son, Charles, Mobile, Ala. Baking-powder	20,821	Mar. 8	58	1262
Mohr Herb Remedy Company, Tempe, Ariz. Ter. Medicinal herb-teas	21,922	Nov. 1	61	720
Mourne, Edward N., Unionville, Mo., and Lexington, Ky. Whisky	21,140	May 17	59	1101
Monroe, Perdita B., Indianapolis, Ind. Remedies for purifying the blood	20,778	Mar. 1	58	1098
Montebello & Co., Alfred de, Mareuil-sur-Ay, France, and New York, N. Y. Wines, brandies, and cordials	20,776	Mar. 1	58	1098
Montebello & Co., Alfred de, Mareuil-sur-Ay, France, and New York, N. Y. Wines and cordials	20,859	Mar. 22	58	1562
Monteith, Dermont M., F. W. Seeley, and H. W. Knapp, St. Paul, Minn., and Salt Lake City, Utah Ter. Certain named remedies	20,757	Feb. 23	58	952
Montmorency Cotton Manufacturing Company, Montmorency, Canada. Sheetings, shirtings, muslins, and cotton dress fabrics	21,244	May 31	59	1430
Mooney & Sons, W. W., Columbus, Ind. Harness-leather	21,781	Sept. 27	60	1881
Moore, James W., New York, N. Y. Medicinal teas	22,115	Dec. 6	61	1475
Moore, Martin L. (See Sawyer and Moore.)				
Morgan & Co., C. W., New York, N. Y. Table relish	21,324	June 21	59	1915
Morrill, James C., Manchester, England. Game for outdoor and indoor use	21,064	May 3	59	785
Morrison Tin Plate Co., Morrison, England. Terne plates	20,701	Feb. 9	58	658
Moulié, Eugène, Jacksonville, Fla. Certain perfumery	21,090	May 10	59	936
Mowry, Albert D., Boston, Mass. Certain named remedies	20,619	Jan. 19	58	280
Müller & Mann, Edmund, Charlottenburg, near Berlin, Germany. Anticorrosive oils, paints, varnishes, and lacquers	20,799	Mar. 1	58	1098
Mühlens & Kropff, New York, N. Y. Toilet soap	22,063	Nov. 29	61	1309
Mulot, Otto L., Astoria, N. Y. Remedy for diseases of the liver and skin	21,862	Oct. 11	61	283
Munroes, Packard & Linseott, Auburn, Me. Boots and shoes	22,157	Dec. 13	61	1651
Murphy, Hibben & Co., Indianapolis, Ind. Knit fabrics	22,014	Nov. 22	61	1161
Murray, Daniel D. (See Stanghler and Murray.)				
Myers & Co., S. F., New York, N. Y. Watch-cases and watch-movements	20,570	Jan. 5	58	2
N. K. Fairbank & Company, Chicago, Ill., St. Louis, Mo., New York, N. Y., and Montreal, Canada. Washing-powder	20,864	Mar. 22	58	1562
N. Z. Graves & Company, Philadelphia, Pa. Varnishes, paints, japans, and analogous materials or compounds	21,584	Aug. 9	60	891
Napheys, Edward C., Philadelphia, Pa. Preparation of corn for culinary purposes	21,172	May 24	59	1254
Nash, Firm of Isaac, Bellbroughton, near Stourbridge, England. Agricultural implements, including scythes, hay-knives, and reaping-hooks	20,822	Mar. 8	58	1262
National Brewing Company of Baltimore County, Maryland, Baltimore city and Baltimore county, Md. Lager-beer	21,772	Sept. 20	60	1748
National Card Company, Indianapolis, Ind., Jersey City, N. J., and New York, N. Y. Playing-cards	21,084	May 10	59	936
National Cigarette and Tobacco Company, New York, N. Y. Cigarettes	21,894	Oct. 25	61	562
National Starch Manufacturing Company, Covington, Ky., and New York, N. Y. Laundry starch	21,083	May 10	59	936
National Starch Manufacturing Company, Covington, Ky., New York, N. Y., and Cincinnati Ohio. Preparation of starch for laundry or food purposes	20,943	Apr. 5	59	156
National Starch Manufacturing Company, Covington, Ky., Indianapolis, Ind., and New York, N. Y. Laundry starch	21,257	June 7	59	1602
National Starch Manufacturing Company, Covington, Ky., New York and Buffalo, N. Y. Preparation of corn-starch or corn-flour	21,751	Sept. 13	60	1608
National U. S. Stamp Delivery Company, Portland, Me., and Boston, Mass. Cylindrical frangible boxes for use in coin-controlled vending-machines	21,271	June 7	59	1603
National Varnish Company, New Haven, Conn. Varnishes and japans	21,610	Aug. 16	60	1046
Nazareth Manufacturing Company, Nazareth, Pa. Knit under vests or waists	22,106	Dec. 6	61	1474

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Nebraska City Cereal Mills, Nebraska City, Nebr. Rolled oats, velvet meal, corn grits, and self-rising griddle-cake flour.....	22,212	Dec. 20	61	1787
Neff, Charles J. (See Neff, George A., C. J., and W. J.).....				
Neff, George A., C. J., and W. J., Kansas City, Mo. Chewing and smoking tobacco and cigars....	21,855	Oct. 4	61	150
Neff, William J. (See Neff, George A., C. J., and W. J.).....				
Nehls, Carle, Cleveland, Ohio. Remedies for neurotic and similar complaints.....	22,270	Dec. 27	61	1946
Nelson Glass Company, Muncie, Ind. Glass bottles, jars, and other glass receptacles and table-ware.....	20,931	Apr. 5	59	155
Netter Bros., Philadelphia, Pa. Wines and liquors.....	21,981	Nov. 15	61	1013
Neumann, August W., New York, N. Y. Dye stuffs for dyeing textile fabrics.....	21,141	May 17	59	1101
Neuss, Hesselin & Co., New York, N. Y. Bleached, gray, printed, and fancy domestic cotton goods.....	20,558	Jan. 5	58	2
New England Whalebone Manufacturing Company, New York, N. Y. Raw and manufactured whalebone.....	21,939	Nov. 8	61	881
New Home Sewing Machine Company, New York, N. Y. Sewing-machines and attachments.....	21,272	June 7	59	1601
New Process Nail Company, Torrington, Conn. Horseshoe-nails.....	22,072	Nov. 29	61	1310
New York Belting and Packing Company, Limited, New York, N. Y. Articles of vulcanized rubber, including mats and matting.....	22,108	Dec. 6	61	1474
New York Consolidated Card Company, New York, N. Y. Playing-cards.....	21,093	May 10	59	937
New York Consolidated Card Company, New York, N. Y. Playing-cards.....	22,011	Nov. 22	61	1161
New York Quinine and Chemical Works, (Limited,) New York, N. Y. Remedies for internal use which contain quinine.....	22,061	Nov. 29	61	1309
New York Sewing Machine and Manufacturing Company, Plattsburg, N. Y. Sewing-machines.....	21,897	Oct. 25	61	552
Newman, John, Elgin, Ill. Butter.....	20,865	Mar. 22	58	1562
Newton Horse Remedy Co., Toledo, Ohio. Emollient or hoof-cure.....	20,739	Feb. 16	58	810
Newton Horse Remedy Co., Toledo, Ohio. Remedy for heaves, cough, or distemper.....	20,814	Mar. 8	58	1262
Nicholson & Co., J. W., London, England. Gin.....	21,200	May 24	59	1256
Nicholson & Co., J. W., London, England. All spirituous and fermented liquors except brandy....	21,571	Aug. 9	60	890
Noble & Streeter, New York, N. Y. Composition for polishing metals.....	21,253	June 7	59	1602
Norcross, John H., Boston, Mass. Certain under and outer wearing apparel.....	22,092	Nov. 29	61	1311
Norddeutsche Wollkämmerlei & Kammgarnspinnerei, Bremen, Germany. Wool-fat.....	22,095	Nov. 29	61	1312
North Packing and Provision Company, Boston, Mass. Packed meat, hams, shoulders, bacon sides, and sausages.....	21,245	May 31	59	1430
North Packing and Provision Company, Boston, Mass. Meat products, including packed and smoked beef and pork, hams, shoulders, sides, bacon, and sausage.....	22,128	Dec. 6	61	1476
Northrop, Arthur C., Waterbury, Conn. Books, pamphlets, and periodicals.....	22,008	Nov. 22	61	1161
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour.....	21,306	June 14	59	1760
Northwestern Consolidated Milling Company, Minneapolis, Minn. Wheat-flour.....	21,307	June 14	59	1760
Noteman, Alonzo, Toledo, Ohio. Cure for drunkenness.....	21,485	July 19	60	434
Nott, Hallie C., Indianapolis, Ind. Remedy for hernia or rupture.....	20,718	Feb. 16	58	810
O'Connor, Denis J., Springfield, Ohio. Baking-powder.....	22,135	Dec. 6	61	1477
Oakford & Fahnstork, Peoria, Ill. Canned vegetables and fruits.....	21,340	June 21	59	1916
Oakley Soap and Perfumery Company, New York, N. Y. Toilet soap.....	22,022	Nov. 22	61	1162
Oasis Nursery Company, Westbury, N. Y. Seeds and plants.....	21,735	Sept. 13	60	1607
Oberly, John L., New York, N. Y. Periodicals.....	21,027	Apr. 26	59	626
Oblinger, John W., Troy, Ohio. Baking and roasting pans.....	22,051	Nov. 22	61	1164
Occidental Oil Company, Brooklyn and New York, N. Y. Cotton-seed oil for culinary purposes and for food.....	21,190	May 24	59	1256
Od Chem. Company, New York, N. Y. Certain named remedies.....	21,339	June 21	59	1916
Ode & Gerbereux, New York, N. Y. Candy, chocolate, and cocoa for confectioners' use.....	21,774	Sept. 20	60	1748
Odorless Disinfectant Co., Washington, D. C., New York, N. Y., and Jersey City, N. J. Disinfectants.....	21,988	Nov. 15	61	1013
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,907	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,908	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,909	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,910	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,911	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,912	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,913	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,914	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,915	Nov. 1	61	719
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	21,916	Nov. 1	61	720
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	22,068	Nov. 29	61	1309
Oettinger & Co., E. R., New York, N. Y. Steel and other pens.....	22,069	Nov. 29	61	1309
Ogborn, Marshall E., San Francisco, Cal. Laxative medicine.....	22,196	Dec. 20	61	1786
Ohio Soap Company, Cincinnati, Ohio. White soap for the toilet and laundry.....	22,021	Nov. 22	61	1162
Olney, Arthur R., and G. D. McDavid, Clinton, Iowa. Vermifuge for animals.....	20,826	Mar. 8	58	1262
Olsen, Monrad J., Des Moines, Iowa. Liquid tonic.....	21,553	Aug. 2	60	733
Ollwell & Co., James, New York, N. Y. Whisky.....	22,219	Dec. 20	61	1788
Onaida Manufacturing Chuck Company, Onaida, N. Y. Chucks.....	20,679	Feb. 2	58	526
Ontario Oriental Flour Company, St. Thomas, Canada, and Chicago, Ill. Corn-flour.....	21,653	Aug. 23	60	1185
Oppenheimer & Levy, S., New York, N. Y. Ladies' face-veils.....	22,104	Dec. 6	61	1474
Orlando Medicine Company, Orlando, Fla. Medicine for fowls.....	21,833	Oct. 4	61	149
Ormes, Upsdale & Co., London, England. Gloves.....	20,922	Apr. 5	59	154
Osborne, Frank N., New York, N. Y. Finger-rings.....	21,885	Oct. 18	61	422
Osborne, Frank N., New York, N. Y. Finger-rings.....	21,972	Nov. 15	61	1012
Osborne, Frank N., New York, N. Y. Finger-rings.....	21,973	Nov. 15	61	1012
P. J. Willis & Bro., Galveston, Tex. Plaids for dresses.....	22,016	Nov. 22	61	1162
Pacific Soap and Chemical Co., Tacoma, Wash. Laundry soap and washing compound.....	20,685	Feb. 9	58	658
Page Belting Company, Concord, N. H. Leather belting, belt, lace, picker, hame-string, and leg-gin leather, picker-straps, hame strings, and cut lacings.....	20,833	Mar. 15	58	1420
Page Belting Company, Concord, N. H. Certain named rubber and leather goods.....	21,924	Nov. 1	61	720
Page Bros. & Co., Boston, Mass. Oil or gas stoves.....	22,075	Nov. 29	61	1310
Page, George W., Hawthorne, N. J., and New York, N. Y. Remedy for certain named diseases.....	21,213	May 31	59	1428
Page, George W., Hawthorne, N. J., and New York, N. Y. Remedy for certain named diseases.....	21,214	May 31	59	1428
Page & Son, J., Cohoes, N. Y. Bating or bats of cotton.....	21,262	June 7	59	1603
Palmer, Austin D., Coshocton, Ohio. Calendars and paper-weights.....	22,152	Dec. 13	61	1651
Palmer, Charles H., Jr., Amesbury, Mass. Top-buggies.....	21,837	Oct. 4	61	149
Palmer, Firm of Solon, New York, N. Y. Extracts, colognes, satchet-powders, and toilet-soap.....	21,397	June 28	59	2070
Palmer & Rey, San Francisco, Cal. Gas and gasoline engines.....	21,834	Oct. 4	61	149
Palmer & Rey, San Francisco, Cal. Gas and gasoline engines.....	21,835	Oct. 4	61	149
Palmer & Rey, San Francisco, Cal. Gas and gasoline engines.....	21,836	Oct. 4	61	149
Palmer, Thomas, New York, N. Y. Baking-powder.....	22,166	Dec. 13	61	1652
Pan Confection Company, Chicago, Ill. Confections and candies.....	20,957	Apr. 12	59	294
Paramore, Hory E., Indianapolis, Ind. Washing-powder.....	20,736	Feb. 16	58	810

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Parke & Co., L. H., Philadelphia, Pa. Blended tea	21,431	July 12	60	293
Parke & Co., L. H., Philadelphia, Pa. Tea	21,432	July 12	60	293
Parker & Co., E. L., Baltimore, Md. All sheet metal and solder	22,140	Dec. 6	61	1477
Parker & Co., E. L., Baltimore, Md. All sheet metal and solder	22,141	Dec. 6	61	1478
Parker & Co., E. L., Baltimore, Md. All sheet metal and solder	22,142	Dec. 6	61	1478
Parker & Co., E. L., Baltimore, Md. All sheet metal	22,143	Dec. 6	61	1478
Parker, Elijah S., New York, N. Y. Salve	20,989	Apr. 19	59	459
Parker, Henry J., Clayton, Ill. Headache-powders	20,874	Mar. 22	58	1562
Parker, Henry J., Clayton, Ill. Powder for allaying fevers, for the treatment of febrile affections, and the cure of headache arising from fever	21,960	Nov. 8	61	883
Parsons & Co., W. H., New York, N. Y. Paper for printing and lining strawboards used in making boxes	20,947	Apr. 5	59	156
Passavant & Co., New York, N. Y. Satin and velvet ribbons	21,711	Aug. 30	60	1324
Patty, John H., Chicago, Ill. Temperamental remedies	21,767	Sept. 20	60	1748
Paul Whitin Manufacturing Company, Northbridge, Mass. Shirts, cambrics, muslins, and dress goods	21,395	June 28	59	2070
Paxton & Gallagher, Omaha, Nebr. Tea	21,267	June 7	59	1603
Paxton & Gallagher, Omaha, Nebr. Tea	21,268	June 7	59	1603
Paxton & Gallagher, Omaha, Nebr. Tea	21,817	Oct. 4	61	150
Paxton & Gallagher, Omaha, Nebr. Tea	21,941	Nov. 8	61	881
Peabody & Co., Henry W., Boston, Mass. Lubricating-oils	21,486	July 19	60	435
Pearl, Eugene, New York, N. Y. Corset shields or supports	22,187	Dec. 20	61	1785
Pearson, George F. E., Brooklyn, N. Y. Photographic prints	21,787	Sept. 27	60	1881
Pearson, Elias F., Mountain View, Mo. Food-preservatives	20,791	Mar. 1	58	1098
Pearson, James S. (See Rogers and Pearson)				
Pease, Son & Co., Thomas, Darlington, England, and Leith, Scotland. Whisky	21,504	July 19	60	436
Peavey & Co., F. H., Minneapolis, Minn. Wheat, corn, barley, and rye	21,191	May 24	59	1256
Peck, Frederic M., Hartford, Conn. Butter and cheese	22,168	Dec. 13	61	1653
Peckham, Malcolm D., New York, N. Y. Electric rings for the cure of disease	21,736	Sept. 13	60	1607
Peirano, Louis, New York, N. Y. Olive-oil	20,784	Mar. 1	58	1098
Penn, Joseph G., P. P. Watson, and A. D. Witten, Martinsville, Va. Plug-tobacco	21,768	Sept. 20	60	1748
Peraza, Domingo, New York, N. Y. Specific for diphtheria and other throat troubles	21,422	July 5	60	156
Perkins & Co., New York, N. Y. Coal	20,634	Jan. 26	58	390
Perkins & Co., New York, N. Y. Coal	20,635	Jan. 26	58	390
Perkins & Co., New York, N. Y. Coal	21,254	June 7	59	1602
Perkins, Fred H., Shrewsbury, Mass. Medicinal beverage and sirups and extracts for forming the same	21,568	Aug. 2	60	734
Perrin Frères et Cie., New York, N. Y. Gloves	22,182	Dec. 20	61	1785
Perrin Frères et Cie., New York, N. Y. Gloves	22,183	Dec. 20	61	1785
Perrin Frères et Cie., New York, N. Y. Gloves	22,184	Dec. 20	61	1785
Perrin Frères et Cie., New York, N. Y. Gloves	22,185	Dec. 20	61	1785
Perry, William H., Concord, N. H. Monuments, architectural trimmings, and various cut stones	21,554	Aug. 2	60	733
Persons & Allen, Springville, N. Y. Liquid preparation for the complexion	20,875	Mar. 22	58	1562
Peter Schoenhofen Brewing Company, Chicago, Ill. Lager-beer	21,279	June 7	59	1604
Peters & Company, Limited, Chicago, Ill. Preparations of sulphur in liquid form	22,035	Nov. 22	61	1163
Peters Shoe Company, St. Louis, Mo. Boots and shoes	20,737	Feb. 16	58	810
Peterson & Co., J. H., Albion, N. Y. Natural mineral water	21,180	May 24	59	1255
Peterson & Ruge, St. Louis, Mo. Detergent compounds in liquid form	21,706	Aug. 30	60	1324
Petri, Ada M., Minneapolis, Minn. Hair-curling compounds	21,724	Sept. 6	60	1475
Pettifer & Son, Stephen, Creedwell, near Malmesbury, England. Veterinary medicines and preparations	21,451	July 12	60	294
Pettifer & Son, Stephen, Crudwell, near Malmesbury, England. Veterinary medicines and preparations	21,586	Aug. 9	60	891
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	21,166	May 24	59	1254
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	21,235	May 31	59	1428
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	21,216	May 31	59	1428
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	21,231	May 31	59	1429
Pettijohn California Breakfast Food Company, Minneapolis, Minn. Rolled wheat	21,232	May 31	59	1429
Phelps, Dodge & Co., New York, N. Y. Tin and other metal plates	20,956	Apr. 12	59	294
Philadelphia Hardware and Malleable Iron Works, Philadelphia, Pa. Steam and hot-water radiators	21,966	Nov. 8	61	884
Picha & Cie., T., Ghent, Belgium. Portland cement	21,385	June 28	59	2069
Pidgeon, Albert J., Kansas City, Mo. Remedy for acute and chronic inflammation	22,174	Dec. 13	61	1653
Pings & Pinner, New York, N. Y. Kid and other gloves	21,028	Apr. 26	59	626
Pings & Pinner, New York, N. Y. Kid and other gloves	21,037	Apr. 26	59	627
Pings & Pinner, New York, N. Y. Kid and other gloves	21,038	Apr. 26	59	627
Pings & Pinner, New York, N. Y. Kid and other gloves	21,039	Apr. 26	59	627
Pings & Pinner, New York, N. Y. Kid and other gloves	21,040	Apr. 26	59	627
Pings & Pinner, New York, N. Y. Kid and other gloves	21,041	Apr. 26	59	627
Pings & Pinner, New York, N. Y. Kid and other gloves	21,211	May 31	59	1427
Pings & Pinner, New York, N. Y. Kid and other gloves	21,212	May 31	59	1427
Pinney, Ida S., Omaha, Nebr. Complexion-bleach	20,560	Jan. 5	58	2
Piowaty, Max, St. Paul, Hutchinson, and Glencoe, Minn. Poultry and eggs	21,822	Oct. 4	61	148
Piowaty, Max, St. Paul, Hutchinson, and Glencoe, Minn. Dairy products	22,085	Nov. 29	61	1311
Place & Co., E. G., Boston, Mass. Finished leather	21,381	June 28	59	2069
Planten, John R., New York, N. Y. Capsules filled with medicine	22,040	Nov. 22	61	1163
Planten, John R., New York, N. Y. Capsules for medicine	22,045	Nov. 22	61	1164
Planten, John R., New York, N. Y. Capsules for medicine	22,046	Nov. 22	61	1164
Plasterer, Purl C., Fort Wayne, Ind. Silver-polish	21,947	Nov. 8	61	882
Plant & Isaac, Cincinnati, Ohio. Men's overalls, pantaloons, suspenders, shirts, scarfs, collars, and cuffs	21,503	July 19	60	436
Plumb, Frank, Saginaw, Mich. Composition tablets for female complaints	21,375	June 28	59	2068
Plumb, Sanford C., New York, N. Y. Antiseptics	21,452	July 12	60	294
Plume & Atwood Manufacturing Company, Waterbury, Conn., and New York, N. Y. Straight pins	21,888	Oct. 25	61	562
Pomeroy, Theodore L., Pittsfield, Mass. Gray cloth	20,847	Oct. 15	58	1420
Pomeroy & Van Dusen, Westfield, Mass. Whips	21,844	Oct. 4	61	150
Ponsot, Auguste, Paris, France. Disinfecting-paper	21,635	Aug. 16	60	1048
Pool, Richard N., New York, N. Y. Certain named remedies	20,559	Jan. 5	58	2
Posley & Vivó, Philadelphia, Pa. Bottled lager-beer, porter, and ale	20,762	Feb. 9	58	658
Popkin & Co., A., New York, N. Y. Ladies' and misses' cloaks and suits	21,756	Sept. 20	60	1747
Port Huron Engine and Thresher Company, Port Huron, Mich. Thrashing, stacking, and weighing machine, and a steam-engine	21,991	Nov. 15	61	1013
Porter & Co., Robert, London, England. Malt liquors	21,325	June 21	59	1915
Porter, Joseph E., Ottawa, Ill. Hay-carriers	22,055	Nov. 22	61	1164
Porter, Thomas W., Denver, Colo. Certain mineral-spring water	20,699	Feb. 9	58	658

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Porterdale Mills, Porterdale, near Covington, Ga. Cotton rope, cordage, and twine	21,740	Sept. 13	60	1607
Potter Parlin Company, Cincinnati, Ohio, and New York, N. Y. Baking-powder	21,580	Aug. 9	60	891
Powell & Gilbert, Amsterdam, N. Y. Liniments or lotions for external and internal use for man and animals	21,512	July 26	60	572
Powers, Edward S., Brockton, Mass. Remedy for rheumatism	22,175	Dec. 13	61	1653
Pratt Food Company, Philadelphia, Pa. Prepared food for animals	21,632	Aug. 16	60	1048
Pratt Food Company, Philadelphia, Pa. Prepared food for poultry	21,633	Aug. 16	60	1048
Pratt Food Company, Philadelphia, Pa. Prepared poultry-food	21,634	Aug. 16	60	1048
Price, C. H. & J., Salem, Mass. Medicated toilet preparation for the skin	22,111	Dec. 6	61	1475
Price, Henry O., Cleveland, Ohio. Prepared medicine for rheumatism, gout, and lumbago	21,995	Nov. 15	61	1014
Price & Walters, Buffalo, N. Y. Waterproof liquid blacking for shoes	22,023	Nov. 22	61	1162
Prinz, Heinrich, Freien Steinau, Germany. Cheese	22,210	Dec. 20	61	1782
Prouty & Co., Isaac, Spencer and Boston, Mass. Boots and shoes	21,394	June 28	59	2070
Pugh, Charles H., Birmingham, England. Bicycles, tricycles, and other velocipedes and parts of the same	20,839	Mar. 15	58	1420
Purdy, Elisha H., Allegheny, Pa. Internal and external remedies for skin diseases and catarrhal affections	20,652	Jan. 26	58	390
Purinton Medicine Co., Detroit, Mich. Remedy for rheumatism	21,549	Aug. 2	60	733
Pyn-ka Syndicate, Limited, Liverpool, England. Polishing paste, powder, and cloths and soaps for metals, and jewelers' soaps	20,674	Feb. 2	58	526
Pyrolith Company, Jersey City, N. J., and New York, N. Y. Artificial stone and its compositions	21,579	Aug. 9	60	890
Quadrant Cycle Co., Birmingham, England. Bicycles and tricycles	21,066	May 3	59	785
Quesnel, Camille. (See Brown and Quesnel.)				
Quirye Company, Chicago, Ill. Medicated beverages or tonics	22,172	Dec. 13	61	1653
Quirye Company, Chicago, Ill. Medicated beverages or tonics	22,256	Dec. 27	61	1945
R. H. Horne Produce Company of Indiana, Union City, Ind. Eggs	21,016	Apr. 19	59	462
Racicot, F. & D., Sherbrooke, Canada. Certain named medicinal remedies	21,406	July 5	60	154
Ransom & Randolph, Toledo, Ohio. Razors	21,077	May 3	59	786
Rawson, William M., Jamaica Plain, Mass. Remedy for indigestion	20,729	Feb. 16	58	810
Raymond, Charles A., Boston, Mass., and New York, N. Y. Boots and shoes of all kinds	21,636	Aug. 16	60	1048
Raymond & Co., Brooklyn, N. Y. Medicated plasters	21,173	May 24	59	1254
Raymond, Jean M., Paris, France. Disinfectant	22,044	Nov. 22	61	1164
Read, Samuel H., New Haven, Conn. Substitute for lard	21,769	Sept. 20	60	1748
Reade Manufacturing Co., Chicago, Ill. Laundry soap	21,749	Sept. 13	60	1608
Reade Manufacturing Co., Chicago, Ill. Laundry soap	21,813	Oct. 4	61	147
Reading Hardware Company, Reading, Pa. Builders' hardware, including locks and latches	22,000	Nov. 15	61	1014
Reckitt & Sons, Limited, Hull and London, England, and New York, N. Y. Laundry-blue	20,641	Jan. 26	58	390
Red Wolf, (Oh-Kow-Ri-Ho,) La Valle, Wis. Blood-cleanser and an oil	20,591	Jan. 12	58	148
Reddaway & Co., F., Manchester, England, and New York, N. Y. Woven machine-belt	21,346	June 21	59	1917
Reddaway & Co., F., Manchester, England, and New York, N. Y. Fire-hose	21,356	June 28	59	2069
Reddaway & Co., F., Manchester, England, and New York, N. Y. Machine-belt	21,538	Aug. 2	60	732
Reed & Carnrick, New York, N. Y. Toilet soap	20,812	Mar. 8	58	1262
Read Holiday & Sons, Limited, New York, N. Y. Wool-coloring matter	21,105	May 10	59	938
Reliance Manufacturing Company, New York, N. Y. Clothes-cleaning preparations	22,205	Dec. 20	61	1787
Reliance Manufacturing Company, New York, N. Y. Shoe-black	22,207	Dec. 20	61	1787
Renaud & Niederstadt, New York, N. Y. Whisky	21,662	Aug. 23	60	1186
Renaud & Niederstadt, New York, N. Y. Whisky	21,663	Aug. 23	60	1186
Rennous, Kleinle & Co., Baltimore, Md. Paint-brushes	20,589	Jan. 12	58	148
Rennous, Kleinle & Co., Baltimore, Md. Paint-brushes	20,590	Jan. 12	58	148
Renz & Henry, Louisville, Ky. Stomach bitters and a compound of sarsaparilla and potash	21,263	June 7	59	1603
Renz & Henry, Louisville, Ky. Specific for gout, rheumatism, and kindred diseases	21,707	Aug. 30	60	1324
Revere Rubber Company, Boston, Mass. Rubber belting, hose, and packing	20,848	Mar. 15	58	1420
Rice & Hutchins, Boston, Mass. Boots, shoes, and slippers	20,580	Jan. 12	58	148
Rice & Hutchins, Boston, Mass. Boots, shoes, and slippers	20,581	Jan. 12	58	148
Rice & Hutchins, Boston, Mass. Boots and shoes and leather for the uppers of boots and shoes	20,962	Apr. 12	59	294
Rice & Hutchins, Boston, Mass. Boots and shoes and leather for the same	21,562	Aug. 2	60	734
Rich Grain Distillery Company, Louisville, Ky. Whisky	20,606	Jan. 12	58	148
Rich & Manheimer, New York, N. Y. Cologne	21,407	July 5	60	154
Richards & Co., R., Allegan, Mich. Remedies for diseases of the stomach, blood, liver, and kidneys, and nervous affections, and general debility	22,119	Dec. 6	61	1476
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes for garments	20,923	Apr. 5	59	154
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes	20,994	Apr. 19	59	460
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes	20,995	Apr. 19	59	460
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes	20,996	Apr. 19	59	460
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes	21,076	May 3	59	786
Richardson & De Long Bros., Philadelphia, Pa. Hooks and eyes	21,587	Aug. 9	60	891
Richter, Robert, Philadelphia, Pa. Filling or cement for teeth	22,260	Dec. 27	61	1946
Rieglès et Cie., E. de Lyons and Paris, France. Mint-alcohol	21,900	Nov. 1	61	719
Ridley, George W., Danville, Ill. Remedies for diseases of the stomach, blood, liver, and kidneys	22,118	Dec. 6	61	1476
Riedel, Max, New York, N. Y. All-wood henriettes	21,865	Oct. 11	61	284
Riefflin, George T., Mount Vernon, N. Y. Perspiration-powders	21,079	May 3	59	786
Rieger, Firm of William, Frankfurt-on-the-Main, Germany. Cosmetics, lotions, perfumery, cream, and soap	22,062	Nov. 29	61	1309
Robert Smith India Pale Ale Brewing Company, Philadelphia, Pa. Ale and stout	20,607	Jan. 12	58	148
Robert Smith India Pale Ale Brewing Company, Philadelphia, Pa. Ale and stout	21,043	Apr. 26	59	627
Robertson, Thomas S., New York, N. Y. Medicine for the cure of the alcohol habit	21,239	May 31	59	1430
Robins, William B., Cincinnati, Ohio. Lamps and burners	22,049	Nov. 22	61	1164
Robinson, James S., Memphis, Tenn. Medicinal preparation for diseases of the liver, stomach, or bowels	22,266	Dec. 27	61	1946
Robyn Bros., St. Louis and St. Charles county, Mo. Apples	20,914	Mar. 29	58	1698
Rockey, Walter S., New York, N. Y. Internal and external remedies for coughs, colds, cramps, bruises, and sprains	21,993	Nov. 15	61	1013
Rockwood Brothers, Chicago, Ill. Canned fruits, vegetables, fish, and meats, catsup, pickles, sauces, and olives	21,091	May 10	59	936
Rockwood Brothers, Chicago, Ill. Canned fruits, vegetables, fish, and meats, and bottled catsups, sauces, pickles, and olives	21,092	May 10	59	937
Roessler & Hasslacher Chemical Company, New York, N. Y. Liquid preparation for gilding	20,797	Mar. 1	58	1098
Rogers, Samuel C., and J. S. Pearson, Buffalo, N. Y. Mineral waters and other non-alcoholic drinks	21,318	June 21	59	1914
Rohe & Brother, New York, N. Y. Lard	20,889	Mar. 22	58	1562
Roof, Clarence M., New York, N. Y. Whisky	21,467	July 19	60	433
Rose Bros., Camden, Me. Phosphated beverage	21,687	Aug. 23	60	1188
Rosenfeld & Co., E., Baltimore, Md. Night-lobes	21,359	June 28	59	2067
Rosenthal, Lewis, New York, N. Y. Weekly periodicals	21,928	Nov. 1	61	720
Rosenzweig & Baumann, Cassel, Germany. Paint for application to metallic surfaces	20,876	Mar. 22	58	1562

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Ross, John K., New York, N. Y. Ladies' corsets or stays	20,774	Feb. 23	58	952
Rothschild, Hugo, New York, N. Y. Gloves	20,751	Feb. 23	58	952
Rowbotham, John, Merchantville, N. J. Compounds for destroying insects and other pests, for disinfecting purposes, for curing diseases, and healing wounds	22,039	Nov. 22	61	1163
Rowell, George P., New York, N. Y. Medicated tablets	20,620	Jan. 19	58	290
Rowland, Hattie A., Chicago, Ill. Hay-fever and catarrh remedy	20,653	Jan. 26	58	390
Royal Medicine Company, Peru, Ind. Cure for nervous diseases and the liquor habit	21,797	Sept. 27	60	1882
Royal Phosphoric Coffee Co., North Bloomfield, Ohio. Coffee	22,241	Dec. 27	61	1944
Rubber Paint Company, Chicago, Ill. Chewing-gum	21,874	Oct. 18	61	421
Ruß Brewing Company, Quincy, Ill. Lager-beer	22,170	Dec. 13	61	1653
Ruge & Sons, Herman, Apalachicola, Fla. Fish, oysters, and other shell-fish packed in tin and glass	21,863	Oct. 11	61	283
Ruhl, Andrew W., Baltimore, Md. Baking-powder	22,027	Nov. 22	61	1162
Ruhl, Andrew W., Baltimore, Md. Baking-powder	22,028	Nov. 22	61	1163
Ruhl, Andrew W., Baltimore, Md. Baking-powder	22,165	Dec. 13	61	1652
Ruppel, Emma C. (See Lemcke and Ruppel.)				
Russo, Joseph A., Oswego, N. Y. Liquid solution for curing dandruff	20,824	Mar. 8	58	1262
Rutan & Co., C. B., New York, N. Y. Hats and caps	20,540	Jan. 5	58	2
Ryan, Charles, Springfield, Ill. Preparation for healing wounds, chaps, or other excoriations by external application	21,181	May 24	59	1255
Ryan & Richardson, Leavenworth, Kans. Vegetables and green and dried fruits	21,563	Aug. 2	60	734
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,213	Dec. 20	61	1787
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,214	Dec. 20	61	1788
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,215	Dec. 20	61	1788
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,216	Dec. 20	61	1788
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,217	Dec. 20	61	1788
S. C. Herbst Importing Company, Milwaukee, Wis. Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco	22,218	Dec. 20	61	1788
S. H. Childs Company, Rochester, N. Y. Cookies, wafers, and similar articles, such as cakes and crackers	21,564	Aug. 2	60	734
Sadler & Co., P. H., Attleborough, Mass. Artificial gems	21,759	Sept. 20	60	1747
Safety Car Heating and Lighting Company, New York, N. Y. Lamps	20,678	Feb. 2	58	526
Sagar, Charles H., Auburn, N. Y. Neuralgic remedies	20,941	Apr. 5	59	155
Salbey, Eugene, Milwaukee, Wis. Tonics	21,644	Aug. 16	60	1049
Saltonia Pharmaceutical Company, St. Louis, Mo. Medicine for internal use for dyspepsia, nausea, and all derangements of the enteric and urinary systems	21,528	July 26	60	573
Samson Cordage Works, Boston, Mass. Cords, lines, twines, and ropes	21,938	Nov. 8	61	881
Samuel Fox & Company, Limited, Sheffield, England. Umbrellas and parts thereof	21,643	Aug. 16	60	1049
Sanford Spinning Company, Fall River, Mass. Cotton yarn	21,745	Sept. 13	60	1608
Sassafras Eye Lotion Co., Manch Chunk, Pa. Eye lotion	20,890	Mar. 22	58	1562
Sawyer, John B. and M. L. Moore, Memphis, Tenn. Antiseptic for the prevention of gonorrhea, syphilis, and all contagious venereal diseases	21,065	May 3	59	785
Schaefer & Co., Cleveland, Ohio. Vegetable oil used as a remedy for rheumatism or pains in the back and limbs	20,958	Apr. 12	59	294
Scheirer, Franklin B., Philadelphia, Pa. Salves, ointments, or liniments, and cough mixture	20,924	Apr. 5	59	154
Scheirer, Franklin B., Philadelphia, Pa. Salves, ointments, or liniments, and cough mixture	21,080	May 3	59	786
Schering & Glatz, New York, N. Y. Chemical products derived from sugar	21,864	Oct. 11	61	284
Schering & Glatz, New York, N. Y. Antiseptics and disinfectants	22,265	Dec. 27	61	1946
Schieren & Co., Charles E., New York, N. Y. Leather belting for machinery	20,915	Mar. 20	58	1698
Schilling & Co., C. S., San Francisco, Cal. California wines and liquors	20,835	Mar. 15	58	1420
Schindele, Abraham. (See Davis and Schindele.)				
Schloss & Co., N. J., New York, N. Y., and Chicago, Ill. Waistbands for trousers	20,677	Feb. 2	58	526
Schmidt & Sons, C., Philadelphia, Pa. Lager-beer	22,078	Nov. 29	61	1310
Schmidt & Sons, C., Philadelphia, Pa. Lager-beer	22,079	Nov. 29	61	1310
Schmnetzen, John, Rapid City, S. D. Natural mineral water	21,741	Sept. 13	60	1607
Schott Brothers, Providence, R. I. Medallions to be secured to pins or shanks or suspending rings	20,752	Feb. 23	58	952
Schuch & Co., John, Cincinnati, Ohio. Preparation for the prevention of diseases caused by infectious air	22,173	Dec. 13	61	1653
Schultz, Robert A., Oak Park, Ill. Polish for wood, glass, and metal	21,007	Apr. 19	59	461
Schwarz, Arthur, New York, N. Y. Photographic paper	21,409	July 5	60	155
Schwarz, Arthur, New York, N. Y. Photographic paper, plates, and chemicals	21,572	Aug. 9	60	890
Schwarzschild & Sulzberger, New York, N. Y. Fresh, cured, and salt meats, sausages, bolognas, and food products in which meat is the principal ingredient	21,005	Apr. 19	59	461
Schweinburg, Emil, New York, N. Y. Corsets	21,006	Apr. 19	59	461
Schweinburg, Emil, New York, N. Y. Corsets	21,349	June 21	59	1917
Schweinburg, Emil, New York, N. Y. Corsets	21,350	June 21	59	1917
Schweinburg, Emil, New York, N. Y. Corsets	21,934	Nov. 8	61	881
Schweinburg, Emil, New York, N. Y. Corsets	22,186	Dec. 20	61	1775
Scoffield, Shurmer & Teagle, Cleveland, Ohio. Illuminating-oil	20,840	Mar. 15	58	1420
Scott & Co., James B., Pittsburg, Pa. Tin andterne plates	20,877	Mar. 22	58	1562
Scott, Eliza L., London, England. Medicine for dogs and other animals	21,997	Nov. 15	61	1014
Scott Force Hat Company, St. Louis, Mo. Hats	20,597	Jan. 12	58	148
Scott, Maria, San Diego, Cal. Remedy for throat diseases	21,488	July 19	60	435
Searle, Herman S., Tacoma, Wash. Remedy for rheumatism	21,616	Aug. 16	60	1047
Seeley Francis W. (See Monteith, Seeley, and Knapp.)				
Seeman Brothers, New York, N. Y. Canned vegetables and fish	20,942	Apr. 5	59	155
Senn & Ackermann, Louisville, Ky. Lager-beer	21,951	Nov. 8	61	882
Septicide Manufacturing Company, Milwaukee, Wis. Antiseptic and disinfecting compounds	20,713	Feb. 16	58	810
Sercombe-Bolte Manufacturing Company, Milwaukee, Wis. Bicycles	21,014	Apr. 19	59	461
Sercombe, Parker H., Milwaukee, Wis. Bicycles, bicycle-tires, and sundries	20,588	Jan. 12	58	148
Sessler, Arnold, New York, N. Y. Overgaiters and leggings	21,936	Nov. 8	61	881
Sharples, Philip M., West Chester, Pa. Centrifugal creamers	22,149	Dec. 6	61	1478
Sharpless Bros., Philadelphia, Pa. Corded cotton fabrics	21,531	July 26	60	573
Sharpless & Carpenter, Philadelphia, Pa. Ground-bone fertilizers	20,932	Apr. 5	59	155
Shaw & Co., Boston, Mass. Calf-skins	20,720	Feb. 16	58	810
Shaw, John E., Philadelphia, Pa. Atomizers	20,667	Feb. 2	58	526
Shaw Leather Company, Boston, Mass. Calf-skins, goat-skins, sole-leather, and sheep-skins	21,974	Nov. 15	61	1012
Sheffield Velocipede Car Company, Three Rivers, Mich. Tramway-trucks	21,057	Apr. 26	59	628
Sherwin, Willard W., Kansas City, Mo. Brick	20,711	Feb. 9	58	658

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Shull, William A., Philadelphia, Pa. Razor-strops	21,073	May 3	59	786
Shurly & Dietrich, Galt, Canada. Saws	21,688	Aug. 23	60	1188
Shurly & Dietrich, Galt, Canada. Saws	21,689	Aug. 23	60	1188
Sibbey, Lindsay & Curr, Rochester, N. Y. Hosiery	21,567	Aug. 2	60	731
Siebenborn, Henry A. D., New York, N. Y. Insecticide	21,212	May 31	59	1428
Siegel, Cooper & Company, Chicago, Ill. Pianos	22,176	Dec. 13	61	1654
Sierra Lumber Company, San Francisco, Cal. Sugar-pine doors	21,305	June 14	59	1760
Sigsbee, Luther P., Ayer, Mass. Supporter for ladies' underwear	21,674	Aug. 23	60	1187
Silver, John S., New York, N. Y. Saponaceous compound for cleansing carpets and for laundry purposes	22,162	Dec. 13	61	1652
Silver Lake Company, Newton and Boston, Mass. Cords, lines, twines, and ropes	21,347	June 21	59	1917
Silver Lake Company, Newton and Boston, Mass. Cords, lines, twines, and ropes	21,348	June 21	59	1917
Silver State Cigar Company, Denver, Colo. Cigars	21,890	Oct. 25	61	562
Simms & Co., James, Philadelphia, Pa. Rye whisky	21,167	May 24	59	1254
Simms, Robert W., Jacksonville, Fla. Brewed-malt beverage	20,681	Feb. 9	58	658
Singer & Wheeler, Peoria, Ill. Ale	21,710	Aug. 30	60	1324
Sir Titus Salt, Bart., Sons & Company, Limited, Saltaire, England, and Bridgeport, Conn. Plushes	21,396	June 28	59	2070
Sir Titus Salt, Bart., Sons & Company, Limited, Saltaire, England, and Bridgeport, Conn. Silk plush	21,453	July 12	60	294
Slaughter, Charles, and D. D. Murray, Duluth, Minn. Specific for nerve exhaustion	20,964	Apr. 12	59	295
Smalley, Albert G., Boston, Mass. Bottles	22,156	Dec. 13	61	1651
Smadley, John, Lea Mills, near Derby, England. Hosiery	20,906	Mar. 29	58	1698
Smith Bros., Boston, Mass. Boots and shoes	21,815	Oct. 4	61	147
Smith Brothers, Poughkeepsie, N. Y. Confectionery for coughs and colds	20,907	Mar. 29	58	1698
Smith, Elin R., Ipswich, Mass. Analgesic preparations	21,715	Aug. 30	60	1324
Smith, Elizabeth J., Providence, R. I. Monthly serial or family paper	21,468	July 19	60	433
Smith, Freeborn G., New York, N. Y., Jersey City, N. J., Washington, D. C., Saratoga Springs, N. Y., Chicago, Ill., Brooklyn, N. Y., Philadelphia, Pa., and Kansas City, Mo. Pianos	21,895	Oct. 25	61	562
Smith, Freeborn G., New York, N. Y., Jersey City, N. J., Washington, D. C., Saratoga Springs, N. Y., Chicago, Ill., Brooklyn, N. Y., Philadelphia, Pa., and Kansas City, Mo. Pianos	22,048	Nov. 22	61	1164
Smith, Lem A., New York, N. Y. Scalp-wash	21,654	Aug. 23	60	1185
Smith, Millard F., Cleveland, Ohio. Laundry soap and washing-powder	22,064	Nov. 29	61	1309
Smith, Orrin P., Auburn, Nebr. Catarrh remedies	21,589	Aug. 9	60	891
Smith & Wesson, Springfield, Mass. Revolving firearms	20,627	Jan. 19	58	280
Smith Wheel Manufacturing Co., Washington, D. C., and New York, N. Y. Bicycles	20,893	Mar. 22	58	1562
Smith, William L., Memphis, Tenn. Electrical appliance for body-wear	20,796	Mar. 1	58	1098
Snell & Makepeace, Theresa, N. Y. Wheat-flour	21,750	Sept. 13	60	1608
Sobrinho & Co., Ferraz, Rio Janeiro, Brazil, and New York, N. Y. Lard	22,030	Nov. 22	61	1163
Sobrinho & Co., Ferraz, Rio Janeiro, Brazil, and New York, N. Y. Lard	22,031	Nov. 22	61	1163
Solid Oak Shoe Co., Worcester, Mass. Leather boots and shoes	21,645	Aug. 16	60	1049
South Bend Iron Works, South Bend, Ind. Plows	22,073	Nov. 29	61	1310
Southall Bros. & Barclay, Birmingham, England. Violet toilet powder	20,629	Jan. 19	58	280
Southall Bros. & Barclay, Birmingham, England. Combination-suspenders for female use	20,730	Feb. 16	58	810
Southall Bros. & Barclay, Birmingham, England. Sanitary towels	20,803	Mar. 1	58	1098
Southall Bros. & Barclay, Birmingham, England. Cod-liver oil and preparations of cod-liver oil	21,106	May 10	59	938
Southall Bros. & Barclay, Birmingham, England. Cod-liver oil and preparations of cod-liver oil	21,107	May 10	59	938
Southall Bros. & Barclay, Birmingham, England. Cod-liver oil and preparations of cod-liver oil	21,108	May 10	59	938
Southworth, Horace C., Leonardsville, N. Y. Remedy for diseases of the blood and kidneys	21,433	July 12	60	293
Souvenir Manufacturing Co., Providence, R. I. Toilet soap	21,058	Apr. 26	59	628
Sovereign, George E., Pottersville, N. J. Parlor games	21,555	Aug. 2	60	734
Spencer, Richard M., Duluth, Minn. Cement	21,494	July 19	60	435
Spielmann & Co., New York, N. Y. Swiss ribbed underwear	21,278	June 7	59	1604
Spittler, John, and W. Drexler, Paterson, N. J. Salve for eye diseases	22,197	Dec. 20	61	1786
Spring Curry Comb Company, South Bend, Ind. Spring currycombs	21,969	Nov. 8	61	884
St. Charles Evaporated Cream Company, St. Charles, Ill. Canned, sweetened, and evaporated cream	20,719	Feb. 16	58	810
St. Hilaire, Emma J., Hartford, Conn. Remedies for the relief of diseases affecting the mucous membrane of the throat, head, and lungs	21,410	July 5	60	155
St. Leon Mineral Water Company, Limited, Toronto, Canada. Mineral water	21,693	Aug. 30	60	1323
Standard Car Coupling Company, Troy and New York, N. Y. Car-couplings	20,710	Feb. 9	58	658
Standard Construction Co., Columbus, Ohio. Street-paving blocks	20,878	Mar. 22	58	1562
Stanton Manufacturing Company, Portland, Me., and Philadelphia, Pa. Hard soap	21,376	June 28	59	2068
Stapenhorst, Jacob, New York, N. Y. Zwieback, (a twice-baked bread)	22,029	Nov. 22	61	1163
Stearns Manufacturing Company, Erie, Pa. Stationary steam-engines	21,256	June 7	59	1602
Stein & Co., Bernhard, Chicago, Ill. Books, magazines, and periodicals	22,229	Dec. 27	61	1943
Steinhart, Heidelberg & Co., New York, N. Y. Outside garments worn by men and boys	22,091	Nov. 29	61	1311
Steinhart, Philip Los Angeles, Cal. Laxative	21,615	Aug. 16	60	1047
Stephen Ballard Rubber Co., New York, N. Y. Rubber belting	20,855	Mar. 22	58	1562
Stericker, Richard P., Springfield, Ill. Medicated lotions and eye-waters	21,775	Sept. 20	60	1748
Stern Bros. & Co., New York, N. Y. Thimbles	21,408	July 5	60	154
Sternbergh & Son, J. H., Reading, Pa. Bolts, nuts, rivets, and screws	22,177	Dec. 13	61	1654
Stevens, Junius M., Brooklyn, N. Y. Antiseptics	20,963	Apr. 12	59	294
Stewart, Estate of Daniel, Indianapolis, Ind. Triple extracts	21,148	May 17	59	1102
Stewart, Estate of Daniel, Indianapolis, Ind. Triple extracts	21,149	May 17	59	1102
Stewart, Henry C., Cincinnati, Ohio. Cleaning and disinfecting soap	21,546	Aug. 2	60	733
Stillson, George C., South Norwalk, Conn. Tonic	20,785	Mar. 1	58	1098
Stimson, Fred. T., Ann Arbor, Mich. Graham flour	21,826	Oct. 18	61	422
Stinson, George, Philadelphia, Pa. Irish whisky	21,246	May 31	59	1430
Stokes, William H., Watertown, S. D. Wheat-flour	21,817	Oct. 4	61	147
Stokes, William H., Watertown, S. D. Wheat-flour	21,818	Oct. 4	61	148
Stokes, William H., Watertown, S. D. Wheat-flour	21,875	Oct. 18	61	421
Stone Hill Wine Co., Hermann, Mo. Wines	20,747	Feb. 23	58	952
Story, George H., New York, N. Y. Picture-varnish	21,588	Aug. 9	60	891
Strasburger & Co., Byron L., New York, N. Y. Watches, watchcases, and movements	20,806	Mar. 1	58	1098
Strassheim & Jaeger, Chicago, Ill. Sugar, sirup, and molasses	21,139	May 17	59	1101
Strassheim & Jaeger, Chicago, Ill. Canned vegetables and fruits	21,174	May 24	59	1254
Strassheim & Jaeger, Chicago, Ill. Flour, cereals, and farinaceous goods in barrels, kegs, and sacks	21,175	May 24	59	1255
Strassheim & Jaeger, Chicago, Ill. Plug-tobacco, cigars, and cigarettes	21,219	May 31	59	1428
Strassheim & Jaeger, Chicago, Ill. Hollow and other wooden ware for household use, and for buckets, tubs, and receptacles or work made by coopers	21,220	May 31	59	1428
Strauss, Theodore L., Baltimore, Md. Foam-promoting compound for malt liquors	20,658	Jan. 26	58	390
Strauss, Theodore L., Baltimore, Md. Foam-promoting compound for malt liquors	20,659	Jan. 26	58	390
Strong, William T., London, Canada. Remedy for the piles	21,814	Oct. 4	61	147
Stuart, Peter, London, England, and Philadelphia, Pa. Artificial stone pavements, paving-blocks, copings, and analogous structures	21,015	Apr. 19	59	461

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Saltan Drug Company, St. Louis, Mo. Remedies for fevers and headaches	20,879	Mar. 22	58	1562
Sussfeld, Lorsch & Co., New York, N. Y. Watch-springs	20,738	Feb. 16	58	810
Sutherland & Edwards, Paterson, N. J. Twine	20,714	Feb. 16	58	810
Sutton, Lewis B., New Canaan, Conn. Compound for removing grease-spots and stains from fabrics, wood, glass, or marble	21,123	May 17	59	1101
Swift and Company, Chicago, Ill. Smoked hams, shoulders, and bacon	21,487	July 19	60	435
Swiss Medicine Co., San Francisco, Cal. Remedy for the cure of rheumatism	21,424	July 5	60	156
Sylvan Remedy Co., Peoria, Ill. Medicated gum drops	22,192	Dec. 20	61	1786
Sylvan Toilet Co., Port Huron, Mich. Oil for toilet and medicinal use by external application	21,152	May 17	59	1102
Sylvan Toilet Co., Port Huron, Mich. Lotion for the complexion	21,617	Aug. 16	60	1047
Sylvan Toilet Co., Port Huron, Mich. Toilet soap	21,618	Aug. 16	60	1047
Syndicate Trading Company, New York, N. Y. Ladies' French corsets	21,816	Oct. 4	61	147
Tahl, Frederick J., Chicago, Ill. Key-rings	20,868	Mar. 22	58	1562
Taylor, Charlotte E., New York, N. Y., Chicago, Ill., Boston, Mass., and Philadelphia, Pa. Hats and bonnets for ladies, misses, and young boys, and trimmings therefor	22,090	Nov. 29	61	1311
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, sheet metal, sheet-iron, or sheet-steel	20,542	Jan. 5	58	2
Taylor Co., N. & G., Philadelphia, Pa. Roofing-tin	20,563	Jan. 5	58	2
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, sheet metal, sheet-iron, or sheet-steel	20,564	Jan. 5	58	2
Taylor Co., N. & G., Philadelphia, Pa. Tin and terne plate and coated and uncoated sheet metal	21,285	June 14	59	1758
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, and sheet metal, coated and uncoated	21,876	Oct. 18	61	421
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate and sheet metal, coated and uncoated	21,877	Oct. 18	61	421
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, and sheet metal, coated and uncoated	22,145	Dec. 6	61	1478
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, and sheet metal, coated and uncoated	22,146	Dec. 6	61	1478
Taylor Co., N. & G., Philadelphia, Pa. Tin-plate, terne-plate, and sheet metal coated with tin	22,238	Dec. 27	61	1944
Taylor, Herbert J., New York, N. Y., and Chicago, Ill. Hats and bonnets for ladies, misses, and young boys, and trimmings therefor	22,013	Nov. 22	61	1161
Taylor, Horace B., Philadelphia, Pa. Furniture varnish or polish	22,137	Dec. 6	61	1477
Taylor & Severance, Middleville, Mich. Remedy for dog-distemper	21,597	Aug. 9	60	892
Taylor, Thomas B., Jackson, Mich. Flaked wheat	20,621	Jan. 19	58	280
Taylor, Young & Co., Portland, Oreg. Canned salmon	21,495	July 19	60	435
Taylor, Limited, Liverpool, England. Disinfectants, disinfecting apparatus, and vessels containing disinfectants	20,598	Jan. 12	58	148
Thaddens Davids Company, New York, N. Y. Compositions applied with a brush in making ornamental cards	21,990	Nov. 15	61	1013
Thatcher, Charles A., Chicago, Ill. Local anæsthetic in liquid form	21,045	Apr. 26	59	628
Thibouville-Lamy, Jérôme, Paris, France. Musical instruments	21,291	June 14	59	1759
Thibouville-Lamy, Jérôme, Paris, France. Musical instruments	21,292	June 14	59	1759
Thomas & Co., James L., Exeter, England. Refined petroleum	20,703	Feb. 9	58	658
Thomas, Edwin R. W., Clarksville, Tenn. Smoking and chewing tobacco	21,360	June 28	59	2067
Thomas, Edwin R. W., Clarksville, Tenn. Smoking and chewing tobacco	21,361	June 28	59	2067
Thomas, Seth E., New York, N. Y. Time-keeping and time-recording instruments	21,684	Aug. 23	60	1187
Thompson, Amund G., Chicago, Ill. Phosphated extract of wild cherry	21,390	June 28	59	2069
Thompson & Co., Lucas, New York, N. Y. Linen goods	22,088	Nov. 29	61	1311
Thompson, James, Chicago, Ill. Remedies for gonorrhea, gleet, and similar diseases	21,074	May 3	59	786
Thomson-Houston Electric Company, Boston, Mass. Rubber or like insulating tape for wrapping electric conductors	20,866	Mar. 22	58	1562
Thomson-Houston Electric Company, Boston, Mass. Insulating-oil for filling the casings of electric transformers	20,867	Mar. 22	58	1562
Thomson & Taylor Spice Company, Chicago, Ill. Roasted coffee	20,807	Mar. 1	58	1098
Thomson & Taylor Spice Company, Chicago, Ill. Baking-powder	20,900	Mar. 29	58	1698
Thomson & Taylor Spice Company, Chicago, Ill. Flavoring extracts for food	20,917	Mar. 29	58	1698
Thomson & Taylor Spice Company, Chicago, Ill. Ground spices	20,918	Mar. 29	58	1698
Thornton, Frank L., Providence, R. I. Buckwheat, Graham flour, cornmeal, rolled oats, and similar manufactured cereals	21,823	Oct. 4	61	148
Tide Water Oil Company, New York, N. Y. Kerosene or petroleum oil	20,882	Mar. 22	58	1562
Tillson, Davis, Orange Bend, Fla. Oranges	21,824	Oct. 4	61	148
Timms, Walter B., New York, N. Y. Canned fish, fruits, vegetables, soups, and milk	21,804	Sept. 27	60	1882
Tompkins, George A., Cortland, N. Y. Aluminum and its alloys	20,853	Mar. 15	58	1420
Town Topics Publishing Company, New York, N. Y. Society journal	21,694	Aug. 30	60	1323
Traub, Max C., Basle, Switzerland. Inorganic salts	21,326	June 21	59	1915
Treadwell, Charles, St. Paul, Minneapolis, and Duluth, Minn., West Superior and Ashland, Wis. Shoes	21,646	Aug. 16	60	1049
Tremont & Suffolk Mills, Lowell, Mass. Cotton goods, such as sheetings, shirtings, dress goods, and cotton flannels	21,351	June 21	59	1917
Trujillo & Sons, D. L., Key West, Fla., and New York, N. Y. Cigars	20,948	Apr. 5	59	156
Truslow & Co., New York, N. Y. Liquefied carbonic-acid gas	21,848	Oct. 4	61	150
Tucker & Cook Manufacturing Company, Conway and Springfield, Mass. Knitting and mending cotton yarns	21,901	Nov. 1	61	719
Tucker & Moulton, Boston, Mass. Shoes	21,044	Apr. 26	59	627
Turner-Shaker Medicine Co., St. Louis, Mo., and Union Village, Ohio. Certain named line of proprietary medicines	22,194	Dec. 20	61	1786
Udell & Co., S. R., Chicago, Ill. Checse	21,046	Apr. 26	59	628
Ulmer Manufacturing Co., Boston, Mass. Blacking and other dressing for shoes and leather	21,247	May 31	59	1430
Union Bag and Paper Company, Chicago, Ill. Paper bags	21,454	July 12	60	294
Union Hardware Company, Torrington, Conn., and New York, N. Y. Ice racing-skates and racing roller-skates	20,654	Jan. 26	58	390
Union Hardware Company, Torrington, Conn., and New York, N. Y. Ice racing-skates and racing roller-skates	20,660	Jan. 26	58	390
Union Metallic Cartridge Company, Bridgeport, Conn. Paper shot-shells	21,222	May 31	59	1428
Union Metallic Cartridge Company, Bridgeport, Conn. Paper shot-shells	21,341	June 21	59	1916
United Knitting Works Company, Limited, Aarburg, Switzerland. Knit underwear	22,105	Dec. 6	61	1474
United Society of Christian Endeavor, Boston, Mass. Jewelry	21,469	July 19	60	434
United States Postage Stamp Delivery Company, Portland, Me., and Boston, Mass. Frangible boxes containing postage-stamps for delivery by a coin-controlled machine	21,746	Sept. 13	60	1608
United States Postage Stamp Delivery Company, Portland, Me., and Boston, Mass. Frangible boxes containing postage-stamps	21,788	Sept. 27	60	1881
United States Printing Company, Cincinnati, Ohio. Playing-cards	20,965	Apr. 12	59	295
United States Printing Company, Cincinnati, Ohio. Playing-cards	20,966	Apr. 12	59	295

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
United States Printing Company, Cincinnati, Ohio. Playing-cards	21,113	May 10	59	938
United States Printing Company, Cincinnati, Ohio. Playing-cards	21,114	May 10	59	938
United States Printing Company, Cincinnati, Ohio. Playing-cards	21,115	May 10	59	938
United States Printing Company, Cincinnati, Ohio. Playing-cards	21,977	Nov. 15	61	1012
Upshur, Custis P., Astoria, Oreg. Canned and preserved fish	20,795	Mar. 1	58	1098
Upshur, Custis P., Astoria, Oreg. Canned and preserved fish	21,805	Sept. 27	60	1882
Upson Nut Company, Unionville, Conn. Bolts for carriages, machines, plows, &c	20,623	Jan. 19	58	280
Usine J. Clerët, Beauvais, France, and Philadelphia, Pa. Pearl buttons	21,414	July 5	60	155
Van Arsdale, Martha E., Yuba City, Cal. Liquid cough-syrup	22,042	Nov. 22	61	1163
Van Buren, Martin, Philadelphia, Pa. Complexion-cream	21,595	Aug. 9	60	892
Van Camp Packing Company, Indianapolis, Ind. Canned soup	21,752	Sept. 13	60	1608
Van Camp Packing Company, Indianapolis, Ind. Canned tomatoes	21,753	Sept. 13	60	1608
Van Dyk Manufacturing Company, Rutherford, N. J. Face and skin powder	22,019	Nov. 22	61	1162
Van Every, Martin, Buffalo, N. Y. Remedies for diseases of the throat, lungs, and kidneys	21,992	Nov. 15	61	1013
Van Hagg & Co., Frank, Pittsburg, Pa. Root-beer	20,562	Jan. 5	58	2
Van Orden, John M., New York, N. Y. Corsets	21,799	Sept. 27	60	1882
Van Rensselaer, Henry D., Waukesha, Wis. Line of medicines	21,994	Nov. 15	61	1014
Van Vliet, William C., New York, N. Y. Polishing-handkerchiefs for hats	21,342	June 21	59	1916
Vandergrift Manufacturing Company, Jamestown, N. Y. Hand washing-machines	22,053	Nov. 22	61	1164
Vandergrift Manufacturing Company, Jamestown, N. Y. Hand washing-machines	22,054	Nov. 22	61	1164
Vapo-Cresolene Company, Stanley, N. J., and New York, N. Y. Medical compounds for the cure of lung and throat diseases	21,647	Aug. 16	60	1050
Vantier & Fils, St., Carouge, Switzerland. Files, chisels, gouge-chisels, sometimes known as scoopers, and gravers	22,147	Dec. 6	61	1478
Villari, Giuseppe, New York, N. Y. Lemons and oranges	22,209	Dec. 20	61	1787
Vick, Edward C., Newark, N. J. Remedies for diseases of the blood, liver, kidneys, and stomach, and skin diseases	21,377	June 28	59	2068
Vilmorin, Andriex & Co., Paris, France. Electrotypes, stereotypes, and wood-cuts	20,594	Jan. 12	58	148
Vincent, Hathaway & Co., Boston, Mass. Whisky	20,894	Mar. 22	58	1562
Virginia Brewing Company, Roanoke, Va. Lager-beer	21,398	June 28	59	2070
Virginia Chemical and Manufacturing Company, Portsmouth, Va. Baking-powder	22,724	Feb. 16	58	810
Virginia Chemical and Manufacturing Company, Portsmouth, Va. Baking-powders	21,094	May 10	59	937
Volk Hat Company, South Norwalk, Conn. Hats	21,825	Oct. 4	61	148
Volunteer Chicago Beef Co., New York, N. Y. Meats, smoked and unsmoked, and all kinds used for human food	21,690	Aug. 23	60	1188
Von Lengerke & Detmold, New York, N. Y. Paper shot-shells	21,131	May 17	59	1101
Voneff Bros., Baltimore, Md. Whisky	20,715	Feb. 16	58	810
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,438	July 12	60	293
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,439	July 12	60	293
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,440	July 12	60	293
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,441	July 12	60	294
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,603	Aug. 9	60	892
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,675	Aug. 23	60	1187
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	21,980	Nov. 15	61	1012
W. J. Wilcox Lard and Refining Company, Guttenberg, N. J., and New York, N. Y. Lard and its substitutes	22,211	Dec. 20	61	1787
W. S. Reed Toy Company, Leominster, Mass. Toy resembling planchette	20,566	Jan. 5	58	2
W. S. Reed Toy Company, Leominster, Mass. Toy ten-pins	20,805	Mar. 1	58	1098
W. T. Hanson Company, Schenectady, N. Y. Pills	21,652	Aug. 23	60	1185
Wagner & Co., H. D., Grinnell, Iowa. Hair-restorative and dandruff-cure	21,442	July 12	60	294
Wagner, George, Washington, D. C. Skin ointment or cream	22,262	Dec. 27	61	1946
Wallace, Mariette, Syracuse, N. Y. Ointment	20,671	Feb. 2	58	526
Walsmann, William, New York, N. Y. Whisky	21,986	Nov. 15	61	1013
Walter A. Wood Harvester Company, St. Paul and Minneapolis, Minn. Harvesters and harvester-binders	21,153	May 17	59	1102
Walter A. Wood Harvester Company, St. Paul and Minneapolis, Minn. Harvesters and harvester-binders	22,150	Dec. 6	61	1478
Walter, Georg, Appleton, Wis. Lager-beer	22,077	Nov. 29	61	1310
Walter M. Lowney Company, Boston, Mass. Fruit-confections	21,981	Nov. 15	61	1012
Wampole & Co., Henry K., Philadelphia, Pa. Remedy for diseases of the uterine organs and similar ailments	21,233	May 31	59	1429
Ward & Son, James, St. Louis, Mo. Antifriction metal	20,639	Jan. 26	58	390
Ward, William P., New York, N. Y. Cigarettes	21,332	June 21	59	1915
Washburn & Moen Manufacturing Company, Worcester, Mass. Barbed wire	20,716	Feb. 16	58	810
Waterbury, Nathaniel, New York, N. Y. Ammonia-alum	21,574	Aug. 9	60	890
Waterbury, Nathaniel, New York, N. Y. Bicarbonate of soda	21,575	Aug. 9	60	890
Waterbury Watch Company, Waterbury, Conn. Watches	22,070	Nov. 29	61	1309
Watkins, John B., New York, N. Y. Paper for printing and writing purposes	20,969	Apr. 12	59	295
Watson, Peter P. (See Penn. Watson, and Witten.)				
Wayne Knitting Mills, Fort Wayne, Ind. Hosiery	20,993	Apr. 19	59	460
Weber, A. C. & G. F., Albany, N. Y. Sarsaparilla tonics	21,959	Nov. 8	61	883
Wechsler & Abraham, Brooklyn, N. Y. Corsets	20,758	Feb. 23	58	952
Weed, Alvah, Alexis, Ill. Cathartic medicines	20,541	Jan. 5	58	2
Weeks, William H., Hazleton, Pa. Candies	21,743	Sept. 13	60	1608
Weingarten Bros., New York, N. Y. Corsets	20,748	Feb. 23	58	952
Weir & Co., J. D., New York, N. Y. Certain named dry goods	22,015	Nov. 22	61	1162
Weis, Henry, Waterloo, Iowa. Egg carriers and cases, egg-case fillers, and fruit-carriers	21,047	Apr. 26	59	628
Welde & Thomas, Philadelphia, Pa. Beer	21,223	May 31	59	1428
Wellman & Dwire Tobacco Company, Quincy, Ill. Smoking and chewing tobacco	21,952	Nov. 8	61	883
Wellman & Dwire Tobacco Company, Quincy, Ill. Plug smoking, and fine-cut tobacco	22,246	Dec. 27	61	1944
Wenham's Sons, A. J., Cleveland, Ohio. Canned fruits, fish, meats, and vegetables	21,800	Sept. 27	60	1882
Wertheimer & Co., New York, N. Y., and Berlin, Germany. Kid and leather gloves	20,675	Feb. 2	58	526
Wertheimer, Swarts & Co., St. Louis, Mo. Boots and shoes	20,680	Feb. 2	58	526
Western Union Chemical Company, Cleveland, Ohio. Manufactured fertilizers	21,970	Nov. 8	61	884
Westfälisch-Anhaltische Sprengstoff-Act.-Ges., Coswig, Germany. Explosives	22,099	Nov. 29	61	1312
Westinghouse Air Brake Company, Wilmerding, Pa. Air-brake apparatus for railway service	20,849	Mar. 15	58	1420
Wheatley, William A., Baltimore, Md. Raw and processed oysters	22,131	Dec. 6	61	1477

Alphabetical list of registrants of trade-marks—Continued.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Vol.	Page.
Wheeler & Co., Hayden W., New York, N. Y. Watches and jewelry	21,725	Sept. 6	60	1475
Wheelock, William E., New York, N. Y. Pitch-pipes and tuning-forks	20,772	Feb. 23	58	952
Whicher & Co., T. A., Boston, Mass. Boots and shoes	21,838	Oct. 4	61	149
Whitall, Tatum & Co., New York, N. Y. Glass bottles	20,792	Mar. 1	58	1098
White Rock Oil Co., Toledo, Ohio. Hair-restorative consisting of a natural white oil	20,934	Apr. 5	59	155
Whitney, Frank A., Athena, Oreg. Remedy for diseases of women	21,798	Sept. 27	60	1882
Whittier, David L., Indianapolis, Ind. Bicycles	20,883	Mar. 22	58	1562
Whittier, David L., Indianapolis, Ind. Bicycles	20,884	Mar. 22	58	1562
Wiedenmayer, George W., Newark, N. J. Ale and beer	21,695	Aug. 30	60	1323
Wieder, Moses L., St. Louis, Mo. White lead	21,668	Aug. 23	60	1186
Wilbert, Lida, Chicago, Ill. Preparations for the complexion, including soaps, lotions, powder, and cream	22,020	Nov. 22	61	1162
Wilkes-Barré Lace Manufacturing Company, Wilkes-Barré, Pa. Pillow-shams	21,196	May 24	59	1256
Wilkes, Stephen, Bilston, England. Metallic bedsteads and wire mattresses	21,726	Sept. 6	60	1475
Wilkins & Beckner, Greenfield, Ind. Kidney and liver cure, blood-purifier, pills, and ointment	20,977	Apr. 12	59	296
Wilkinson, Harris C., Chicago, Ill. Pills	20,642	Jan. 26	58	390
Wilkinson, Harris C., Chicago, Ill. Pills	21,312	June 14	59	1760
Wilkinson, Harris C., Chicago, Ill. Pills	21,957	Nov. 8	61	883
Willard, Samuel L., San Augustine, Tex. Remedies for external use	21,849	Oct. 4	61	150
William Clark Company, Newark, N. J., and Stonington, Conn. Spool-cotton	21,539	Aug. 2	60	733
William Clark Company, Newark, N. J., and Stonington, Conn. Spool cotton	21,540	Aug. 2	60	733
William Wilkinson & Sons, Limited, Grimesthorpe, Sheffield, England. Knives, forks, scissors, shears, files, and saws	20,725	Feb. 16	58	810
William Wilkinson & Sons, Limited, Grimesthorpe, Sheffield, England. Sheep-shears, garden-shears, and butchers' knives	20,726	Feb. 16	58	810
William Wilkinson & Sons, Limited, Grimesthorpe, Sheffield, England. Sheep-shears, garden-shears, and butchers' knives	20,771	Feb. 23	58	952
Williams, Frederick D., Providence, R. I. Collar-buttons	21,971	Nov. 15	61	1012
Williams, Homer, San Francisco, Cal. Veterinary remedies	21,009	Apr. 19	59	461
Williams, Joseph, Jr., Pittsburg, Pa. Line of remedies	21,760	Sept. 20	60	1747
Williams, Richard G., New York, N. Y. Hats	20,661	Jan. 26	58	390
Winlot, Florence E., Boston, Mass. Remedies for venereal diseases	20,815	Mar. 8	58	1262
Wilson, George M. S., Toronto, Canada. Manufactured gas for heating and lighting purposes	22,138	Dec. 6	61	1477
Wilson, William, New York, N. Y. Remedies in the form of tablets for rheumatism and diseases of the kidneys	21,269	June 7	59	1603
Winchester, William A., Medford, Mass. Medicinal preparation for the cure of piles, dysentery, and kindred complaints	22,034	Nov. 22	61	1163
Windsor Company, North Adams, Mass., and New York, N. Y. Dress fabrics, such as prints, calicoes, poplins, and alpacas	21,541	Aug. 2	60	732
Winkelmann & Brown Drug Company, Baltimore, Md. Perfumery	21,033	Apr. 26	59	627
Winkelmann & Brown Drug Company, Baltimore, Md. Perfumery	21,034	Apr. 26	50	627
Winkelmann & Brown Drug Company, Baltimore, Md. Perfumery	21,142	May 17	59	1101
Winslow, William H., Pittsburg, Pa. Medicinal sirup	21,649	Aug. 16	60	1050
Winsor, John J., Saginaw, Mich. Remedy for rheumatism	20,949	Apr. 5	59	156
Winter Bros., Waterford, Wash. Canned fish, fruits, and vegetables	21,378	June 28	59	2068
Witten, Ancil D. (See Penn, Watson, and Witten.)				
Witwer, Clement S. (See Flowers and Witwer.)				
Wm. Bergenthal Company, Milwaukee, Wis. Whisky	21,594	Aug. 9	60	891
Wm. Zahn Leather Company, Newark, N. J. Kid-leather	22,190	Dec. 20	61	1786
Wolf & Randolph, Philadelphia, Pa. Paints, stains, and varnishes	21,143	May 17	59	1101
Wood, John J., Liverpool, England. Optical instruments for improving eyesight	21,032	Apr. 26	59	627
Wood & Son, George L., Brooklyn and New York, N. Y. Varnishes	20,919	Mar. 29	58	1698
Woodcock, Hartwell L. and J. E., Belfast, Me. Sarsaparilla compound	21,827	Oct. 4	61	149
Woodcock, John E. (See Woodcock, Hartwell L. and J. E.)				
Woodward, Charles B., St. Louis, Mo. Prints and reproductions by photomechanical processes	21,547	Aug. 2	60	733
Worden, Arthur L., Detroit, Mich. Medicine for certain named diseases	21,519	July 26	60	572
Wrage, Gustav R., Berlin, Iowa. Medical composition for removing fungus growths from the jaws and bones of animals and warts from persons	20,933	Apr. 5	59	155
Wright, Alfred, Rochester, N. Y. Perfumery	21,532	July 26	60	574
Wright Brothers Tobacco Company, St. Charles, Mo. Plug-tobacco	22,245	Dec. 27	61	1944
Wright Universal Electric Company, New York, N. Y. Battery compounds	21,611	Aug. 16	60	1046
Wyckoff, Seamans & Benedict, Ilion and New York, N. Y. Type-writing machines	21,819	Oct. 4	61	148
Wyson & Co., J. J., New York, N. Y. Cashmeres and henriettas	20,595	Jan. 12	58	148
Wythe & Co., W. H., Orange, N. J. Bronzing liquid or gold paint	21,929	Nov. 1	61	720
Young, Wilbur F., Meriden, Conn. Liniments, embrocations, and like external remedies	21,489	July 19	60	435
Zacherl & Logothetti, Chicago, Ill. Insect-powder	20,784	Feb. 23	58	952
Zeno & Co., London, England. Perfumed soap and perfumery	20,836	Mar. 15	58	1420
Zizelman & Bartlett, Cleveland, Ohio. Cleansing compound	22,065	Nov. 29	61	1309
Zucker & Levett Chemical Company, New York, N. Y. Polishing preparation	21,518	July 26	60	572

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Name, residence, and title.	No.	Date.	Official Gazette.	
			Volume.	Page.
Hope Mills Manufacturing Company, Fayetteville, N. C. "Housekeepers' Gingham Aprons." (For aprons.)	6,545	June 14	59	1612
Palmer, Isaac E., Middletown, Conn. "Palmer's Patent." (For hammocks)	6,540	Mar. 15	58	1420
Palmer, Isaac E., Middletown, Conn. "Palmer's Patent." (For hammocks)	6,541	Mar. 22	58	1562
Palmer, Isaac E., Middletown, Conn. "Palmer's Patent." (For hammocks)	6,543	Mar. 22	58	1562
Palmer, Isaac E., Middletown, Conn. "Palmer's Patent." (For hammocks)	6,544	Mar. 22	58	1562
Palmer, Isaac E., Middletown, Conn. "Palmer's Patent Hammock"	6,542	Mar. 22	58	1562

DISCLAIMERS.

Name, residence, and invention.	No.	Filed.	Official Gazette.	
			Vol.	Page.
Kenega, Martin H., Mومence, Ohio; disclaimer filed by assignee, the Acme Harvester Company. Horse hay-rake	259,550	May 14, 1892	59	1112
Kennedy, Julian, Latrobe, and Henry Aiken, Pittsburg, Pa.; disclaimer filed by patentee. Hydraulic cranes. (Re-issue)	11,164	May 5, 1891	61	1666
McBride, Thomas, Philadelphia, Pa., and Ebenezer Fisher, Kinkardine, Ontario, Canada; disclaimer filed by patentees. Spectacle bridges	461,364	Apr. 15, 1892	59	475
Schulze-Berge, Hermann and Franz G. A., Brooklyn, N. Y.; disclaimer filed by patentees. Air-pumps	428,638	Sept. 2, 1892	60	1484
Slemmer, Frank G., Maryland, Md.; disclaimer filed by patentee. Soldering-machine	466,580	June 11, 1892	59	1612
Thompson, James F., Rockland; disclaimer filed by patentee and his assignee, Charles F. Baker, Boston, Mass. Coloring and burnishing compositions	473,679	June 11, 1892	59	1768
Woll, Peter, Jr., Philadelphia, Pa.; disclaimer filed by patentee. Manufacturing curled hair	458,721	May 5, 1892	59	794

ALPHABETICAL LIST OF INVENTIONS.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Specification.	Drawing.	Volume.	Page.
Abbrading and finishing tool.....	S. Ross, Jr.....	472,823	Apr. 12	1240	318	59	247
Absorbent pad.....	F. E. Smith.....	467,624	Jan. 26	2148	546	58	432
Account-keeping device.....	W. W. Maxwell.....	487,953	Dec. 13	1174	293	61	1570
Accountant. Pocket cash.....	J. Davis.....	473,656	Apr. 26	2634	664	59	549
Accouterment.....	J. W. Frazier.....	469,444	Feb. 23	2400	{ 614 615 }	58	1019
Acid. Apparatus for concentrating sulphuric	C. Négrier.....	468,891	Feb. 16	1532	390	58	842
Acid. Apparatus for condensing nitric.....	O. Guttman.....	472,498	Apr. 5	772	196	59	146
Acid in oils and fats. Dissolving lactic.....	A. Sommer.....	470,715	Mar. 15	1676	.....	58	1441
Acid in oils and fats. Solution of.....	A. Sommer.....	470,714	Mar. 15	1675	.....	58	1410
Acid. Making naphthosultoudisulphonic.....	H. Kuzel.....	473,467	Apr. 26	2319	.....	59	469
Acid. Making nitric.....	J. Lang.....	477,375	June 21	1829	447	59	1825
Acid. Making oxyvinic.....	B. R. Seifert.....	488,290	Dec. 20	1750	.....	61	1703
Acid of phenyl-rosinduline. Disulpho.....	E. Hepp.....	466,852	Jan. 12	880	.....	58	177
Acid pan and making the same. Sulphuric.....	R. Kùch.....	474,527	May 10	1035	265	59	847
Acid-resisting composition for lining tanks.....	J. Norton, Jr.....	480,934	Aug. 16	1881	.....	60	972
Acids. Making oxymethoxybenzoic.....	B. R. Seifert.....	470,920	Mar. 15	1589	.....	58	1501
Acids. Restoring nitrating.....	H. Maxim.....	479,988	Aug. 2	357	88	60	649
Acids. Solidifying liquid.....	W. White.....	475,586	May 24	2708	.....	59	1204
Adding and counting apparatus.....	O. R. J. Wohlang.....	469,766	Mar. 1	153	40	58	1129
Adding and printing machine.....	J. Mason and S. Shoup.....	463,250	Feb. 2	513	{ 127 128 }	58	625
Adding-machine.....	J. S. Hilliard.....	477,416	June 21	1887	464	59	1837
Adding-machine.....	C. A. Oakes and J. H. Jackson.....	485,214	Nov. 1	89	28	61	591
Adding-machine.....	S. A. Potter.....	478,361	July 5	472	114	60	94
Adding-machine.....	R. S. Robertson.....	479,531	July 26	2311	578	60	492
Adding-machine.....	W. H. Wilson.....	479,343	July 19	1978	495	60	413
Adding-machine.....	J. W. Wright.....	476,350	June 7	192	45, 46	59	1473
Addressing-machine.....	F. D. Belknap.....	477,793	June 28	2504	{ 627 628 629 }	59	1975
Addressing-machine.....	G. S. Conch.....	475,755	May 31	2973	755	59	1268
Addressing-machine.....	J. P. O'Malley.....	481,052	Aug. 16	2067	516	60	1008
Addressing-machine.....	F. D. Rettich.....	481,639	Aug. 30	3063	748	60	1225
Addressing-machine.....	L. J. Wadsworth.....	467,319	Jan. 19	1651	421	58	331
Addressing mail-matter. Machine for.....	C. A. White.....	488,912	Dec. 27	2740	676	61	1917
Adhesive.....	J. W. Frank.....	478,229	July 5	261	.....	60	53
Adhesive fabrics. Producing.....	B. Hochman.....	471,611	Mar. 29	3020	769	58	1718
Adhesives. Production of.....	L. Kern.....	487,928	Dec. 13	1139	284	61	1563
Adjustable bit.....	H. O. Davis.....	476,614	June 7	586	139	59	1553
Adjustable bracket.....	D. Ravenel, Jr., and R. P. Miles.....	485,589	Nov. 1	666	177	61	710
Adjustable bracket for supporting inkstands.....	G. F. Hall.....	475,056	May 17	1277	476	59	1026
Adjustable chair.....	E. Pynchon.....	484,571	Oct. 18	1607	408	61	349
Adjustable chair.....	W. Richards.....	480,743	Aug. 16	1594	{ 399 400 }	60	915
Adjustable chair or stool.....	P. A. Bredsvold.....	483,777	Oct. 4	387	96	61	81
Adjustable clamp for securing stands to various objects.....	C. E. Hudson.....	468,450	Feb. 9	842	213	58	697
Adjustable die.....	F. Armstrong.....	469,622	Feb. 23	2664	685	58	1072
Adjustable handle for taps, reamers, &c.....	T. E. Avery.....	469,035	Feb. 16	1784	455	58	893
Adjustable pattern for drafting garments.....	B. Musse.....	467,045	Jan. 12	1202	{ 303 304 }	58	236
Adjustable seat.....	C. H. Biggs and F. H. Fairchild.....	478,840	July 12	1198	297	60	252
Advertiser. Photoscopic.....	P. Ortega.....	469,171	Feb. 16	1960	501	58	928
Advertising apparatus. Automatic.....	W. C. Jennings.....	469,652	Feb. 23	2704	696	58	1080
Advertising apparatus. Automatic.....	J. S. Yule.....	484,576	Oct. 18	1616	410	61	351
Advertising apparatus for cash-registers.....	H. Cook.....	482,722	Sept. 20	1323	323	60	1619
Advertising apparatus. Magic-lantern.....	W. G. Spiegel.....	472,912	Apr. 12	1368	351	59	275
Advertising-board.....	P. E. Green.....	484,194	Oct. 11	1005	257	61	219
Advertising-cabinet.....	D. B. Lincoln.....	486,113	Nov. 15	1501	{ 395 396 }	61	912
Advertising-card rack.....	D. S. Foote.....	475,726	May 24	2926	742	59	1244
Advertising-clock.....	F. Sr., and F. Welleba, Jr., and L. Wächter.....	479,687	July 26	2547	{ 634 635 }	60	535
Advertising device.....	G. W. Bartlett.....	466,926	Jan. 12	1010	258	58	201
Advertising device.....	P. Herrmann.....	484,314	Oct. 11	1209	307	61	258
Advertising device.....	W. E. Irish.....	482,178	S pt. 6	425	101	0	1418
Advertising device.....	C. M. Snyder.....	466,583	Jan. 5	438	112	58	84
Advertising device.....	J. A. and J. B. Wright.....	485,676	Nov. 8	802	214	61	753
Advertising device. Automatic.....	T. B. Hafertep.....	487,563	Dec. 6	536	138	61	1427
Advertising-machine.....	C. P. Oldham.....	474,504	May 10	993	256	59	839
Advertising match-box.....	J. J. Harrison and W. Hooker.....	471,052	Mar. 15	2125	563	58	1530
Advertising novelty or display-card.....	J. Robinson.....	486,899	Nov. 29	2766	723	61	1199
Advertising or business cabinet.....	M. W. Marsden.....	483,849	Oct. 4	492	122	61	102
Advertising-program holder.....	J. F. O'Brien.....	474,919	May 17	1655	423	59	983
Advertising purposes. Apparatus for delivering cards and other articles for.....	R. H. Little.....	479,820	Aug. 2	67	16	60	595
Advertising-puzzle.....	J. L. Leavitt.....	469,839	Mar. 1	277	72	58	1154

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Advertising-sign.....	J. O. Belknap.....	470,034	Mar. 1	583	145	58	1212
Advertising-sign.....	A. Martyn.....	477,429	June 21	1906	470	59	1840
Advertising-sign.....	W. R. Sanford.....	473,239	Apr. 19	1932	486	59	391
Advertising-sign. Illuminated.....	C. R. McGimsey.....	478,204	July 5	211	53	60	43
Advertising-wagon.....	W. S. Carter.....	474,366	May 10	786	204	59	799
Aerated liquids. Apparatus for the manufacture of.	L. G. and S. M. Chinnery.....	482,841	Sept. 20	1502	{ 373 374 }	60	1655
Aerated liquids. Receptacle for.....	J. D. Iler.....	474,387	May 10	812	212	59	805
Aerated water. Machine for manufacturing and dispensing.....	J. P. Jackson.....	485,386	Nov. 1	367	98	61	648
Aerating liquids. Apparatus for.....	C. A. and J. Schneible.....	474,414	May 10	859	225	59	814
Aerating liquids. Art of and apparatus for.....	J. and C. A. Schneible.....	474,413	May 10	857	224	59	814
Aerating liquids. Method of and apparatus for.....	J. H. Minto.....	483,259	Sept. 27	2204	553	60	1605
Aerating liquids. Process of and apparatus for.....	C. H. Schultz.....	485,665	Nov. 8	787	209	61	750
Aeration of liquids.....	E. Williams.....	481,249	Aug. 23	2436	600	60	1091
Aerator. Milk.....	T. W. and B. T. Wood.....	487,413	Dec. 6	305	78	61	1382
Aerial ship.....	W. N. Riddle.....	473,344	Apr. 19	2106	529	59	426
Aging and purifying liquors. Apparatus for.....	A. L. Wood.....	488,104	Dec. 13	1434	{ 359 360 }	61	1625
Aging and rectifying alcoholic liquids by ozone. Apparatus for.....	F. Broyer and P. Petit.....	468,326	Feb. 9	656	162	58	660
Aging liquors. Process of and apparatus for.....	T. R. Timby.....	485,999	Nov. 8	1300	{ 345 346 }	61	856
Aging whisky. Apparatus for.....	J. H. Halligan.....	470,121	Mar. 1	714	176	58	1238
Aging wines, spirits, or other liquors. Apparatus for.....	T. R. Timby.....	486,000	Nov. 8	1303	{ 346 347 }	61	856
Agitator.....	R. Smith.....	473,530	Apr. 26	2415	613	59	507
Agricultural implement.....	A. Caldwell.....	486,849	Nov. 29	2670	{ 698 699 }	61	1175
Agricultural implement.....	A. Caldwell.....	486,850	Nov. 29	2672	699	61	1175
Agricultural implement.....	M. Macleod.....	479,094	July 19	1583	396	60	337
Agricultural implement.....	H. A. W. Smith.....	467,207	Jan. 19	1481	379	58	299
Agricultural machine.....	J. F. Thompson.....	483,026	Sept. 20	1808	457	60	1716
Agricultural machine.....	J. B. Wilkins.....	484,690	Oct. 18	1805	459	61	389
Air and gas meter.....	G. E. Abrahams.....	470,814	Mar. 15	1838	{ 471 472 }	58	1471
Air and steam coupling.....	J. Blattner.....	474,207	May 3	497	119	59	734
Air. Apparatus for heating compressed.....	R. A. Parke.....	481,623	Aug. 30	3041	743	60	1220
Air. Apparatus for purifying, moistening, and at-temperating.....	L. C. Huck.....	476,274	June 7	68	14, 15	59	1451
Air-belt purifier.....	H. A. Barnard.....	485,571	Nov. 1	643	171	61	705
Air-brake.....	J. F. Carpenter.....	479,736	July 26	2643	655	60	553
Air-brake.....	R. G. Coates.....	467,920	Feb. 2	24	6	58	531
Air-brake.....	R. G. Coates.....	467,921	Feb. 2	27	6	58	531
Air-brake.....	D. Hanney.....	476,880	June 14	1008	245	59	1651
Air-brake.....	T. J. Hogan.....	473,839	Apr. 26	2908	731	59	602
Air-brake.....	T. J. Hogan.....	482,058	Sept. 6	221	52, 53	60	1378
Air-brake.....	J. B. Knudsen.....	468,377	Feb. 9	753	187	58	679
Air-brake.....	H. McNulta.....	471,801	Mar. 29	3338	850	58	1777
Air-brake.....	F. W. Mills.....	476,546	June 7	482	114	59	1533
Air-brake.....	E. G. Shortt.....	469,176	Feb. 16	1966	503	58	930
Air-brake and car-coupling. Combined.....	P. Pelton.....	482,362	Sept. 13	784	189	60	1502
Air-brake. Automatic.....	A. Silcock.....	468,701	Feb. 9	1245	317	58	777
Air-brake coupling.....	W. A. and B. S. H. Harris.....	472,190	Apr. 5	281	73, 74	59	53
Air-brake coupling.....	J. T. Hayden.....	481,651	Ang. 30	3084	752	60	1229
Air-brake coupling.....	J. E. Marble.....	484,034	Oct. 11	773	195	61	173
Air-brake hose. Coupler-head for.....	S. M. Beery.....	485,365	Nov. 1	337	89	61	641
Air-brake-pipe coupling.....	C. D. Fahrney.....	485,182	Nov. 1	41	14	61	581
Air-brake slack-adjuster.....	C. E. Corporan.....	483,802	Oct. 4	430	104	61	87
Air-brakes. Automatic regulator for.....	M. L. E. Duval.....	466,703	Nov. 22	2427	632	61	1110
Air-brakes. Compressor for.....	D. Dunn.....	473,302	Apr. 19	2022	{ 509 510 }	59	411
Air-brakes. Slack take-up for.....	L. Guillemet.....	482,040	Sept. 6	190	46	60	1373
Air-compressor.....	M. Dillenburgh.....	481,850	Aug. 30	3422	840	60	1294
Air-compressor.....	T. F. Farrell.....	479,260	July 19	1841	462	60	783
Air-compressor.....	J. G. Haines.....	480,193	Aug. 2	692	175	60	315
Air-compressor.....	A. H. Hutchinson.....	481,143	Aug. 16	2242	552	60	1039
Air-compressor.....	A. O'Brien.....	477,381	June 21	1837	451	59	1827
Air-compressor.....	B. F. Teal.....	474,034	May 3	239	57	59	684
Air-compressor.....	P. Weisel.....	467,389	Jan. 19	1757	449	58	350
Air-compressor and reservoir.....	J. G. Haines.....	470,934	Mar. 15	2009	515	58	1505
Air-compressor. Automatic.....	B. Beck.....	476,723	June 7	739	183	59	1584
Air-compressor. Coin-operated automatic hydraulic.....	R. F. Avery.....	482,775	Sept. 20	1414	350	60	1636
Air-compressor. Hydraulic.....	S. Hanford.....	474,296	May 3	640	162	59	761
Air-compressor. Hydraulic.....	J. H. Henderson and E. Schutz.....	475,111	May 17	1968	{ 498 499 }	59	1043
Air-compressor. Hydraulic.....	G. H. Sherman.....	475,251	May 17	2176	554	59	1085
Air-compressor. Hydrostatic.....	W. T. Wood.....	485,853	Nov. 8	1054	281	61	804
Air-compressor motor.....	D. P. Burdon and S. Houston.....	471,766	Mar. 29	3266	834	58	1764
Air-compressor pistons. Speed-regulator for.....	E. C. Fasoldt.....	481,527	Aug. 23	2886	708	60	1175
Air-compressor. Windmill.....	T. O. Perry.....	485,881	Nov. 8	1100	{ 292 293 }	61	814
Air cooler. Return.....	H. B. Roelker.....	484,979	Oct. 25	2294	592	61	501
Air cooling and purifying apparatus.....	I. F. Good.....	469,207	Feb. 16	2034	519	58	940
Air cooling and purifying apparatus.....	G. E. Proctor.....	488,798	Dec. 27	2556	{ 634 635 }	61	1879
Air-cooling apparatus.....	E. H. C. Oehlmann.....	468,115	Feb. 2	311	75	58	584
Air-cylinder.....	W. J. O. Bryon, Jr.....	483,529	Oct. 4	18	4	61	7
Air-cylinder.....	W. J. O. Bryon, Jr.....	483,829	Oct. 4	465	116	61	96
Air-ducts. Sheet-metal.....	J. N. Lake.....	481,620	Aug. 30	3037	742	60	1220
Air laden therewith. Separating grain and dust or stive from.....	F. E. Duckham.....	485,915	Nov. 8	1159	306	61	826
Air. Method of and apparatus for purifying and regulating the temperature of.....	G. Sobotka and A. Kliemetschek.....	471,294	Mar. 22	2562	650	58	1624

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Air-moistening apparatus	E. Mertz	470,693	Mar. 15	1640	{ 425 } 426	58	1433
Air-moistening device	E. W. Frazer and F. Thuman	470,424	Mar. 8	1248	{ 320 } 320	58	1346
Air motor. Compressed	P. Giffard	480,089	Aug. 2	536	{ 133 } 134	60	682
Air or gas meter	H. Lane	470,826	Mar. 15	1859	{ 476 } 477	58	1476
Air or gas meter	F. E. Youngs	485,075	Oct. 25	2441	{ 627 } 628	61	531
Air or gas meter	F. E. Youngs	485,076	Oct. 25	2443	{ 628 } 629	61	531
Air-ship	B. F. Barnes	478,905	July 12	1280	{ 318 } 318	60	268
Air-ship	J. C. Walker	467,069	Jan. 12	1235	{ 312 } 313	58	243
Air ventilator. Foul- Alarm:	S. Z. Martin	483,631	Oct. 4	169	42, 43	61	35
See Automatic alarm. Fire and burglar alarm.							
Axle-alarm. Heat-alarm.							
Boiler-foed alarm. High and low water							
Burglar-alarm. alarm.							
Burglar and fire Hot-box alarm.							
alarm. Low-water alarm.							
Door-alarm. Thermal alarm.							
Electric alarm. Time-alarm.							
Fire-alarm. Water-alarm.							
Alarm	F. F. Boegner	478,982	July 19	1410	349	60	304
Alarm	D. P. Norcross	480,273	Aug. 9	846	215	60	756
Alarm apparatus	E. Lachmann	486,380	Nov. 15	1911	505	61	995
Alarm-box. District	C. W. McClellan	485,351	Nov. 1	313	53, 84	61	636
Alarm-lock	R. Mahannah	479,374	July 19	2029	506	60	423
Alarm-lock	R. M. Metcalf	480,237	Aug. 2	771	194	60	728
Alarm-lock	R. G. Vassar	478,071	June 23	2947	{ 736 } 737	59	2061
Album	A. Bartholme	487,170	Nov. 29	3212	823	61	1282
Album	G. Baum and J. Müller	472,470	Apr. 5	721	184	59	137
Album-case	W. Bergner	478,390	July 5	509	124	60	100
Album-clasp	J. C. Koch	480,950	Aug. 16	1915	{ 478 } 479	60	977
Album. Photographic	J. R. Jones	471,387	Mar. 22	2707	690	58	1652
Album. Photographic	G. Schwab	479,667	July 26	2518	627	60	530
Album. Stereoscopic	J. H. McGrew	472,196	Apr. 5	290	76	59	55
Alcoholic liquors-casks. Apparatus for and method	M. Hickey	484,963	Oct. 25	2265	585	61	494
of recovering waste							
Alcoholic liquors and other liquids. Apparatus for	S. Mason, Jr.	482,018	Sept. 6	159	38	60	1366
purifying and refining							
Alcoholic liquids. Purification of	P. C. Rousseau, M. J. de Chanté- rac, and M. J. D. A. de la Baume.	470,447	Mar. 8	1289	.....	58	1354
Alembic	V. J. Kuess	488,766	Dec. 27	2502	622	61	1867
Alizarine. Derivative	R. E. Schmidt	476,418	June 7	299	.....	59	1496
Alizarine. Derivative	R. E. Schmidt	476,420	June 7	301	.....	59	1497
Alkali. Apparatus for and process of recovering	H. Blackman	478,981	July 19	1405	{ 348 } 349	60	304
Alkali. Apparatus for recovering	H. Blackman	478,980	July 19	1402	348	60	303
Alkalies and chlorine. Production of caustic	F. M. Lyte	481,407	Aug. 23	2691	661	60	1136
Alkalies. Making aluminates of	E. Fleischer	472,668	Apr. 12	1012	.....	59	205
Alloy	A. I. Cocker, G. W. Collyer, and C. Haines	480,233	Aug. 2	767	.....	60	727
Alloy	E. W. Cooke	474,443	May 10	900	.....	59	823
Alloy	W. J. Miles, Jr.	467,329	Jan. 19	1660	.....	58	334
Alloy	E. C. Miller	467,140	Jan. 12	1379	.....	58	271
Alloy	H. G. O'Neill	485,423	Nov. 1	424	.....	61	659
Alloy. Aluminum	C. F. Whitney	480,445	Aug. 9	1123	.....	60	806
Alloy. Antifriction	T. D. Bottome	484,064	Oct. 11	841	.....	61	187
Alloy. Antifriction	J. Fowler	474,295	May 3	640	.....	59	761
Alloys. Chemical reagent for use in the manufacture	S. E. Cheeseman	485,453	Nov. 1	466	.....	61	668
of							
Alloys. Electro-depositing	S. O. Cowper-Coles	487,176	Nov. 29	3219	.....	61	1284
Alloys. Forming	S. E. Cheeseman	466,455	Jan. 5	235	60	58	45
Alloys. Mixing	W. R. Thomas	487,338	Dec. 6	162	46	61	1353
Alloys of iron and chromium. Purifying	J. Bedford	477,490	June 21	2008	.....	59	1800
Alloys of iron or steel and nickel. Manufacturing	E. F. Wood	476,913	June 14	1062	.....	59	1052
Alloying furnace. Metal	W. A. Baldwin	477,792	June 28	2502	627	59	1975
Almanac	R. te Peerdt	467,559	Jan. 26	2062	321	58	415
Altar for sacramental purposes. Household	L. C. Beaudet	470,098	Mar. 1	681	167	58	1231
Alumina and acetic acid. Obtaining	F. P. Dewey	485,461	Nov. 1	477	.....	61	669
Alumina. Apparatus for making	H. W. Shepard	488,580	Dec. 27	2219	550	61	1812
Aluminum. Method of and apparatus for extracting	M. Emme	476,256	June 7	42	10	59	1446
Aluminum or other metals. Apparatus for produc-	P. Heroult	473,118	Apr. 19	1716	435	59	350
ing							
Aluminum. Process of and apparatus for the extrac-	M. and E. Bernard	476,914	June 14	1064	256	59	1602
tion of							
Aluminum. Separating	C. S. Bradley	468,148	Feb. 2	365	90	58	595
Amalgam for dentists' use	G. Jitterbock	485,280	Nov. 1	188	.....	61	611
Amalgam. Treating base-bullion	B. Moebius	480,956	Aug. 16	1922	481	60	979
Amalgamating apparatus for crushed ores and like	W. W. Fyfe	480,366	Aug. 9	995	250	60	783
reduced bodies.							
Amalgamating apparatus for separating gold and	G. J. Atkins	473,104	Apr. 19	1681	427	59	344
other metals from their ores.							
Amalgamating gold or silver with mercury	B. G. Noble	470,209	Mar. 8	870	215	58	1277
Amalgamating silver ore	A. Janin	481,031	Aug. 16	2033	507	60	1001
Amalgamating silver ores	A. Janin	468,063	Feb. 2	233	56	58	509
Amalgamating silver ores	A. Janin	473,395	Apr. 19	2197	551	59	443
Amalgamator	W. J. Connors and W. W. Eddy	478,922	July 12	1308	326	60	274
Amalgamator	W. E. Darrow	473,385	Apr. 19	2181	548	59	440

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Amalgamator	W. J. Gard, S. S. Dalzell, and W. A. Shafer.	476,955	June 14	1137	274	59	1677
Amalgamator	J. H. Hawthornthwaite.	469,566	Feb. 23	2596	665	58	1057
Amalgamator	A. M. Stetson.	476,497	June 7	416	97	59	1518
Amalgamator	J. M. Thompson.	475,360	May 24	2348	602	59	1136
Amalgamator	B. Tyson.	473,533	Apr. 26	2420	614	59	507
Amalgamator and ore-concentrator	L. C. Moreland.	479,140	July 19	1657	414	60	350
Amalgamator for free-milling gold ore	A. Woodhouse.	471,367	Mar. 22	2672	680	58	1645
Ammeter	C. F. Brush.	466,953	Jan. 12	1051	267	58	208
Ammeters and other electric apparatus. Means for operating	H. M. Pilkington and R. S. White.	477,223	June 21	1576	387	59	1778
Ammonia-absorber	F. Kaiser.	481,955	Sept. 6	51	12	60	1344
Ammonia-distilling apparatus	W. L. Rowland.	478,132	July 5	76	20	60	17
Ammonia. Manufacturing nitrate of	R. S. Penniman.	478,087	June 28	2941	734	59	2059
Ammonia. Process of and apparatus for making	P. Kuntze.	488,207	Dec. 20	1610	402	61	1677
Ammonia. Purifying	H. von Stronbeck.	477,089	June 14	1350	59	59	1720
Ammonia-still	N. W. Condict, Jr.	478,407	July 5	537	131	60	106
Ammonia-still	H. Nadorff.	484,607	Oct. 18	1774	451	61	383
Ammunition-car. Rotating	H. A. Spiller.	470,955	Mar. 15	2042	522	58	1511
Ammunition for submarine guns	H. Berdan.	478,216	July 5	229	57	60	47
Anchor	R. S. K. Chrietzberg.	481,782	Aug. 30	3313	809	60	1274
Anchor	C. H. Eaton.	477,745	June 28	2428	607	59	1963
Anchor for brick walls	J. M. Van Why.	473,273	Apr. 19	1982	497	59	402
Anchors. Foot for dredge	W. Pike and N. McDairmid.	483,012	Sept. 20	1789	451	60	1712
Andron	E. F. Paschal.	475,701	May 24	2880	728	59	1237
Anemometer-cup	H. J. Green.	471,817	Mar. 29	3362	856	58	1782
Angle-finish for rooms	A. D. Ellis.	478,928	July 12	1319	328	60	276
Angle-iron. Apparatus for cutting off	M. Gilgenberg.	475,214	May 17	2119	536	59	1074
Animal-catcher	A. Otto.	486,939	Nov. 29	2857	739	61	1212
Animal-dipper	E. A. Firestone.	486,372	Nov. 15	1903	503	61	993
Animal-exterminator	G. Gillpatrick.	473,872	Apr. 26	2969	749	59	613
Animal-power	J. Dick.	478,575	July 12	792	195	60	172
Animal-securing device	J. A. Hindman.	474,251	May 3	561	138	59	747
Animal-shears	P. Ashberry and W. Barnes.	479,109	July 19	1611	403	60	342
Animal-shears	P. Ashberry and W. Barnes.	479,110	July 19	1613	403	60	342
Animal-shears	C. Burgon.	466,860	Jan. 12	896	229	58	179
Animal-shears	C. and H. Burgon.	468,217	Feb. 2	464	115	58	616
Animal-shears	C. and H. Burgon.	480,997	Aug. 16	1986	497	60	991
Animal-shears	C. and H. Burgon.	481,844	Aug. 30	3411	837	60	1292
Animal-shears	H. S. Daggett.	483,904	Oct. 4	572	144	61	119
Animal-training apparatus	C. C. Kelly.	478,513	July 5	694	168	60	138
Animal-trap	T. W. Blackerby.	472,651	Apr. 12	989	255	59	201
Animal-trap	J. R. Bromwell.	488,111	Dec. 13	1447	364	61	1627
Animal-trap	S. H. Burch.	472,852	Apr. 12	1276	327	59	255
Animal-trap	J. C. Gould.	472,213	Apr. 5	326	84	59	61
Animal-trap	W. H. Harden.	473,312	Apr. 19	2044	513	59	414
Animal-trap	M. Johnston.	484,799	Oct. 25	1999	513	61	443
Animal-trap	F. H. Keuthan.	470,577	Mar. 8	1468	382	58	1390
Animal-trap	J. Klar and F. H. Hall.	477,126	June 14	1397	340	59	1729
Animal-trap	E. R. and C. W. Knecht.	480,593	Aug. 9	1348	386	60	851
Animal-trap	E. L. Lewis.	472,733	Apr. 12	1114	286	59	223
Animal-trap	C. M. McLeod and J. T. Garrett.	472,386	Apr. 5	596	152	59	112
Animal-trap	G. Potter.	472,814	Apr. 12	1227	314	59	245
Animal-trap	A. F. Rockwell.	474,303	May 3	648	164	59	763
Animal-trap	J. D. Shaffer.	473,967	May 3	132	30	59	663
Animal-trap	M. D. Slawson.	485,303	Nov. 1	221	63	61	618
Animal-trap	H. J. Steiner.	477,966	June 28	2778	696	59	2029
Animal-trap	C. B. Trumble.	481,707	Aug. 30	3171	775	60	1245
Animal-trap	O. S. Ward.	488,232	Dec. 20	1657	413	61	1685
Animal-trap	C. R. Watrous and J. S. Palmer.	471,726	Mar. 29	3212	817	58	1753
Animal-trap	G. H. Wells, Jr.	469,429	Feb. 23	2376	609	58	1015
Animal-trap	G. H. Wells, Jr.	486,005	Nov. 8	1310	349	61	857
Animal-trap	D. Wigert.	479,161	July 19	1686	422	60	356
Animal-trap	R. T. Williams.	487,593	Dec. 6	574	147	61	1435
Animal-trap	G. Winkler.	472,687	Apr. 12	1040	268	59	209
Ankle supporter	J. G. Pugsley.	487,492	Dec. 6	429	110	61	1406
Annealing	S. H. Brown.	468,740	Feb. 9	1300	58	789	
Annealing-box	A. Beyer.	479,345	July 19	1982	496	60	414
Annealing-box	M. F. Wilfong.	467,474	Jan. 19	1892	483	58	377
Annealing-furnace	A. A. Cowles and J. F. Gilpin.	479,115	July 19	1620	405	60	343
Annealing-furnace	O. J. Winlund and A. L. Larson.	471,299	Mar. 22	2572	653	58	1625
Annealing-oven	D. W. Murphy.	482,048	Sept. 6	207	49	60	1376
Annealing wire or metallic rods by electricity. Apparatus for	J. H. Hunter.	484,637	Oct. 18	1716	435	61	370
Annunciator	A. H. Brintnell.	470,831	Mar. 15	1867	479	58	1477
Annunciator	W. C. Dillman.	472,439	Apr. 5	671	172	59	126
Annunciator	W. C. Dillman.	472,440	Apr. 5	672	172	59	126
Annunciator	D. Heineman.	466,870	Jan. 12	916	234	58	184
Annunciator	L. G. Rowand.	477,071	June 14	1324	321	59	1715
Annunciator drop. Electric	J. C. Warner.	477,616	June 21	2212	549	59	1901
Annunciator. Electric	J. H. Bates.	488,536	Dec. 27	2149	531	61	1797
Annunciator. Electric	A. B. Lyman.	488,567	Dec. 27	2197	543	61	1207
Annunciator. Electric	C. Molitor.	466,357	Jan. 5	74	19	58	17
Annunciator. Electric	E. D. Moore.	482,263	Sept. 6	559	133	60	1444
Annunciator. Electric	F. A. Pickernell.	481,120	Aug. 16	2192	542	60	1030
Annunciator. Electrical	F. S. Carter.	486,820	Nov. 22	2615	681	61	1149
Annunciator. Electrical	F. S. Carter and G. P. Stumpf.	486,243	Nov. 15	1694	448	61	950
Annunciator. Electrical	W. Ebert.	468,170	Feb. 2	397	99	58	601
Annunciator. Electrical	W. F. Harte.	466,784	Jan. 12	769	200	58	156
Annunciator. Electrical	T. W. Lane.	473,121	Apr. 19	1720	435	59	351

Alphabetical list of inventions—Continued

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Annunciator. Electrical	N. H. Raymond	483,310	Sept. 27	2278	572	60	1818
Annunciator. Electrical	F. W. Steeg	473,975	May 3	142	33	59	665
Annunciator. Electrical	N. M. Watson	471,986	Mar. 29	3589	{ 917	58	1826
Annunciator. Electrical	N. M. Watson	471,987	Mar. 29	3591	917	58	1827
Annunciator. Electrical drop	T. W. Laue	480,729	Aug. 16	1573	394	60	910
Annunciator. Electro-magnetic	F. W. Dunbar	469,995	Mar. 1	530	132	58	1202
Annunciator. Train-order	L. T. Crabtree	480,073	Aug. 2	501	128	60	678
Annunciators. Resetting device for	R. A. Schoenberg	468,697	Feb. 9	1240	315	58	776
Anti-hill cutter	J. Tym	473,799	Apr. 26	2848	715	59	590
Ant or insect guard	J. Elwood	479,976	Aug. 2	317	78	60	642
Anti-trap	J. Royse	473,965	May 3	131	30	59	662
Anti-rattler	E. R. Pettit	476,406	June 7	283	67	59	1493
Antifriction-clasp	W. L. Black	484,947	Oct. 25	2243	578	61	491
Antiseptic quinoline	J. Ziegler	478,495	July 5	662	60	131	
Antiseptic sponge. Artificial	A. Poehl	471,343	Mar. 22	2630	668	58	1637
Anvil attachment	G. W. Rice	486,504	Nov. 22	2103	556	61	1047
Apple cutter and corer	T. Westerman	471,158	Mar. 22	2363	604	58	1585
Aquarium. Picture	E. G. Lochmann	475,404	May 24	2416	617	59	1148
Arm-light circuits. Device for testing	A. H. Manwaren	476,156	May 31	3624	917	59	1397
Arm-light globe-holder	C. A. Pfluger	468,412	Feb. 9	792	197	58	687
Arm-light hanger	C. A. Pfluger	470,766	Mar. 15	1748	{ 450	58	1455
Arm-light hanger	C. A. Pfluger	472,935	Apr. 12	1403	359	59	281
Arm-light hanger for inside use	C. A. Pfluger	468,413	Feb. 9	793	197	58	688
Arch. Fireproof floor	P. M. Bruner	478,914	July 12	1295	322	60	272
Arch. Floor	R. L. Stone	475,354	May 24	2341	600	59	1134
Arch. Hollow cohesive	R. Guastavino, Jr	471,173	Mar. 22	2381	608	58	1589
Arithmetic. Means for instruction in	P. Kalisch	472,057	Apr. 5	69	18, 19	59	16
Arm. Artificial	W. Boardman	469,115	Feb. 16	1886	482	58	913
Arm. Artificial	J. E. Wortham	483,090	Sept. 20	1900	480	60	1735
Armature-conductor and means for insulating the same.	E. Kolben	480,727	Aug. 16	1570	393	60	909
Armature-conductors. Connection for	G. Stephens	470,217	Mar. 8	882	218	58	1279
Armature-core for electric motors	D. Pepper, Jr.	473,077	Apr. 19	1643	418	59	338
Armature-core for electric motors and dynamos	A. J. Lehman	485,224	Nov. 1	194	55	61	613
Armature. Electric-machine	B. G. Lamme	488,016	Dec. 13	1279	{ 318	61	1592
Armature for dynamo-electric machines	M. Deprez	469,080	Feb. 16	1844	472	58	905
Armature for dynamo-electric machines	J. Nebel	482,265	Sept. 6	562	133	60	1444
Armature for dynamo-electric machines	A. L. Parcellle	486,234	Nov. 15	1683	445	61	948
Armature for dynamo-electric machines	H. F. Parshall	480,740	Aug. 16	1591	398	60	914
Armature for dynamo-electric machines	S. H. Short	473,363	Apr. 19	2135	536	59	431
Armature for dynamo-electric machines	S. H. Short	473,364	Apr. 19	2138	536	59	432
Armature for dynamo-electric machines	S. H. Short	473,159	May 17	2034	513	59	1056
Armature for dynamo-electric machines	M. J. Wightman	479,179	July 19	1719	431	60	362
Armature for dynamo-electric machines and motors	C. S. Bradley	486,078	Nov. 15	1426	{ 376	61	898
Armature for dynamo-electric machines or motors	C. G. Curtis	473,568	Apr. 26	2494	{ 630	59	522
Armature for dynamo-electric machines. Ventilating.	E. Thomson	482,397	Sept. 13	806	193	60	1507
Armature for dynamos and motors	E. Thomson	483,700	Oct. 4	267	66	61	56
Armature for electric generators or motors	S. H. Short	473,366	Apr. 19	2141	537	59	433
Armature for electric machines	E. A. Sperry	479,030	July 19	1485	369	60	318
Armature for electric motors	E. C. Morgan	474,848	May 17	1553	396	59	961
Armature for electro-magnetic machines	R. Lundell	487,755	Dec. 13	851	217	61	1507
Armature for electro-magnets. Adjustable	E. Hofmann	472,480	Apr. 5	740	188	59	140
Armature for motors and generators	N. C. Bassett	483,708	Oct. 4	277	69	61	58
Armature. Ring	E. Kolben	480,728	Aug. 16	1572	393	60	909
Armature. Ring	J. G. Pool	468,690	Feb. 9	1225	312	58	773
Armature-ring	D. Pepper, Jr.	473,078	Apr. 19	1644	418	59	338
Armature-winding for dynamo-electric machines	R. Eickemeyer	469,917	Mar. 1	399	{ 100	58	1178
Armature-winding for dynamo-electric machines	R. Eickemeyer	482,625	Sept. 20	1475	367	60	1650
Armature-winding for dynamo-electric machines	E. P. Warner	483,729	Oct. 4	306	76, 77	61	64
Armatures. Device for removing	S. H. Sharpsteen	481,833	Aug. 30	3395	834	60	1288
Armatures. Limiting-stop for	R. Varley, Jr.	476,845	June 14	948	230	59	1639
Armor-plato	H. Clay	485,683	Nov. 8	812	217	61	755
Armor-plates. Manufacture of	T. J. Treslender	475,364	May 24	2353	603	59	1136
Articles. Construction of legged	F. M. Harman and A. L. Eaton	478,857	July 12	1215	302	60	256
Articles. Construction of legged	W. J. Humphreys	467,811	Jan. 26	2447	621	58	449
Artist's easel	G. B. Howland	467,653	Jan. 26	2192	557	58	440
Artist's sketching-screen	T. A. Brouwer, Jr.	486,322	Nov. 15	1822	481	61	978
Asbestos. Affixing manufactured	F. W. Jaqui, Jr.	483,560	Oct. 4	66	61	16	16
Ash or garbage receptacle	W. L. Fergus	472,667	Apr. 12	1011	262	59	205
Ash-pan and fender. Extension	T. L. Jenkins	467,988	Feb. 2	123	30	58	547
Ash-pan and sifter. Combined	C. W. Wall	484,621	Oct. 18	1689	429	61	366
Ash-trap	W. H. Bell	471,263	Mar. 22	2520	639	58	1615
Asphalt blocks. Forming	S. McCarter	478,626	July 12	862	212	60	187
Asphalt. Mixing-machine for	J. B. Pitchford and A. S. Cooper	467,302	Jan. 19	1631	415	58	326
Asphaltum, &c., from natural asphalt. Production and manufacture of pure	H. A. Diehl	469,777	Mar. 1	181	47	58	1136
Asphaltum. Manufacture of	J. A. Dubbs	480,234	Aug. 2	767	60	727	
Asphaltum. Manufacture of	J. A. Dubbs	480,235	Aug. 2	768	194	60	728
Asphaltum. Manufacturing	J. A. Dubbs	468,867	Feb. 16	1497	58	836	
Aspirator or ventilator	S. Costa	475,010	May 17	1809	459	59	1012
Astigmatoscope	J. K. Underwood	476,704	June 7	713	175	59	1579
Atomizer	C. M. Blackman	487,873	Dec. 13	1053	263	61	1547
Atomizer	M. Dittenboefer	483,546	Oct. 4	46	11	61	12
Atomizer	H. M. Dunlap	483,435	Sept. 27	2454	617	60	1852
Atomizer	C. H. Fisber	470,375	Mar. 8	1168	{ 299	58	1331
Atomizer	J. G. Garland	466,978	Jan. 12	1090	{ 300	58	216

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Disg.	Vol.	Page.
Atomizer.....	A. Howard.....	469,144	Feb. 16	1925	493	58	921
Atomizer.....	F. F. Ingram.....	481,951	Sept. 6	46	11	60	1343
Atomizer.....	J. S. Klein.....	473,759	Apr. 26	2786	{ 700 701 }	59	578
Atomizer.....	G. Laubensdorfer and F. Lipp.....	474,605	May 10	1157	294	59	870
Atomizer.....	R. Lockwood.....	478,118	July 5	62	16	60	14
Atomizer.....	C. L. Morehouse.....	485,396	Nov. 1	385	103	61	651
Atomizer.....	T. E. Ogram.....	478,940	July 12	1333	331	60	279
Atomizer.....	V. C. Vant Woud.....	474,035	May 3	240	57	59	684
Atomizer and sprayer. Convertible.....	J. K. Magee.....	482,407	Sept. 13	820	197	60	1509
Atomizer bulb-guard.....	M. Wirths.....	477,345	June 21	1776	434	59	1815
Atomizer. Electrical.....	C. Lightbody.....	469,481	Feb. 23	2467	633	58	1032
Atomizer for liquid fuel.....	S. Cox, Jr.....	477,624	June 21	2238	560	59	1906
Atomizer-nozzle.....	W. Hengershoff and F. Lipp.....	474,526	May 10	1034	265	59	847
Atomizing or spraying liquids. Device for.....	E. R. Keen.....	475,452	May 24	2496	637	59	1162
Attrition-mill.....	W. H. Hoffman.....	486,580	Nov. 22	2223	{ 583 584 }	61	1068
Attrition-mill bushing.....	W. H. Hoffman.....	486,581	Nov. 22	2224	584	61	1068
Auditorium-chair.....	J. W. Patterson.....	488,533	Dec. 20	2144	530	61	1780
Auger.....	G. L. Savage.....	478,970	July 12	1384	341	60	287
Auger. Coal.....	F. W. Corrigan.....	483,216	Sept. 27	2095	531	60	1785
Auger. Earth.....	F. W. Brooksieper.....	481,345	Aug. 23	2593	637	60	1117
Auger. Earth.....	W. H. Clark and H. C. Keefer.....	483,300	Sept. 27	2264	570	60	1816
Auger. Earth.....	M. S. Franks.....	471,605	Mar. 29	3015	767	58	1718
Auger. Earth.....	B. Lane.....	470,059	Mar. 1	622	155	58	1230
Auger. Earth.....	C. A. Scott.....	470,168	Mar. 1	757	195	58	1252
Auger. Earth.....	C. A. Scott and J. C. Gardiner.....	472,403	Apr. 5	621	158	59	117
Auger. Earth.....	T. Smith.....	469,307	Feb. 23	2192	561	58	978
Auger. Earth.....	N. D. Tyler.....	471,320	Mar. 22	2601	660	58	1631
Auger. Earth.....	W. H. Tyler.....	469,427	Feb. 23	2374	609	58	1014
Auger. Earth.....	G. P. Vicken.....	470,725	Mar. 15	1691	436	58	1443
Auger-handle.....	G. E. Rogers.....	484,050	Oct. 11	794	200	61	177
Auger-handle.....	D. B. Whitehill.....	488,463	Dec. 20	2025	505	61	1758
Auger-heads. Die for forming.....	S. H. Jennings.....	469,448	Feb. 23	2406	616	58	1021
Auger-heads. Machine for shaping.....	A. U. Smith.....	486,239	Nov. 15	16-9	447	61	950
Auger. Mortising.....	A. L. Newton.....	479,377	July 19	2035	508	60	424
Auger. Post.....	O. P. Whipple.....	469,290	Feb. 23	2168	556	58	973
Auger. Post-hole.....	H. M. Cryer.....	472,339	Apr. 5	526	136	59	99
Auger. Post-hole.....	H. M. Flanders.....	484,519	Oct. 18	1535	390	61	334
Auger. Post-hole.....	C. Justesen.....	474,664	May 10	1253	320	59	889
Auger. Post-hole.....	H. Mendenhall and J. M. Hite.....	468,812	Feb. 16	1411	358	58	820
Auger. Post-hole.....	J. Mesure.....	467,184	Jan. 19	1148	369	58	292
Autographic register.....	S. D. Cechran.....	475,487	May 24	2552	650	59	1173
Autographic register.....	H. Cook.....	466,768	Nov. 22	2525	{ 660 661 }	61	1130
Autographic register.....	W. L. Eery.....	481,937	Sept. 6	27	7	60	1339
Autographic register.....	W. H. Glennon.....	488,004	Dec. 13	1260	314	61	1558
Autographic register.....	J. Kirby, Jr.....	469,666	Feb. 23	2732	703	58	1087
Autographic register.....	J. Kirby, Jr.....	469,667	Feb. 23	2737	704	58	1088
Autographic register.....	P. E. Loree.....	485,955	Nov. 8	1227	323	61	840
Autographic register.....	J. Pfeifer.....	484,643	Oct. 18	1725	{ 438 439 }	61	372
Autographic register.....	J. Pfeifer.....	484,644	Oct. 18	1732	440	61	374
Autographic register.....	J. Pfeifer.....	488,900	Dec. 27	2708	670	61	1911
Autographic register.....	J. Pfeifer.....	488,901	Dec. 27	2711	{ 670 671 }	61	1911
Autographic register.....	J. Pfeifer.....	488,902	Dec. 27	2713	671	61	1912
Automatic alarm.....	N. Rubenstein.....	476,217	May 31	3740	{ 944 945 }	59	1418
Automatic brake.....	G. Bowler.....	469,535	Feb. 23	2543	654	58	1047
Automatic brake.....	T. A. McCandless.....	482,378	Sept. 13	780	187	60	1501
Automatic brake.....	J. A. McKee and P. G. Hatchett.....	486,886	Nov. 29	2727	711	61	1186
Automatic brake.....	J. H. Priestley.....	481,190	Aug. 23	2320	571	60	1068
Automatic brake.....	J. M. Stone.....	479,577	July 26	2377	{ 592 593 }	60	504
Automatic brake.....	J. R. Wilson.....	487,412	Dec. 6	304	78	61	1381
Automatic gate.....	R. E. Slawson.....	482,462	Sept. 13	906	220	60	1525
Automatic regulator.....	E. J. Houghton and W. White.....	483,121	Dec. 13	1460	368	61	1630
Automatic sprinkler.....	A. P. Howes.....	473,628	Apr. 26	2594	653	59	541
Automatic sprinkler.....	J. Kane.....	484,321	Oct. 11	1218	310	61	260
Automatic sprinkler.....	R. W. Newton.....	478,809	July 12	1148	284	60	243
Automatic sprinkler.....	P. W. Swan.....	488,257	Dec. 20	1692	423	61	1692
Automatic switch.....	N. Newman.....	487,881	Dec. 13	1061	266	61	1549
Awning.....	B. Branner.....	480,553	Aug. 9	1227	323	60	840
Awning.....	B. Brooks.....	478,842	July 12	1201	298	60	253
Awning.....	P. Combs and W. H. Gray.....	477,512	June 21	2040	507	59	1867
Awning.....	W. C. Dredge.....	467,345	Jan. 19	169-8	434	58	339
Awning.....	W. N. Kennedy.....	468,277	Feb. 2	566	139	58	633
Awning.....	F. P. Kirk.....	468,942	Feb. 16	1615	409	58	819
Awning.....	F. A. Leavitt.....	470,894	Mar. 15	1951	499	58	1494
Awning.....	E. O. Roenigk.....	476,074	May 31	3487	879	59	1371
Awning.....	H. Vayre.....	483,950	Oct. 4	635	160	61	131
Awning-frame.....	J. Pettit.....	480,437	Aug. 9	1108	277	60	803
Awning. Portable mine.....	L. Greenwald and M. R. Hopkins.....	471,217	Mar. 22	2454	623	58	1603
Awning. Ventilating.....	C. A. Lloyd.....	476,662	June 7	655	159	59	1566
Awning-worker.....	J. T. Baker.....	476,119	May 31	3565	896	59	1385
Awnings. Device for operating.....	G. K. Bancroft.....	476,439	June 7	333	76	59	1502
Ax-helve attachment.....	W. Donlon.....	483,248	Sept. 27	2152	545	60	1796
Axes. Die for forming.....	J. P. Kelly.....	479,166	July 19	1693	424	60	357
Axes. Manufacture of.....	C. W. Hubbard, Jr.....	487,948	Dec. 13	1169	291	61	1569
Axes. Manufacture of.....	E. Thomson.....	476,967	June 14	1153	278	59	1680
Axle.....	J. Herby.....	483,444	Sept. 27	2464	620	60	1855
Axle.....	R. E. Lehmann.....	472,762	Apr. 12	1157	296	59	231
Axle.....	W. H. Matthews.....	479,223	July 19	1785	447	60	374

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Axle	W. M. Rankin	472,587	Apr. 12	898	230	59	185
Axle	C. L. Sheldon	470,261	Mar. 8	942	234	58	1291
Axle alarm. Hot	A. Backhaus	472,688	Apr. 12	1041	269	59	209
Axle and box. Vehicle	G. W. Smith	488,486	Dec. 20	2064	513	61	1766
Axle and shaft bearing	N. Bersin	470,330	Mar. 8	1094	279	58	1318
Axle-bearing	S. S. Arnold	481,545	Aug. 30	2919	718	60	1198
Axle-bearing	G. Botsford and W. Holtz	476,602	June 7	569	136	59	1549
Axle-bearing	T. J. McGee	481,911	Aug. 30	3525	862	60	1314
Axle-bearing	D. Wigger	474,709	May 10	1321	337	59	903
Axle-blanks and axles. Machine for making continuous collared	O. C. Hall	469,784	Mar. 1	188	49	58	1137
Axle blanks and axles. Manufacture of	O. C. Hall	470,239	Mar. 8	914	226	58	1286
Axle-box	O. Collins	483,045	Sept. 20	1833	466	60	1721
Axle-box	A. Miller	477,768	June 28	2470	617	59	1970
Axle-box	W. L. Mills	484,556	Oct. 18	1591	403	61	346
Axle-box	M. Orenstein	466,622	Jan. 5	499	128	58	96
Axle-box	E. N. Wood	483,372	Sept. 27	2366	593	60	1835
Axle-box. Antifriction	E. M. Briedwell	467,968	Feb. 2	88	22	58	542
Axle box. Car	J. Donnelly	488,877	Dec. 27	2677	662 663	61	1904
Axle box. Car	E. Peckham	485,219	Nov. 1	97	30	61	293
Axle box. Car	I. H. Plummer	471,893	Mar. 29	3462	884	58	1802
Axle box. Car	S. Robertson	487,231	Nov. 29	3336	849	61	1303
Axle box. Car	E. L. Sharpneck	484,054	Oct. 11	798	201	61	178
Axle box. Car	H. B. Spencer	473,529	Apr. 26	2415	612	59	506
Axle-box for street-cars	N. C. Bassett	471,089	Mar. 22	2248	578	58	1563
Axle-box lid	P. N. French	476,194	May 31	3089	932	59	1408
Axle-box lid	R. Souther	484,471	Oct. 18	1457	371	61	319
Axle-box lid. Car	F. P. Boatman	483,801	Oct. 4	419	104	61	87
Axle-boxes. Dust-guard for	H. M. Goodman	471,969	Mar. 29	3567	911	58	1-22
Axle boxes. Dust-guard for car	W. Barr	483,524	Oct. 4	11	3	61	5
Axle. Car	A. Alford	470,651	Mar. 15	1577	411	58	1421
Axle. Car	R. L. McLaren	483,470	Sept. 27	2494	628	60	1861
Axle. Car	D. M. Miller	475,965	May 31	3328	839	59	1336
Axle. Car	D. Sr. and D. Roberge, Jr	486,898	Nov. 29	2785	723	61	1198
Axle. Carriage	F. E. Webb	476,108	May 31	3547	892	59	1381
Axle. Carriage	H. Wecker	480,798	Aug. 16	1675	419	60	931
Axle-collars. Device for cutting grooves in	H. Holcomb	468,085	Feb. 2	265	64	58	576
Axle cooler and lubricator	R. B. Cogan, W. M. Pierce, and J. C. F. Jones	474,294	May 3	639	161	59	761
Axle-cutter	W. A. Pettingill	473,340	Apr. 19	2097	527	59	424
Axle-cutter	D. E. Reed and O. Gurnee	477,268	June 21	1656	405	59	1792
Axle-cutter	J. Swegles	482,767	Sept. 20	1405	347	60	1634
Axle dust-gnard. Car	R. M. Lawless	483,385	Sept. 27	2390	600	60	1839
Axle. Extensible	W. E. Pugsley	475,248	May 17	2173	553	59	1084
Axle for forward wheels of wagons. Crank	M. L. De Witt	485,492	Nov. 1	521	138	61	678
Axle for vehicles. Trussed	H. C. Reed and A. Clark	470,259	Mar. 8	940	233	58	1290
Axle-gage	H. McQuarry	467,470	Jan. 19	1886	481	58	376
Axle journals. Dust-guard for car	F. B. Harrison	467,719	Jan. 26	2305	585 586	58	461
Axle-lubricator	G. W. Beal	475,051	May 17	1870	474	59	1025
Axle-lubricator	E. H. Benners	478,041	June 28	2903	725	59	2052
Axle-lubricator	C. W. Brewer	477,620	June 21	2233	558	59	1905
Axle-lubricator	J. T. Connelly	480,318	Aug. 9	923	233	60	770
Axle-lubricator	H. V. Conway	484,088	Oct. 11	845	214	61	187
Axle-lubricator	J. E. Crook	469,966	Mar. 1	486	121	58	1193
Axle-lubricator	J. C. Cropper	474,652	May 10	1230	315	59	885
Axle-lubricator	P. Dennau, Sr	480,765	Aug. 16	1628	408	60	921
Axle-lubricator	B. Edgar	466,399	Jan. 5	138	38	58	28
Axle-lubricator	J. Q. Finch	482,918	Sept. 20	1633	410	60	1680
Axle-lubricator	T. H. Fox	470,998	Mar. 15	2114	543	58	1525
Axle-lubricator	H. M. Goodman	487,181	Nov. 29	3226	826	61	1285
Axle-lubricator	J. S. Patten	475,147	May 17	2017	509	59	1053
Axle-lubricator	J. S. Patten	479,077	July 19	1553	388	60	331
Axle-lubricator	C. C. Pierce	484,234	Oct. 11	1077	273	61	233
Axle-lubricator	W. H. Pugh	488,402	Dec. 20	1925	483	61	1737
Axle-lubricator	W. W. Smith	469,100	Feb. 16	1869	478	58	910
Axle-lubricator	W. H. Ward	482,503	Sept. 13	980	237	60	1540
Axle-lubricator	W. H. Ward	483,624	Oct. 4	161	40	61	33
Axle-lubricator	G. L. Weaver	482,770	Sept. 20	1408	348	60	1635
Axle-lubricator	I. P. and H. A. Wendell	483,333	Sept. 27	2311	581	60	1825
Axle-lubricator	J. R. Wilson	477,319	June 21	1740	426	59	1808
Axle-lubricator	J. W. Woodhouse	478,832	July 12	1187	294	60	250
Axle-skein	T. G. Mandt	467,819	Jan. 26	2459	624	58	491
Axle-skelp	L. D. Hill	470,787	Mar. 15	1783	459	58	1461
Axle-threading tool	J. C. Stuchel	481,514	Aug. 23	2860	702 703	60	1170
Axle. Vehicle	O. W. Beach	483,975	Oct. 4	683	170	61	141
Axle. Vehicle	A. Hoefler and F. L. G. Chapman	473,189	Apr. 19	1849	460	59	374
Axle. Vehicle	W. J. Miller, E. S. McBean, and J. W. McBurnett	472,545	Apr. 12	841	215	59	173
Axle. Vehicle jointed	E. F. Steele	487,059	Nov. 29	3033	779	61	1246
Axle. Wagon	N. Olsen	479,918	Aug. 2	209	53	60	623
Axle-washer	N. M. Brinkerhoff	477,639	June 28	2271	569	59	1929
Axle-washer rack	T. Gungas	486,640	Nov. 22	2322	608	61	1089
Axle washer. Vehicle	W. Richard, H. G. Ogden, and E. E. Heath	477,065	June 14	1303	317	59	1711
Axles. Adjustable nut for	I. J. Trench	473,272	Apr. 19	1981	497	59	402
Axles. Antifriction-bearing for car	H. B. Williams	477,037	June 14	1256	304	59	1702
Axles. Ball-bearing for	S. Elliott	483,836	Oct. 4	472	118	61	97
Axles. Dust-collar for vehicle	H. Cochran and J. L. Hardie	473,612	Apr. 26	2567	647	59	536
Axles. Journal-bearing for car	P. Sweeney	483,405	Sept. 27	2414	607	60	1844
Axles. Machine for forming lubricator-grooves in vehicle	C. W. Brewer	477,638	June 28	2269	568	59	1929
Axles. Machine for trimming the flash from	W. J. Parmelee	471,136	Mar. 22	2322	597	58	1578

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Axles. Manufacture of.....	W. J. Parmelee.....	472,389	Apr. 5	602	152	59	113
Axles. Manufacture of.....	E. E. Slick.....	470,354	Mar. 8	1132	290	58	1324
Axles. Manufacture of channeled.....	O. C. Hall.....	471,544	Mar. 29	2931	746	58	1703
Axles of electrically-propelled vehicles. Thrust-collar for.....	R. P. Osgood.....	477,695	June 28	2352	588	59	1948
Axles, shafts, &c. Manufacture of.....	B. F. and F. T. Peacock.....	475,969	May 31	3332	840	59	1337
Azimuth-circle.....	E. S. Ritchie.....	481,625	Aug. 30	3046	{ 743 744 }	60	1321
Baby-jumper.....	J. Higham.....	472,351	Apr. 5	542	140	59	101
Baby-jumper.....	B. A. Husbands.....	488,609	Dec. 27	2261	561	61	1821
Baby-jumper.....	W. S. Tothill.....	483,270	Sept. 27	2219	557	60	1-07
Baby tender and crib. Combined.....	A. Baird.....	485,081	Oct. 25	2451	631	61	533
Baby-walker.....	A. Baird.....	481,609	Aug. 30	3022	739	60	1216
Back-band hook.....	S. Ward.....	467,070	Jan. 12	1237	313	58	243
Back-rest.....	J. N. Butler.....	486,275	Nov. 15	1761	463	61	965
Badge.....	C. A. Tripp.....	471,039	Mar. 15	2169	558	58	1536
Badge.....	B. S. Whitehead.....	484,527	Oct. 18	1546	392	61	336
Badge and bouquet-holder. Combined.....	H. W. Laun.....	471,181	Mar. 22	2396	611	58	1591
Badge and pencil-holder. Combined.....	J. J. Phare.....	469,529	Feb. 23	2536	652	58	1045
Badge and rosette. Emblematic society.....	B. S. Whitehead.....	476,939	June 14	1107	267	59	1671
Badge. Illuminated.....	P. J. McLain.....	485,748	Nov. 8	915	245	61	777
Bag:							
<i>See</i> Bicycle-bag.....	Paper bag.....						
Coal or other bag.....	Saddle-bag.....						
Feed-bag.....	Shopping-bag.....						
Mail-bag.....	Striking-bag.....						
Moth-proof bag.....	Tobacco-bag.....						
Nose-bag.....	Traveling-bag.....						
Nursery-bag.....							
Bag.....	F. W. Lawrence.....	482,428	Sept. 13	857	205	60	1516
Bag, bale, and bundle tie.....	D. E. Ladd.....	473,822	Apr. 26	2380	722	59	597
Bag-bundling press.....	J. Sabold.....	480,967	Aug. 16	1942	486	60	983
Bag-fastener.....	B. L. Hubert.....	483,450	Sept. 27	2473	622	60	1856
Bag-fastener.....	R. C. Rice.....	471,433	Mar. 22	2776	708	58	1664
Bag-fastener.....	L. A. Walker.....	476,219	May 31	3742	945	59	1418
Bag-fastener.....	E. G. Williams.....	485,675	Nov. 8	801	214	61	753
Bag-fastener and support.....	W. D. Smith.....	473,969	May 3	135	31	59	663
Bag-fastening.....	J. Baunach.....	477,097	June 14	1362	331	59	1723
Bag-filler.....	T. Crane.....	470,475	Mar. 8	1330	346	58	1361
Bag frame. Traveling.....	W. Roemer. (Reissue).....	11,278	Oct. 18	1934	492	61	418
Bag-holder.....	J. H. Craig.....	471,466	Mar. 22	2824	719	58	1673
Bag-holder.....	M. Fortin.....	486,708	Nov. 22	2433	633	61	1111
Bag-holder.....	F. S. Henning and W. Pigott.....	469,061	Feb. 16	1820	465	58	900
Bag-holder.....	E. H. Ketchum.....	482,641	Sept. 13	1189	288	60	1580
Bag holder.....	J. D. Trimmerman.....	477,235	June 21	1601	392	59	1782
Bag-holder.....	A. Young.....	484,079	Oct. 11	835	211	61	186
Bag-holding device.....	J. Peer.....	488,449	Dec. 20	2004	{ 500 501 }	61	1754
Bag-lock.....	F. P. Cobham.....	475,037	May 17	1848	469	59	1020
Bag-lock.....	F. and L. S. Depuy.....	486,159	Nov. 15	1575	417	61	927
Bag-lock.....	H. McKinnon.....	477,331	June 21	1756	430	59	1812
Bags, boxes, &c. Corner-piece for traveling.....	W. Roemer.....	466,966	Jan. 12	1069	271	58	211
Bagging-machine.....	J. R. Mesa.....	467,377	Jan. 19	1742	445	58	347
Bagasse-carrier.....	L. W. Brown.....	488,423	Dec. 20	1967	491	61	1745
Bagatelle-board. Pocket.....	F. L. Lathrop.....	479,432	July 26	2140	534	60	459
Bail.....	A. C. Burgess.....	470,391	Mar. 8	1198	306	58	1336
Bail and ear therefor. Detachable.....	J. N. Lusk.....	472,130	Apr. 5	193	51	59	36
Bail-ear and cover-fastener.....	G. D. Strayer.....	470,147	Mar. 1	747	186	58	1244
Bait. Spoon.....	E. F. Pfeuger.....	480,132	Aug. 2	598	152	60	696
Bait. Spoon.....	G. M. Skinner.....	479,575	July 26	2375	592	60	503
Baker's and confectioner's depositing apparatus.....	R. Meeson.....	484,937	Oct. 25	2232	575	61	489
Baking-pan.....	S. L. Kelly.....	478,609	July 12	841	207	60	182
Baking-pan.....	S. C. and F. G. Long.....	486,259	Nov. 15	1734	457	61	959
Baking-pan.....	E. B. Osgood.....	486,734	Nov. 22	2469	644	61	1119
Baking-pan.....	W. H. Pickett and J. L. Neill.....	472,811	Apr. 12	1922	314	59	244
Baking-pan.....	W. Wachs.....	472,595	Apr. 12	906	232	59	186
Baking pan. Cake.....	M. E. McDaniel.....	466,617	Jan. 5	491	126	58	94
Baking-plate for pies, &c.....	C. L. Wagand.....	476,340	June 7	178	42	59	1471
Baking-powder.....	C. A. Catlin.....	474,811	May 17	1488		59	950
Balance.....	L. Da Rozir.....	488,142	Dec. 13	1492	375	61	1636
Balance. Indicating and recording.....	J. H. Greenstreet.....	478,232	July 5	269	66, 67	60	54
Balance. Platform.....	H. M. Merrill.....	483,937	Oct. 4	616	156	61	127
Balance. Proportional.....	O. H. Jadwin.....	481,618	Aug. 30	3035	741	60	1219
Balance. Recording.....	C. F. Ames.....	481,543	Aug. 30	2916	717	60	1297
Balance. Spring.....	F. H. Morgan and G. H. Scott.....	479,718	July 26	2609	648	60	546
Balance-wheel.....	H. Bonck and J. H. Lovendale.....	486,754	Nov. 22	2503	653	61	1126
Balances. Weight-pan for.....	R. E. McClelland.....	480,027	Aug. 2	433	109	60	664
Balcony. Folding window.....	C. Thomson.....	478,177	July 5	168	43	60	36
Bale-covering. Metallic.....	G. B. Hussey.....	474,046	May 3	263	64	59	6-8
Bale-tie.....	P. Bardon.....	488,302	Dec. 20	1763	444	31	1706
Bale-tie.....	C. B. Brainerd.....	485,253	Nov. 1	151	44	61	604
Bale-tie.....	J. W. Griswold.....	466,563	Jan. 5	409	104	58	78
Bale-tie.....	I. A. Kilmer.....	476,654	June 7	645	157	59	1565
Bale-tie.....	R. Kilmer.....	479,924	Aug. 2	328	80	60	645
Bale-tie.....	E. S. Lenox.....	466,609	Jan. 5	481	124	58	92
Bale-tie.....	A. S. Robinson.....	468,467	Feb. 9	872	222	58	703
Bale-tie.....	J. B. Rollins.....	488,795	Nov. 22	2571	670	61	1130
Bale-tie.....	H. C. Tully.....	471,628	Mar. 29	3049	776	58	1723
Bale-tie.....	E. W. Wickey.....	487,504	Dec. 6	447	116	61	1410
Bale-tie cutter.....	G. M. Rounds.....	480,875	Aug. 16	1796	449	60	955
Bale-tie machine.....	W. S. Livengood.....	468,667	Feb. 9	1189	303	58	765
Bale-tie machine.....	W. S. Livengood.....	486,615	Nov. 22	2284	595	61	1080
Bale-ties. Machine for making.....	W. A. Laidlaw.....	473,321	Apr. 19	2054	{ 516 517 }	59	416
Bales. Device for drawing tie-bands around.....	J. J. Martin and W. H. Brownfield.....	481,184	Aug. 23	2310	549	60	1066

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Baled material. Sampling device for	C. S. Hunter	473,316	Apr. 19	2048	514	59	415
Baling apparatus. Cotton	E. D. Carter	474,293	May 3	636	161	59	760
Baling apparatus. Cotton	E. M. Ivens	475,117	May 17	1977	501	59	1045
Baling cotton. Apparatus for	J. G. Goldthwaite	467,860	Jan. 26	2527	640 641	58	503
Baling-machine	E. A. Walker	485,824	Nov. 8	1009	270 271 272	61	795
Baling-press	J. W. Brown and A. A. Gehrt	468,638	Feb. 9	1138	290	58	755
Baling-press	P. K. Dederick	480,176	Aug. 2	664	169	60	708
Baling-press	P. K. Dederick	480,177	Aug. 2	665	169	60	708
Baling-press	H. Deitz	476,954	June 14	1135	273 274	59	1676
Baling-press	H. Deitz	482,303	Sept. 6	625	149	60	1457
Baling-press	A. A. Gamble	469,737	Mar. 1	107	29	53	1120
Baling-press	W. Hemingway	472,049	Apr. 5	59	15	59	14
Baling-press	J. B. and J. R. Johnson	480,771	Aug. 16	1638	410	60	923
Baling-press	W. A. Laidlaw	473,320	Apr. 19	2052	515	59	416
Baling-press	W. S. Livengood	479,287	July 19	1879	470 471	60	391
Baling-press	A. Mattijetz	471,012	Mar. 15	2133	547	58	1529
Baling-press	C. B. Selover	475,002	May 17	1799	456	59	1010
Baling-press	C. E. Whitman	485,072	Oct. 25	2436	626	61	530
Baling-press	H. L. Whitman	472,838	Apr. 12	1259	322 323	59	251
Baling-press	A. Wickey	486,997	Nov. 29	2942	758	61	1229
Baling-press	A. Wickey	487,503	Dec. 6	446	115	61	1409
Baling-press	J. A. Wright	467,475	Jan. 19	1893	483 484	58	377
Baling-press block-dropper	E. W. Wickey	475,837	May 31	3119	790	59	1296
Baling-press feeder	J. H. Kruse and M. K. Shipley	485,045	Oct. 25	2402	617	61	522
Baling-press power	P. C. Southwick	473,645	Apr. 26	2619	660	59	546
Baling-presses. Power mechanism for	G. O. Vernon	466,731	Jan. 5	678	174	58	129
Ball-bats. Cushion-tip for	G. W. Hancock	471,545	Mar. 29	2932	746	58	1703
Ballasting device. Automatic	B. Halstead	472,904	Apr. 19	1514	387	59	314
Balling-machine	G. J. Torrance	472,774	Apr. 12	1173	300	59	234
Balling slivers. Machine for	W. M. Pawling	487,891	Dec. 13	1076	269 270	61	1552
Balloon. Captive	L. Payn	476,893	June 14	1028	249	59	1655
Ballot-box	F. W. Barrett	488,748	Dec. 27	2478	616	61	1263
Ballot-box	V. A. Grimes and C. R. Lane	477,533	June 21	2080	517	59	1876
Ballot-box	C. F. Hodsdon	478,283	July 5	353	85	60	71
Ballot-box	E. Hoxie	488,203	Dec. 20	1602	400	61	1675
Ballot-box	F. K. Plumby	478,264	July 5	326	79	60	65
Ballot-box. Pneumatic registering	J. McTammany	482,691	Sept. 13	1265	310 311 312	60	1595
Ballot-holder for voting-machines	K. Dougan	488,937	Dec. 27	2772	684 685	61	1924
Ballots. Device for facilitating the counting of	I. S. Pear	468,972	Feb. 16	1675	427	58	870
Banana-case	J. T. Cornforth	484,355	Oct. 11	1270	324	61	271
Band-cutter and feeder	J. E. Boles	487,363	Dec. 6	208	57	61	1361
Band-cutter and feeder	A. A. Booth	469,907	Mar. 1	385	96.97	58	1175
Band-cutter and feeder	W. P. Burke	487,987	Dec. 13	1237	308	61	1582
Band-cutter and feeder	R. E. Dorton	482,677	Sept. 13	1239	302 303	60	1590
Band-cutter and feeder	W. H. Ellinger	473,620	Apr. 26	2584	651	59	539
Band-cutter and feeder	D. Gwin	482,476	Sept. 13	931	227	60	1529
Band-cutter and feeder	M. E. Johnson and A. M. Phillips	481,570	Aug. 30	2961	727	60	1205
Band-cutter and feeder	P. Swenson	470,265	Mar. 8	948	235	58	1292
Band-cutter and feeder support	R. E. Dorton	482,676	Sept. 13	1238	302	60	1590
Band-fastener	H. M. Tileston	485,482	Nov. 1	508	134	61	675
Band-tightener	D. J. C. Arnold	485,484	Nov. 1	512	135	61	676
Bandages. Machine for winding	C. Miller	476,667	June 7	660	160	59	1568
Banding-machine	W. H. McDavitt	473,886	Apr. 26	2996	756	59	619
Banding-machine	W. M. Wood	467,657	Jan. 26	2198	559	58	441
Banjo	J. W. Clement	470,986	Mar. 15	2091	535	58	1521
Banjo	D. T. Moore	484,222	Oct. 11	1053	267	61	228
Banjo	F. Myers	472,904	Apr. 12	1351	348	59	271
Banjo	J. E. Quinlan	477,451	June 21	1945	482	59	1848
Banjo	B. E. Shattuck	476,083	May 31	3502	882	59	1374
Banjo attachment	W. L. Roberts	486,053	Nov. 8	1381	367	61	871
Banjo-guard	W. E. Collins	483,683	Oct. 4	240	60	61	50
Banjos or violins. Tail-piece for	H. C. Middlebrooke	487,879	Dec. 13	1060	265	61	1548
Bank	E. M. Goldsmith	484,310	Oct. 11	1204	306	61	257
Bank-bill binder	H. D. Allen	467,967	Feb. 2	87	21	58	541
Bank-note	W. W. Wood	477,038	June 14	1257	305	59	1702
Bank. Pocket savings	L. U. Loomis	471,485	Mar. 22	2851	726	58	1679
Bank. Trick savings	C. Tollner	475,525	May 24	2617	666	59	1186
Bar:							
See Car draw-bar.	Horseshoe-blank bar.						
Claw-bar.	Jail-bar.						
Cutter-bar.	Pantograph-bar.						
Finger-bar.	Pinch-bar.						
Fire-bar.							
Bar-fixture	A. Brandon	477,987	June 28	2911	704	59	2036
Bar-fixture	J. J. Lefebvre and J. O. Cessna	471,327	Mar. 22	2609	661	58	1632
Bar-fixtures. Sectional interchangeable	J. Neumann	473,771	Apr. 26	2799	704	59	582
Barber's chair	G. W. Archer	476,774	June 14	832	203	59	1614
Barber's chair	S. Cloutier	488,707	Dec. 27	2419	599	61	1851
Barbers' chairs. Swivel-stand for	A. Kern	473,397	Apr. 19	2300	552	59	444
Barbers. Combination-case for	R. V. Russell	471,752	Mar. 29	3249	827	58	1760
Barber's register	F. Witte	474,935	May 17	1679	430	59	988
Bark-cutting machine. Tan-	A. F. Jones	474,745	May 10	1378	349	59	914

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Barracks. Card	G. Espitallier	484,413	Oct. 18	1362	{ 348 349 }	61	301
Barrel	E. Cole	482,675	Sept. 13	1236	301	60	1590
Barrel	J. P. Cowden	474,723	May 10	1346	342	59	908
Barrel	G. H. Forster	481,350	Aug. 23	2601	639	60	1119
Barrel-bushings. Cleaner for	E. T. Mueller	472,065	Apr. 5	84	23	59	18
Barrel-contractor	P. Little	473,764	Apr. 26	2791	702	59	579
Barrel-cover	G. E. and G. E. Raymond, Jr	485,227	Nov. 1	113	35	61	596
Barrel-covers. Locking device for removable	J. C. Tiffany	470,519	Mar. 8	1392	364	58	1374
Barrel-dripper	C. B. Allgood	478,303	July 5	383	92	60	77
Barrel-elevator	C. A. Sterling	477,874	June 28	2646	{ 661 662 }	59	2002
Barrel-expander	P. Little	474,020	May 3	216	51	59	679
Barrel-fastener	E. F. Jenkins	474,133	May 3	383	92	59	712
Barrel-filler	K. Kiefer	487,531	Dec. 6	490	129	61	1418
Barrel-head	G. E. Beau	470,173	Mar. 8	811	201	58	1265
Barrel-head-beveling machine	H. Theis	481,335	Aug. 23	2581	634	60	1116
Barrel-head machine	F. H. Kane	488,167	Dec. 13	1542	{ 386 387 }	61	1646
Barrel head. Produce	J. A. Campbell	467,870	Jan. 26	2542	644	58	506
Barrel-heads. Adjustable hook for clamping	A. B. Vaag	467,784	Jan. 26	2399	609	58	479
Barrel-heading machine	F. Emmert	474,596	May 10	1144	291	59	868
Barrel-hoist	R. Weigel and B. Waechtler	484,073	Oct. 11	823	208	61	183
Barrel or cask tilting device	D. O. Kimmel and J. Keck	469,703	Mar. 1	50	16	58	1108
Barrel-press	W. Fullard	482,574	Sept. 13	1096	266	60	1563
Barrel-rack	W. Ludwig	468,463	Feb. 9	865	219	58	702
Barrel-roller	J. A. Browning	469,119	Feb. 16	1890	483	58	914
Barrel setting-up and firing machine	W. W. Leffingwell	473,630	Apr. 26	2598	654	59	542
Barrel-stand	H. Campbell	479,735	July 26	2642	655	60	552
Barrel-stand	H. H. Fisk	483,978	Oct. 4	687	171	61	142
Barrel-stand	M. Herzberg, S. T. Whitaker, and W. C. Lanier	485,742	Nov. 8	908	243	61	775
Barrel-stand	T. F. Marshall	471,010	Mar. 15	2131	547	58	1529
Barrel-stand	C. Rettig	481,640	Aug. 30	3065	748	60	1225
Barrel. Ventilated	R. J. Patterson	473,569	Apr. 26	2535	640	59	531
Barrels, &c. Cover for	E. S. Phelps	476,407	June 7	284	67	59	1493
Barrels, &c. Machinery for shaping, finishing, and flanging metal	T. C. Barraclough	470,737	Mar. 15	1707	440	58	1447
Barrels, &c. Making	H. Campbell	479,734	July 26	2641	655	60	552
Barrels, &c. Manufacture of metal	D. Caird	473,495	Apr. 26	2360	{ 598 599 }	59	497
Barrels. Means for protecting the bungways of	M. Anthony	476,180	May 31	3669	927	59	1405
Barrels. Mechanism used in the manufacture of	S. Wright	471,838	Mar. 29	3388	{ 864 865 }	58	1787
Barrels, &c. Setting-up and forming machine for	H. Campbell	479,627	July 26	2448	610	60	517
Barrels, &c. Tap-socket for	C. J. Mayhew	476,665	June 7	659	160	59	1567
Barrels. Thimble and bushing for	M. Anthony and W. C. Savage	468,144	Feb. 2	359	88	58	594
Barrow-coat	E. Halford	471,478	Mar. 22	2845	724	58	1677
Barrow-wheel	M. Crossland and D. Long	481,298	Aug. 23	2522	619	60	1105
Barrow-wheel	C. A. Cabbage	472,570	Apr. 12	873	325	59	180
Base-ball apparatus	W. C. Blades	475,432	May 24	2463	628	59	1156
Basic-lined furnace	J. H. Darby	484,181	Oct. 11	987	252	61	215
Basic lining	J. Reese	481,869	Aug. 30	3449	600	60	1300
Basin. Catch	J. E. Shapley	468,157	Feb. 2	376	93	58	597
Basin. Catch	E. F. St. John	478,654	July 12	900	223	60	194
Basin-clamp	J. H. Glauber	483,804	Oct. 4	422	104	61	88
Basin cover. Catch	W. M. Whitten	468,714	Feb. 9	1262	321	58	781
Basin strainer and stopper	H. H. Craigie	469,513	Feb. 23	2509	643	58	1040
Basin. Wash	J. Kelly	479,429	July 26	2134	533	60	458
Basins, bath-tubs, &c. Automatically-opening outlet for	J. M. Carrère, Jr	470,179	Mar. 8	823	203	58	1268
Basins. Seal-trap for catch	T. Tomliussen	468,141	Feb. 2	355	88	58	593
Basket	F. A. Blackmon	466,917	Jan. 12	996	255	58	198
Basket	F. H. Deane	478,411	July 5	544	{ 132 133 }	60	107
Basket	F. and H. Jepsen	470,680	Mar. 15	1621	421	58	1429
Basket	O. Stoddard	476,498	June 7	417	97	59	1518
Basket. Bottle	C. A. Knight	476,150	May 31	3615	913	59	1395
Basket-cover fastening	G. C. Garbrance	479,797	Aug. 2	34	8	60	588
Basket for marketing fruit	M. B. Williams	470,732	Mar. 15	1700	438	58	1445
Basket handle and cover-fastener. Fruit	F. A. Rappleye	474,925	May 17	1666	425	59	985
Basket handle or carrier	S. F. Robbins	479,529	July 26	2309	577	60	491
Basket. Lunch	J. N. Hahn and J. P. Herman	478,103	July 5	39	12	60	10
Basket protector. Clothes	L. Beard	466,527	Nov. 22	2135	563	61	1053
Basket. Truck or fruit	N. T. Fitch	472,964	Apr. 12	1449	370	59	289
Basket. Wire desk	L. G. Beers	473,054	Apr. 19	1608	410	59	331
Baskets. Machine for forming berry	R. E. Morey	466,617	Nov. 22	2236	596	61	1081
Baskets. Means for securing coverings of netting to	A. E. Story	472,893	July 12	1262	312	60	265
Bath: See Portable bath. Solar or other bath.							
Sitz-bath.							
Bath and wash tub. Convertible	N. F. Hurdal	469,570	Feb. 23	2602	667	58	1058
Bath apparatus. Electric	H. E. Waite	477,975	June 28	2791	699	59	2032
Bath apparatus. Needle	J. Clifford and J. H. Gavin	475,754	May 31	2972	754	59	1267
Bath-room drying companion	D. W. Leet	486,674	Nov. 22	2374	621	61	1099
Bath-tub	J. T. Watson	476,950	June 14	1127	271	59	1675
Bath-tub. Folding	E. A. O'Brien	477,443	June 21	1933	478	59	1845
Bath-tub seat	G. A. Keene	488,011	Dec. 13	1272	317	61	1591
Bather's appliance	W. H. Mattson	486,348	Nov. 15	1867	491	61	985
Bathing apparatus. Vapor	R. Lange	473,935	May 3	83	17	59	652
Batteries. Apparatus for charging secondary	C. O. Mailloux	467,543	Jan. 26	2027	513	58	410
Batteries. Apparatus for charging secondary	C. O. Mailloux	467,544	Jan. 26	2029	514	58	410
Batteries. Apparatus for charging secondary	C. O. Mailloux	467,546	Jan. 26	2036	515	58	411
Batteries. Apparatus for charging secondary	C. O. Mailloux	467,547	Jan. 26	2041	516	58	411

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Batteries. Charging secondary.....	C. O. Mailloux.....	467,545	Jan. 26	2034	{ 514 515 }	58	411
Batteries. Electrolytes or depolarizing solution for galvanic.....	S. Miller.....	468,887	Feb. 16	1527	.....	58	842
Batteries. Exciting fluid for galvanic.....	C. Lütcke, Jr.....	474,454	May 10	929	.....	59	826
Batteries. Finishing grids for secondary.....	A. F. Madden.....	485,128	Oct. 25	2516	647	61	546
Batteries. Standard cell for electric.....	H. S. Carhart.....	485,089	Oct. 25	2465	634	61	536
Battery: See Diffusion-battery. Medical battery. Electric battery. Plunge-battery. Galvanic battery. Secondary battery. Galvanic body-battery. Voltaic battery.							
Battery.....	W. A. Childs.....	477,645	June 28	2275	571	59	1930
Battery-cell.....	E. P. Usher.....	480,884	Aug. 16	1804	451	60	957
Battery-cell or similar article. Sealed.....	C. Willms.....	479,541	July 26	2326	581	60	495
Battery compound.....	W. Wright.....	484,385	Oct. 11	1316	.....	61	280
Battery-connector.....	E. R. Knowles.....	482,012	Sept. 6	143	35	60	1363
Battery cut-off. Automatic.....	W. S. Richards.....	482,136	Sept. 6	342	82	60	1402
Battery-plate.....	E. P. Usher.....	480,887	Aug. 16	1807	451	60	957
Battery-plate.....	E. P. Usher and W. F. Draper.....	480,886	Aug. 16	1806	451	60	957
Battery plate and making the same. Storage.....	W. W. Donaldson and R. Macrae.....	471,538	Mar. 29	2921	743	58	1701
Battery plate. Secondary.....	E. R. Knowles.....	480,266	Aug. 9	836	213	60	754
Battery plate. Storage.....	H. G. Osburn.....	479,835	Aug. 2	92	24	60	600
Battery solutions. Preparing.....	E. Poppowitsch.....	480,033	Aug. 2	443	.....	60	666
Battery-zinc.....	C. B. Schoenmehl.....	467,239	Jan. 19	1530	390	58	308
Battery-zinc and making the same.....	J. Beattie, Jr.....	466,820	Jan. 12	825	212	58	167
Bead attachment.....	A. Godfrey.....	474,192	May 3	367	88	59	708
Beading and turning machine.....	J. E. Brown.....	476,809	June 14	987	239	59	1647
Beading-machine.....	J. P. Howe.....	470,573	Mar. 8	1460	379	58	1358
Beam clamp and banger.....	W. W. Canby.....	470,102	Mar. 1	687	168	58	1233
Beams. Art of and apparatus for cutting flanged.....	J. A. Potter.....	485,981	Nov. 8	1267	334	61	848
Beams. Bolster for.....	L. Duvinage.....	468,062	Feb. 2	232	57	58	569
Beam-picker.....	H. A. Bacon.....	483,986	Oct. 11	703	177	61	159
Beam picker and sorter.....	E. Knapp.....	472,299	Apr. 5	455	{ 117 118 }	59	86
Bearing.....	W. H. Bache.....	486,061	Nov. 8	1396	370	61	874
Bearing.....	P. H. Holmes.....	482,309	Sept. 6	647	155	60	1462
Bearing.....	H. Howson.....	476,144	May 31	3604	911	59	1393
Bearing. Adjustable.....	F. Hart.....	475,311	May 24	2364	563	59	1119
Bearing. Adjustable.....	B. V. Nordberg.....	468,822	Feb. 16	1426	363	58	823
Bearing. Antifriction.....	F. Mossberg.....	486,052	Nov. 8	1380	367	61	871
Bearing. Antifriction.....	M. O. Parenteau.....	488,697	Dec. 27	2408	596	61	1848
Bearing. Antifriction.....	W. F. Wellman.....	475,835	May 31	3117	789	59	1295
Bearing. Antifriction thrust.....	S. Ingersoll.....	488,916	Dec. 27	2583	641	61	1884
Bearing. Antifriction thrust.....	G. Wilkes and F. Edwards.....	482,430	Sept. 13	859	206	60	1517
Bearing. Ball.....	F. A. Grüneberg.....	477,113	June 14	1380	336	59	1726
Bearing. Ball.....	G. F. Simonds.....	466,435	Jan. 5	203	52	58	39
Bearing. Ball.....	G. F. Simonds.....	466,436	Jan. 5	205	52	58	39
Bearing. Ball.....	G. F. Simonds.....	466,437	Jan. 5	206	52, 53	58	39
Bearing. Ball.....	G. F. Simonds.....	466,438	Jan. 5	208	53, 54	58	40
Bearing. Ball.....	G. F. Simonds.....	466,439	Jan. 5	210	54	58	40
Bearing. Ball.....	G. F. Simonds.....	466,440	Jan. 5	212	54	58	40
Bearing. Ball.....	G. F. Simonds.....	466,443	Jan. 5	216	55	58	41
Bearing. Ball.....	G. F. Simonds.....	466,444	Jan. 5	217	56	58	41
Bearing. Ball.....	G. F. Simonds.....	466,445	Jan. 5	218	56	58	42
Bearing. Ball.....	G. F. Simonds.....	466,446	Jan. 5	219	56	58	42
Bearing. Ball.....	H. G. Yates.....	468,067	Feb. 2	241	59	58	571
Bearing-box adjuster. Automatic.....	H. L. Hopkins.....	472,122	Apr. 5	176	48	59	33
Bearing. Dust-proof swivel shaft.....	T. A. Edison.....	474,593	May 10	1140	290	59	867
Bearing for screw-nuts. Ball.....	C. E. Brunthaver.....	477,642	June 28	2373	569	59	1929
Bearing for shafting. Thrust.....	C. D. Mosher.....	485,207	Nov. 1	80	25	61	589
Bearing for signal and switch rods.....	A. G. Evans.....	483,548	Oct. 4	48	12	61	12
Bearing for vehicle-wheels. Ball.....	E. S. Frazier.....	482,896	Sept. 20	1604	402	60	1674
Bearing. Machinery.....	J. D. Brown.....	484,993	Oct. 25	2320	599	61	506
Bearing. Non-metallic.....	W. T. Carroll.....	475,929	May 31	3266	824	59	1324
Bearing plate for vehicles. Center.....	D. L. Barnes.....	468,471	Feb. 9	876	223	58	704
Bearing. Roll.....	A. Paterson.....	477,818	June 28	2549	638	59	1984
Bearing. Roller.....	S. B. Bartlett.....	485,083	Oct. 25	2453	631	61	533
Bearing. Roller.....	J. Gibbons.....	487,690	Dec. 6	746	191	61	1468
Bearing. Roller.....	F. Van Benthuyssen.....	479,038	July 19	1498	372	60	321
Bearing. Shaft.....	C. F. Search.....	485,890	Nov. 8	1121	296	61	818
Bearing. Thrust.....	W. H. Hultgren.....	468,043	Feb. 2	207	51	58	565
Bearings. Making cages for antifriction.....	F. Mossberg.....	487,194	Nov. 29	3346	830	61	1288
Bearings. Making composition.....	H. Howson.....	476,145	May 31	3605	911	59	1393
Bearings. Spring-roll for roller.....	J. W. Hyatt.....	487,530	Dec. 6	488	128	61	1417
Bed and dressing-case. Combined folding.....	W. L. Kimerly.....	484,765	Oct. 13	1922	491	61	417
Bed attachment. Folding.....	H. W. Ru Ton.....	475,250	May 17	2175	554	59	1085
Bed, billiard-table, &c. Combined folding.....	R. N. Barger.....	481,385	Aug. 23	2655	651	60	1129
Bed-bottom.....	S. Bertenshaw.....	472,978	Apr. 19	1483	379	59	309
Bed-bottom.....	A. H. Frost.....	468,054	Feb. 2	522	54	58	567
Bed-bottom.....	L. Hinkle.....	484,912	Oct. 25	2187	563	61	481
Bed-bottom.....	H. Reinhold.....	471,622	Mar. 29	3040	774	58	1722
Bed-bottom.....	J. B. Ryan.....	480,282	Aug. 9	857	219	60	759
Bed-bottom.....	W. H. Scott.....	487,430	Dec. 6	330	84	61	1386
Bed-bottom.....	C. T. Segar.....	480,788	Aug. 16	1664	416	60	928
Bed-bottom.....	C. T. Segar.....	480,789	Aug. 16	1664	416	60	928
Bed-bottom. Coiled-wire.....	T. W. Klipfel.....	477,602	June 28	2297	575	59	1934
Bed-bottom. Folding.....	S. Raymond.....	470,706	Mar. 15	1664	431	58	1438
Bed-bottom. Spring.....	D. Edgar.....	469,936	Mar. 1	274	71	58	1154
Bed-bottom. Spring.....	W. E. Frank and O. S. Foster.....	466,535	Jan. 5	361	90	58	69
Bed-bottom. Spring.....	J. B. Jones.....	474,911	May 17	1643	419	59	981
Bed-bottom. Spring.....	A. F. Purefoy.....	486,183	Nov. 15	1603	426	61	932
Bed-bottom. Spring.....	A. F. Purefoy.....	486,184	Nov. 15	1605	426	61	933

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bed-bottom. Wire	G. Witter	484,484	Oct. 18	1482	377	61	323
Bed-bottom. Woven-wire	W. B. Campbell	482,337	Sept. 13	700	167	60	1487
Bed-brace	A. Harden	467,456	Jan. 19	1860	474	58	370
Bedbug-trap	F. F. Baggessen	481,270	Aug. 23	2466	608	60	1096
Bed. Cabinet	J. W. Hayton and S. H. Swift	476,923	June 14	1077	259 260	59	1665
Bed canopy. Folding	A. H. Eva	479,063	July 19	1532	382	60	328
Bed case and wardrobe. Combined folding	A. S. White	473,984	May 3	154	36	59	667
Bed. Child's folding	H. Walker	471,203	Mar. 22	2430	618	68	1598
Bedclothes-clamp	A. W. Hamble	483,628	Oct. 4	165	41	61	34
Bed-covering. Atmospheric	W. Holder	469,247	Feb. 23	2092	538	58	960
Bed. Folding	L. O. Anderson	467,603	Jan. 26	2122	539	58	427
Bed. Folding	M. K. English	476,876	June 14	997	242	59	1619
Bed. Folding	J. Ganey	456,867	Nov. 29	2702	705	61	1181
Bed. Folding	W. P. Griffith	475,499	May 24	2572	655	59	1177
Bed. Folding	W. S. Gunn	469,518	Feb. 23	2518	646 647	58	1041
Bed. Folding	E. E. Herrinton and I. C. Smith	485,276	Nov. 1	181	53	61	610
Bed. Folding	W. Kelsey	479,599	July 26	2404	599	60	509
Bed. Folding	L. V. Moulton	474,027	May 3	226	54	59	681
Bed. Folding	L. V. Moulton	474,249	May 17	1554	396 397	59	962
Bed. Folding	W. S. Nevins	482,266	Sept. 6	563	133	60	1444
Bed. Folding	W. B. Noyes	483,724	Oct. 4	296	74	61	62
Bed. Folding	J. Penney	484,722	Oct. 18	1847	470	61	394
Bed. Folding	G. W. Rodecap	478,761	July 12	1065	264 265	60	227
Bed. Folding	L. Sekofsky	473,355	Apr. 19	2122	533	59	429
Bed. Folding	W. D. Snyder	487,685	Dec. 6	729	186	61	1468
Bed. Folding	H. Stevenson	477,967	June 28	2780	696	59	2029
Bed. Folding	W. P. Tracy	472,321	Apr. 5	492	128	59	92
Bed. Folding	C. M. Wagner	479,661	Aug. 2	128	31	60	608
Bed. Folding	C. M. Wagner	480,795	Aug. 16	1670	417 418	60	929
Bed. Folding	J. E. Yeager	474,587	May 10	1133	289	59	866
Bed for infants. Swinging	B. B. Roach	482,275	Sept. 6	579	138	60	1448
Bed. Invalid	C. Olsen	467,017	Jan. 12	1149	292	58	226
Bed-lock	I. H. Elliott	482,626	Sept. 13	1173	263	60	1577
Bed-lounge	A. L. Gillen	480,190	Aug. 2	688	174	60	712
Bed-lounge	S. A. Holstein	479,071	July 19	1545	386	60	329
Bed-lounge	W. Petersen	469,657	Feb. 23	2718	698 699	58	1084
Bed-lounge	G. and F. Pirrung	477,449	June 21	1942	481	59	1847
Bed-lounge	J. Russell	472,589	Apr. 12	900	231	59	185
Bed or pillow. Air	S. Curlin	486,696	Nov. 22	2415	629 630	61	1108
Bed-pan	W. A. Crandall	467,923	Feb. 2	29	7	58	532
Bed-pan	S. A. Smith	481,375	Aug. 23	2632	647	60	1125
Bed-pan	L. Stockwell	466,449	Jan. 5	224	57	58	43
Bed-pan pad	K. A. Shaffer	482,388	Sept. 13	793	191	60	1505
Bed-protector	J. P. Duval	473,065	Apr. 19	1625	415	59	335
Bed-slat cushion	A. Laliberte	474,018	May 3	211	50	59	678
Bed-slat holder	M. D. Harrelson	488,558	Dec. 27	2176	537	61	1803
Bed. Sofa	W. Anderson	477,881	June 28	2657	664	59	2004
Bed. Sofa	J. P. Miller	482,262	Sept. 6	558	132	60	1443
Bed. Sofa	J. Rimmer	474,970	May 17	1746	442 443	59	1000
Bed. Spring	H. L. Day	473,729	Apr. 26	2744	691	59	570
Bed. Spring	L. A. Frigon	475,763	May 31	2985	757	59	1270
Bed. Spring	A. H. Viel	476,178	May 31	3667	927	59	1405
Bed-spring	W. L. Gillette	471,500	Mar. 22	2872	731	58	1683
Bed-spring	C. King	477,181	June 14	1491	365	59	1749
Bed-spring	J. Monzel	487,288	Dec. 6	78	24	61	1337
Bed-spring	J. B. Russel	488,030	Dec. 13	1311	327	61	1599
Bed-spring	J. Sims, D. J. Wood, and J. W. Sims	476,835	June 14	931	227	59	1635
Bed. Time-alarm	G. Q. Seaman	479,307	July 19	1907	477	60	399
Bed. Wardrobe	A. M. Brainard	482,158	Sept. 6	390	92	60	1411
Bed. Wardrobe	D. D. Cook	476,003	May 31	3379	851 852	59	1347
Bed. Wardrobe	W. S. Gunn	476,744	June 7	776	191	59	1592
Bed. Wardrobe	F. P. Parker, S. C. Jones, and N. F. Coffey	479,719	July 26	2610	648 649	60	546
Bed. Wardrobe	I. C. Smith and E. E. Herrinton	479,471	July 26	2213	556	60	474
Bed. Wardrobe	J. Teel	468,184	Feb. 2	421	104	58	607
Bed. Wardrobe	C. Teufel	482,028	Sept. 6	175	42	60	1369
Beds. Adjustable head-section for	L. H. Steffey	471,764	Mar. 29	3264	833	58	1763
Beds. Crib attachment for	G. D. Walker	472,647	Apr. 12	983	254	59	200
Bedstead	T. R. Chambers	471,533	Mar. 29	2913	742	58	1700
Bedstead	G. H. Currey	482,725	Sept. 20	1327	324	60	1620
Bedstead	C. E. McClintock	479,013	July 19	1459	363	60	313
Bedstead	J. L. Poalk	468,030	Feb. 2	188	46	58	561
Bedstead	G. Renfro	470,445	Mar. 8	1286	329	58	1353
Bedstead	P. L. White	479,043	July 19	1506	375	60	323
Bedstead-brace	E. S. Elliott	469,081	Feb. 16	1845	472	58	905
Bedstead-brace	J. Gribben	481,628	Aug. 30	3049	744	60	1222
Bedstead. Cot	J. Massie	477,430	June 21	1907	470	59	1841
Bedstead. Folding	O. Alexander	485,159	Nov. 1	1	1	61	573
Bedstead. Folding	F. Hamblin	481,757	Aug. 30	3267	795	60	1264
Bedstead. Folding	T. La Purl	485,502	Nov. 1	535	142	61	681
Bedstead. Folding	W. D. Snyder	472,558	Apr. 12	858	220	59	177
Bedstead. Folding	W. D. Snyder	474,868	May 17	1584	403	59	967
Bedstead folding guard	J. H. Courath	475,932	May 31	3273	826	59	1325
Bedstead. Invalid	C. W. Pratt	474,690	May 10	1297	332	59	894
Bedstead. Metallic	B. R. Barklow	468,862	Feb. 16	1492	380	58	835

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Bedstead. Sofa.	R. Jaekel	477,421	June 21	1894	466	59	1838
Bedstead. Wardrobe.	A. M. Brainard	479,624	July 26	2444	609	60	516
Bedstead. Wardrobe.	A. M. Brainard	482,159	Sept. 6	391	92, 93	60	1412
Bedstead. Wardrobe.	F. Geldowsky	482,122	Sept. 6	326	78	60	1399
Bedstead. Wardrobe.	W. D. Snyder	468,368	Feb. 9	724	179	58	674
Bedstead. Wardrobe.	W. D. Snyder	474,869	May 17	1584	403	59	968
Bee-escape for hives	G. H. Ashworth	473,284	Apr. 19	2002	503	59	406
Beehive.	S. F. Brewer	468,783	Feb. 16	1374	346	58	813
Beehive.	G. H. Bynnm	472,726	Apr. 12	1103	284	59	221
Beehive.	J. W. Chrisinger	486,277	Nov. 15	1764	464	61	965
Beehive.	J. Conser	483,137	Sept. 27	1973	500	60	1761
Beehive.	G. A. Drummond	470,111	Mar. 1	699	172	58	1235
Beehive.	U. G. Matthew	470,789	Mar. 15	1786	460	58	1462
Beehive.	H. F. Showman	479,725	July 26	2627	652	60	550
Bee-smoker	T. F. Bingham	473,724	Apr. 26	2736	689	59	568
Bee-smoker	G. W. Brodbeck	484,172	Oct. 11	976	250	61	213
Bee-smoking apparatus	A. G. Hill	478,006	June 28	2851	713	59	2042
Bee-swanner	W. Dibble	474,115	May 3	361	86	59	707
Beef-tenderer	A. C. De Sheppard	480,178	Aug. 2	666	170	60	709
Beer, ale, &c. Chip for.	J. J. Wolf	481,774	Aug. 30	3298	804	60	1271
Beer apparatus	F. M. La Boiteaux	479,190	July 19	1739	436	60	365
Beer apparatus.	J. H. Kersenbrock	484,025	Oct. 11	761	192	61	171
Beer. Apparatus for the pasteurization of	S. S. Woodbury	482,667	Sept. 13	1223	298	60	1587
Beer-bottling apparatus.	J. H. Kersenbrock	484,024	Oct. 11	759	191	61	170
Beer-cooler.	J. F. Duffy	487,405	Dec. 6	288	75	61	1378
Beer-cooler.	W. W. Ferguson	475,548	May 24	2652	674	59	1192
Beer-cooler.	W. Gibson	488,144	Dec. 13	1494	376	61	1637
Beer-cooler.	V. C. Trabold	468,050	Feb. 2	216	53	58	567
Beer-cooler tube	C. A. Cotter	479,205	July 19	1759	441	60	369
Beer-cooling apparatus	E. Seitz	483,395	Sept. 27	2401	603	60	1841
Beer-drawing apparatus	P. F. Gaynor	473,737	Apr. 26	2762	694	59	573
Beer-filling apparatus	H. Stockhelm	487,790	Dec. 13	910	230	61	1519
Beer. Manufacturing	C. Feigenspan	475,853	May 31	3150	799	59	1302
Beer. Method of and apparatus for carbonating	J. B. Stobaens and F. C. Wacken- huth.	478,176	July 5	166	43	60	35
Beer. Method of and apparatus for the manufacture of	C. F. Lawton	468,809	Feb. 16	1407	357	58	819
Beer or other liquids. Apparatus for use in barrel- ing	W. Albach	477,096	June 14	1360	331	59	1722
Beer or other liquids. Device for dispensing	M. Itjen	472,358	Apr. 5	548	142	59	103
Beer-racking trough	J. Kass	476,652	June 7	642	156	59	1564
Beer. Treating	A. Kreusler	485,012	Oct. 25	2348	605	61	512
Beer. Treatment of	L. Hoff	470,621	Mar. 8	1534	58	1404	
Beer, &c., with carbonic-acid gas and apparatus therefor. Impregnating	O. Zwietsch	485,362	Nov. 1	332	88	61	640
Beer with carbonic acid. Apparatus for charging	J. B. Stobaens	482,881	Sept. 20	1569	392	60	1668
Belaying-pin	J. W. Collins	474,722	May 10	1344	341	59	907
Bell	A. A. Bevin and J. C. Wells	483,341	Sept. 27	2321	583	60	1827
Bell	E. S. Piper	482,983	Sept. 20	1735	438	60	1701
Bell	E. S. Piper	482,984	Sept. 20	1736	439	60	1701
Bell	E. D. Rockwell	471,982	Mar. 29	3584	914	58	1825
Bell	E. D. Rockwell	471,983	Mar. 29	3585	915	58	1825
Bell	E. D. Rockwell	473,854	Apr. 26	2937	740	59	607
Bell	E. D. Rockwell	482,696	Sept. 13	1278	313	60	1598
Bell	J. C. Wells	483,342	Sept. 27	2311	581	60	1824
Bell. Alarm door	J. H. Weller	470,001	Aug. 2	373	93	60	652
Bell. Bicycle	A. Morton	480,026	Aug. 2	432	109	60	664
Bell. Bicycle	E. D. Rockwell	483,084	Sept. 20	1887	477	60	1732
Bell. Call	A. Iske	473,880	Apr. 26	2981	751	59	615
Bell. Door	A. Iske	488,244	Dec. 20	1672	418	61	1688
Bell. Door	J. W. Ross	468,403	Feb. 9	782	194	58	685
Bell. Electric	G. W. Conover	480,319	Aug. 9	924	234	60	770
Bell. Electric	J. K. Hard	485,379	Nov. 1	355	95	61	645
Bell. Electric	N. H. Raymond	483,309	Sept. 27	2276	572	60	1818
Bell. Electric	J. E. Thron	481,762	Oct. 18	1919	489	61	414
Bell. Electric	P. Wagner	487,437	Dec. 6	347	89, 90	61	1390
Bell. Electro-magnetic	J. J. Ross	486,354	Nov. 15	1874	493	61	987
Bell. Gong	W. S. Ham	483,149	Sept. 27	1989	503	60	1764
Bell. Gong door	A. J. Brouillard	475,960	May 31	3321	838	59	1335
Bell. Gong door	J. P. Connell	477,649	June 28	2281	571	59	1931
Bell handle. Door	A. Iske	473,879	Apr. 26	2979	751	59	615
Bell-ringer	J. L. Baker	470,096	Mar. 1	678	167	58	1231
Bell. Signal	E. Olsen	485,297	Nov. 1	214	60	61	616
Bell trip. Alarm	J. A. Chamberlain	472,030	Apr. 5	28	6	59	8
Bells. Contact-post for electric	F. W. Manger and O. H. Huebel	475,783	May 31	3015	764	59	1276
Bellows	J. G. Gareis	476,740	June 7	769	189	59	1591
Bellows. Blacksmith's and hand	S. H. Brand	472,187	Apr. 5	277	72	59	52
Belt	O. B. Peck	485,476	Nov. 1	502	132	61	674
Belt	C. Scherer	472,402	Apr. 5	620	158	59	116
Belt	J. Tynan	482,401	Sept. 13	811	195	60	1508
Belt. Ammunition	F. M. Garland	479,798	Aug. 2	36	8	60	589
Belt-and-pulley gearing	J. Fisher	477,108	June 14	1374	335	59	1725
Belt. Driving	P. R. D. D'Humy	469,778	Mar. 1	182	47	58	1136
Belt. Driving	J. McQueen and W. Moores	467,765	Jan. 26	2374	603	58	474
Belt-driving mechanism	T. J. Lumis	468,078	Feb. 2	254	62	58	574
Belt. Electric	D. P. Andrus	479,147	July 19	1667	417	60	352
Belt. Electric	A. M. Eklund	479,410	July 26	2098	525	60	450
Belt. Electric	J. H. Johnson	487,185	Nov. 29	3232	827	61	1286

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Belt. Electric	O. Kjorstad	488,013	Dec. 13	1275	317	61	1591
Belt. Electric	E. N. Tefft	485,754	Nov. 8	921	246	61	778
Belt-fastener	G. H. Avery	487,091	Dec. 6	737	188	61	1466
Belt-fastener	W. N. Bailey and C. F. Tilton	473,864	Apr. 26	2953	745	59	610
Belt-fastener	S. Budlong	471,518	Mar. 22	2891	736	58	1687
Belt-fastener	E. Greenwood and R. M. Wise	486,374	Nov. 15	1906	504	61	994
Belt-fastener	E. L. Matteson	487,021	Nov. 29	2976	766	61	1235
Belt-fastener	F. E. Shant	486,570	Nov. 22	2203	579	61	1065
Belt-fastener	W. M. Whiting	471,285	Mar. 22	2549	647	58	1621
Belt-fastening for driving machinery	G. Rotherham	471,140	Mar. 22	2339	599	58	1580
Belt for women's undergarments	M. C. Geldowsky	488,886	Dec. 27	2688	665	61	1906
Belt-holder	W. F. Cleveland	487,993	Dec. 13	1245	310	61	1585
Belt-holder	M. Trowbridge	488,639	Dec. 27	2309	572	61	1829
Belt. Link	D. S. Stewart	484,827	Oct. 25	2037	522	61	450
Belt punching and trimming machine	F. E. Hersey	483,555	Oct. 4	58	15	61	14
Belt-reel	C. W. Schubert	485,664	Nov. 8	786	209	61	750
Belt. Safety	J. C. Moore	468,574	Feb. 9	1053	268	58	738
Belt-shifter	B. F. Radford	483,620	Oct. 4	156	38	61	33
Belt-shifter	E. A. Walker	472,745	Apr. 12	1133	291	59	227
Belt-shifter for carding-machines	J. B. Livsey	476,282	June 7	76	16	59	1452
Belt-shifting apparatus	S. Barrett	468,478	Feb. 9	891	226	58	707
Belt-shipper	J. Hartness	467,097	Jan. 12	1286	326	58	252
Belt-shipping device	W. P. Canning	484,407	Oct. 18	1353	345	61	299
Belt. Straightening	C. R. P. Klem	470,839	Mar. 15	1880	481	58	1479
Belt-stretcher	A. J. Humphreys	474,832	May 17	1529	390	59	957
Belt-stretcher	G. P. Keuehan	478,060	June 26	2933	732	59	2057
Belt-stretcher	E. Page	485,216	Nov. 1	93	29	61	592
Belt-suspending device	E. Hammesfahr	478,260	July 5	321	77	60	64
Belt-tightener	J. B. Allfree	467,712	Jan. 26	2294	582 583	58	459
Belt-tightener	H. Brand	486,155	Nov. 15	1570	416	61	926
Belt-tightener	H. Hackney	488,197	Dec. 20	1589	398	61	1672
Belt-tightener	C. Jernander	470,134	Mar. 1	732	182	58	1242
Belt-tightener	B. N. Payne	488,698	Dec. 27	2409	597	61	1848
Belt-tightener	W. D. Tyler	472,967	Apr. 12	1452	371	59	290
Belt-tightening base for machinery	J. J. Wood	468,010	Feb. 2	159	39	58	555
Belts. Idler for driving	A. V. Hall and W. S. Holmes	487,564	Dec. 6	537	138	61	1427
Belting	R. Cowen	473,696	Apr. 26	2698	679	59	561
Belting	J. O'Connell and G. E. Medcraft	487,855	Dec. 13	1022	256	61	1541
Belting	W. E. Sharples	488,617	Dec. 27	2272	503	61	1823
Belting. Rubber	C. A. Clark	472,601	Apr. 12	918	236	59	188
Belting. Woven fabric for machine	J. Oldfield	478,941	July 12	1335	331	60	279
Bench:							
See Wash-bench.							
Bench and truck. Combined	H. C. Hicks	476,268	June 7	59	13	59	1449
Bench-block for dentists, jewelers, and others	G. W. Melotte and C. M. Clinton	482,453	Sept. 13	896	217	60	1523
Bench-dog	C. A. Wavland	487,106	Nov. 29	3112	798	61	1243
Bench dog or clamp	G. B. Norman	487,762	Dec. 13	862	219	61	1509
Bench-hook	W. L. Frisbie	483,684	Oct. 4	241	60	61	50
Bench-hook	C. J. Kempf	478,797	July 12	1131	279	60	239
Bench-stop	S. W. Jenks	486,472	Nov. 22	2057	515	61	1037
Bending machinery	E. L. Booher	474,358	May 10	770	200 201	59	796
Bending-press	S. Swartz	487,435	Dec. 6	345	88	61	1389
Bending-roll	E. Heyde	468,659	Feb. 9	1172	299	58	762
Berry-crates. Former for	C. S. Andrews	467,026	Jan. 12	1165	295	58	230
Berry-picker	C. C. Read	485,057	Oct. 25	2416	621	61	525
Berth. Automatic leveling ship's	D. Parks	472,070	Apr. 5	90	25	59	19
Berths, car-seats, &c. Spring for ships'	S. L. Saunders	476,823	June 14	916	224	59	1633
Berths. Folding step for car	H. C. Stanley	482,391	Sept. 13	797	191	60	1506
Bevel	W. G. Avery	467,010	Nov. 29	2962	763	61	1212
Bevel	D. Hoadley	480,016	Aug. 2	405	101	60	658
Bevel	A. and J. L. Kershaw	468,386	Feb. 9	752	187	58	679
Bevel and surface gage. Combination	J. F. Sauerman	467,562	Jan. 26	2065	522	58	416
Bevel-gage. Double-blade	J. Fox	482,888	Sept. 20	1587	399	60	1670
Beverage	W. M. Myers	471,879	Mar. 29	3445	58	1798	
Beverage apparatus	A. Hildebrandt	479,594	July 26	2398	597	60	508
Beverage carbonating and dispensing apparatus	P. E. Malmström	475,128	May 17	1990	504	59	1048
Beverage-dispensing apparatus	W. L. Enegren	476,452	June 7	348	79, 80	59	1505
Beverage. Effervescent	O. M. Hechtman	482,738	Sept. 20	1355	60	1625	
Beverage of fermented and unfermented wort and making the same.	E. Adam	483,337	Sept. 27	2316	60	1845	
Beverages. Carbonating fermented	J. F. Wittemann	487,342	Dec. 6	168	47	61	1354
Beverages. Charging portable fountains with carbonated	J. F. Wittemann	484,078	Oct. 11	832	210 211	61	185
Beverages. Making malt	E. Adam	483,338	Sept. 27	2316	582 583	60	1826
Beverages. Method of and apparatus for aerating	W. Hucks	476,645	June 7	630	152 153	59	1562
Beverages. Preparation for	A. S. Krueger	483,067	Sept. 20	1863	60	1728	
Bicycle	A. J. Battersby	480,166	Aug. 2	650	165	60	706
Bicycle	J. Bradley	477,292	June 21	1691	415 416	59	1799
Bicycle	G. A. Burwell	467,914	Feb. 2	12	4	58	529
Bicycle	A. H. Clark	486,432	Nov. 22	2004	531 532	61	1026
Bicycle	F. Clément	468,643	Feb. 9	1146	292	58	757
Bicycle	W. S. Crammer	481,476	Aug. 23	2801	689	60	1158
Bicycle	W. C. Davis	478,187	July 5	183	47	60	39
Bicycle	W. H. De Witt	472,528	Apr. 12	824	210	59	170
Bicycle	W. H. De Witt	478,415	July 5	548	134	60	108
Bicycle	L. M. Devore and C. E. Porry	488,603	Dec. 27	2251	539	61	1819
Bicycle	H. E. Dey and F. B. Griswold	485,094	Oct. 25	2472	635	61	538
Bicycle	J. Diamond	473,829	Apr. 26	2893	726	59	599
Bicycle	F. Douglas	469,339	Feb. 23	2235	573	58	987

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bicycle	F. Douglas	469,627	Feb. 23	2672	687	58	1073
Bicycle	F. Douglas	469,630	Feb. 23	2675	688	58	1074
Bicycle	A. W. Dunn	478,156	July 5	127	32, 33	60	28
Bicycle	S. H. Ellis	467,794	Jan. 26	2418	{ 614 615 }	58	482
Bicycle	W. A. Fleming	471,472	Mar. 22	2837	722	58	1676
Bicycle	W. L. Fruen	479,757	July 26	2676	664	60	559
Bicycle	F. M. and J. E. Goodhue	485,187	Nov. 1	51	16	61	582
Bicycle	G. F. Hall	480,844	Aug. 16	1743	436	60	944
Bicycle	L. P. Halladay	477,179	June 14	1489	364	59	1749
Bicycle	W. A. Hance	468,994	Feb. 16	1719	437	58	820
Bicycle	O. Hansou	482,735	Sept. 20	1343	{ 332 333 }	60	1623
Bicycle	R. K. Hartley	484,712	Oct. 18	1832	466	61	395
Bicycle	L. C. Jaquish	473,931	May 3	73	14, 15	59	650
Bicycle	L. C. Jaquish	478,752	July 12	1047	258	60	223
Bicycle	F. Jewett	481,569	Aug. 30	2957	{ 726 727 }	60	1205
Bicycle	W. S. Johnson	477,122	June 14	1393	339	59	1729
Bicycle	A. H. Kempe	484,857	Oct. 25	2091	538	61	461
Bicycle	E. E. Kenney and F. D. Cable	485,583	Nov. 1	658	175	61	709
Bicycle	S. H. Kimball	487,018	Nov. 29	2973	{ 765 766 }	61	1234
Bicycle	T. E. McKenna	474,400	May 10	828	217	59	808
Bicycle	G. W. Meigs and J. G. Ziegler	474,327	May 3	703	182	59	772
Bicycle	T. C. Moore and S. F. Crull	476,157	May 31	3627	917	59	1398
Bicycle	S. E. Mosher	477,772	June 23	2474	619	59	1971
Bicycle	J. D. Moskowitz	472,796	Apr. 12	1203	309	59	240
Bicycle	T. O'Brien	471,621	Mar. 29	3039	{ 774 775 }	58	1722
Bicycle	T. O'Brien	471,651	Mar. 29	3078	783	58	1729
Bicycle	H. B. Owsley	466,983	Jan. 12	1102	279	58	218
Bicycle	L. J. Phelps	481,734	Aug. 30	3226	787	60	1256
Bicycle	A. Sequeira	474,764	May 10	1405	356	59	920
Bicycle	C. R. Shorey	471,232	Mar. 22	2559	650	58	1623
Bicycle	M. D. Smalley	472,487	Apr. 5	749	151	59	142
Bicycle	G. T. Smallwood	479,470	July 26	2208	{ 554 555 }	60	473
Bicycle	W. Smith	469,753	Mar. 1	134	36	58	1125
Bicycle	A. S. Swarthout	486,687	Nov. 22	2393	{ 625 626 }	61	1103
Bicycle	F. Sweetland	482,067	Sept. 6	234	57	60	1381
Bicycle	T. J. Thompson	474,784	May 10	1439	365	59	927
Bicycle	H. H. Thorp	478,770	July 12	1077	268	60	230
Bicycle	H. W. Thurston and E. Stenersen	483,661	Oct. 4	211	52	61	43
Bicycle	A. Tremblay	482,856	Sept. 20	1525	379	60	1660
Bicycle	J. H. Tuttle and F. D. Cable	478,724	July 12	997	247	60	214
Bicycle	S. Vale	472,005	Mar. 29	3615	{ 923 924 }	58	1832
Bicycle	A. Van Bibber	477,583	June 21	2147	533	59	1889
Bicycle	W. O. Wakefield	483,273	Sept. 27	2224	{ 558 559 }	60	1808
Bicycle	S. Wilson	477,033	June 14	1250	303	59	1701
Bicycle	A. Winton	481,536	Aug. 23	2304	713	60	1179
Bicycle	G. Zillgitt	471,249	Mar. 22	2497	633	58	1611
Bicycle attachment	A. Marthens	487,577	Dec. 6	553	142	61	1431
Bicycle attachment	R. W. Riess	469,722	Mar. 1	82	23	58	1115
Bicycle-bag	E. W. Mease	470,874	Mar. 15	1933	494	58	140
Bicycle-ball-bearing	W. H. Binns	473,816	Apr. 26	2-74	721	59	595
Bicycle-brake	W. H. Crook	486,630	Nov. 22	2306	602	61	1086
Bicycle-brake	R. C. Fay	484,953	Oct. 25	2249	579	61	493
Bicycle-brake	P. Haag	486,464	Nov. 22	2046	541	61	1034
Bicycle-brake	W. T. Lewis	471,845	Mar. 29	3398	866	58	1789
Bicycle-brake	W. T. Lewis	478,194	July 5	190	49	60	40
Bicycle-brake	W. T. Lewis	486,935	Nov. 29	2845	736	61	1209
Bicycle-brake	F. D. Owen	478,206	July 5	214	53	60	44
Bicycle-brake	A. Perkins	474,759	May 10	1398	354	59	918
Bicycle-brake	D. L. Keaney	483,621	Oct. 4	158	39	61	33
Bicycle-brake attachment	W. S. Porter	486,683	Nov. 22	2388	624	61	1102
Bicycle-carrier attachment	M. E. Blood	481,890	Aug. 30	3483	853	60	1306
Bicycle-chain adjustment	W. H. Binns	473,817	Apr. 26	2874	721	59	595
Bicycle-chain adjustment	J. S. Copeland	484,492	Oct. 18	1493	379	61	326
Bicycle-clock attachment	A. S. Keyser	477,423	June 21	1896	467	59	1849
Bicycle-driving mechanism	D. J. Hoopes	474,740	May 10	1373	347	59	913
Bicycle-exhibiting device	C. W. Munson	478,805	July 12	1144	283	60	242
Bicycle-foot-rest	F. Douglas	467,344	Jan. 19	1697	431	58	339
Bicycle-fork	F. Sweetland	475,633	May 24	2781	704	59	1218
Bicycle-frame	F. H. Bolte	476,974	June 14	1163	281	59	1681
Bicycle-frame	F. H. Bolte	478,391	July 5	510	124	60	101
Bicycle-handle	F. L. Lymburner	466,500	Jan. 5	309	78	58	59
Bicycle-handle	W. C. Smith	476,424	June 7	306	71	59	1497
Bicycle-handle	F. E. Youngs	471,932	Mar. 29	3519	898	58	1813
Bicycle-handles. Spring-joint for	W. Parkes	469,592	Feb. 23	2631	674	58	1064
Bicycle-hub and shaft coupling	W. H. Binns	473,818	Apr. 26	2875	721	59	596
Bicycle-lock	F. Egge	481,390	Aug. 23	2662	{ 652 653 }	60	1130
Bicycle-lock	A. W. Hall	470,836	Mar. 15	1876	480	58	1478
Bicycle-lock	A. Israel	469,651	Feb. 23	2703	696	58	1080
Bicycle-lock	E. W. Macanley	481,236	Aug. 23	2599	592	60	1084
Bicycle-luggage-carrier	A. B. Barkman	468,757	Feb. 9	1324	335	58	793
Bicycle-luggage-carrier	F. E. Barbour	475,174	May 17	2058	517	59	1061
Bicycle-luggage-carrier	J. H. Sager	479,846	Aug. 2	106	27	60	603
Bicycle-luggage-carrier	R. C. Wall	467,729	Jan. 26	2322	{ 589 590 }	58	464

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bicycle motor spring-fork	W. Lynch and E. Tremper	480,599	Aug. 9	1360	338	60	853
Bicycle oil-can holder	J. W. Cushman	478,092	July 5	28	9	60	8
Bicycle-pedal	F. Douglas	469,295	Feb. 23	2174	557	58	975
Bicycle-pedal	F. Sweetland	473,030	Apr. 19	1572	400	59	325
Bicycle-saddle	W. Brampton	473,609	Apr. 26	2563	646	59	536
Bicycle-saddle	W. S. Brooks	472,427	Apr. 5	655	167	59	123
Bicycle-saddle	W. I. Bunker	471,417	Mar. 22	2753	703	58	1660
Bicycle-saddle	F. Douglas	467,342	Jan. 19	1695	434	58	338
Bicycle-saddle	F. Douglas	460,628	Feb. 23	2673	687	58	1073
Bicycle-saddle	F. Douglas	469,629	Feb. 23	2674	687	58	1073
Bicycle-saddle	A. L. Garford	481,538	Aug. 23	2907	714	60	1180
Bicycle-saddle	O. Hanson	471,744	Mar. 29	3239	825	58	1758
Bicycle-saddle	L. A. Sherman	468,398	Feb. 9	774	192	58	684
Bicycle-saddle	C. Stein	485,434	Nov. 1	438	117	61	662
Bicycle-saddle	J. A. Stenberg	487,769	Dec. 13	907	230	61	1518
Bicycle-saddle	F. Sweetland	474,106	May 3	351	84	59	705
Bicycle-saddle	F. Sweetland	476,638	June 14	937	228	59	1637
Bicycle-saddle	R. S. Truie. (Reissue)	11,249	June 21	2252	564	59	1909
Bicycle-saddle	C. W. Zimmer	478,184	July 5	179	47	60	38
Bicycle-saddle spring	H. Bergfels	473,493	Apr. 26	2356	598	59	496
Bicycle-saddle spring	H. Bergfels	480,838	Aug. 16	1736	434	60	943
Bicycle-saddle spring	C. H. Holdsworth	478,430	July 5	570	138	60	111
Bicycle-saddle support	W. S. Johnson	477,123	June 14	1394	339	59	1729
Bicycle-saddle support	E. M. Staples	487,081	Nov. 29	3067	787	61	1254
Bicycle. Safety	W. J. Edwards	475,444	May 24	2480	632	59	1159
Bicycle-seat	J. H. Sager	479,845	Aug. 2	104	26	60	602
Bicycle-seat	W. Steers and H. Hunt	471,908	Mar. 29	3478	889	58	1806
Bicycle seat and luggage-carrier attachment	W. I. Calver	477,042	June 14	1263	306	59	1703
Bicycle-seat attachment	M. E. Blood	480,760	Aug. 16	1616	406	60	919
Bicycle-seat spring	P. R. Walsh	469,192	Feb. 16	1999	510	58	935
Bicycle-seat support	W. A. Elmore	478,581	July 12	802	198	60	174
Bicycle signal apparatus	A. J. Sandgren	483,585	Oct. 4	107	26	61	23
Bicycle-shoe	M. S. Hess	468,223	Feb. 2	472	117	58	617
Bicycle-stand	G. S. Crosby	487,473	Dec. 6	402	104	61	1400
Bicycle-stand	M. J. Russell	477,705	June 28	2367	592	59	1950
Bicycle-stand	H. C. Wiedenmann	488,464	Dec. 20	2026	506	61	1759
Bicycle steering mechanism	D. H. McPherson	475,142	May 17	2011	508	59	1051
Bicycle-support	C. F. Beebe	485,572	Nov. 1	645	172	61	706
Bicycle-support	F. H. Birchard	480,061	Aug. 2	485	124	60	675
Bicycle-support	F. Gleason	483,146	Sept. 27	1984	502	60	1762
Bicycle-support	T. B. Marshall	478,878	July 12	1237	307	60	260
Bicycle-support	J. J. Müller	484,941	Oct. 25	2237	576	61	490
Bicycle-support	C. E. Owers	476,297	June 7	107	25	59	1459
Bicycle-support	L. Roeth	467,709	Jan. 26	2286	580	58	457
Bicycle-support	W. L. Ross	468,920	Feb. 16	1582	401	58	853
Bicycle-support	M. L. Schoch	474,415	May 10	861	225	59	814
Bicycle-support	W. Siar and C. H. Dunn	480,441	Aug. 9	1114	279	60	804
Bicycle supporting and locking attachment	W. Lewis	485,255	Nov. 1	195	56	61	613
Bicycle-supporting frame	R. A. Engler	481,751	Aug. 30	3260	793	60	1263
Bicycle-treadle-crank	W. V. Ash	485,678	Nov. 8	805	215	61	751
Bicycle-wheel	F. Ashley	481,460	Aug. 23	2787	685	60	1155
Bicycle-wheel	C. O. and L. Barnes, Sr.	474,897	May 17	1627	415	59	977
Bicycle-wheel	G. G. F. Boswell	478,735	July 12	1028	252	60	220
Bicycle-wheel	J. S. Bretz	478,394	July 5	514	126	60	102
Bicycle-wheel	C. H. Metz	478,064	June 28	2937	733	59	2058
Bicycle-wheel	G. T. Reed	476,216	May 31	3739	944	59	1417
Bicycle-wheel lock	C. J. Brosnan	473,867	Apr. 26	2956	745	59	611
Bicycles. Adjustable saddle-bar for	G. R. and W. H. Perry and C. K. George	475,020	May 17	1826	463	59	1015
Bicycles. Adjustable seat-support for	G. H. Smith, R. K. Hartley, and I. S. McDougall	484,681	Oct. 18	1794	456	61	387
Bicycles. Child's seat for	C. Weindef	469,760	Mar. 1	146	38	58	1128
Bicycles. Child's seat or parcel-carrier for	M. E. Blood	482,938	Sept. 20	1655	417	60	1625
Bicycles. Cone-bearing and ball-lock for	O. Euchler	486,452	Nov. 22	2028	536	61	1031
Bicycles. Crank-securing device for	F. Douglas	467,343	Jan. 19	1696	434	58	339
Bicycles. Differential gear for	F. R. Bigelow	476,031	May 31	3419	863	59	1356
Bicycles. Oil-cup for	T. Wheatley	472,837	Apr. 12	1258	322	59	251
Bicycles. Pneumatic seat for	T. H. Deardorff and A. U. Betts	467,352	Jan. 19	1708	437	59	341
Bicycles. Spring-fork for	J. McCain	468,750	Feb. 9	1313	333	58	791
Bicycles. Umbrella-holder for	F. J. Werneth	472,282	Apr. 5	429	110	59	80
Bicycles. Umbrella-holder for	J. Whipple	467,360	Jan. 19	1719	439	58	343
Bicycles. Vise-stand for sustaining	B. M. Steele	486,511	Nov. 22	2112	558	61	1049
Bicyclist's combination-tool	W. E. King and W. R. Walpole	475,780	May 31	3011	764	59	1275
Bier	G. Begley	483,038	Sept. 20	1824	463	60	1719
Bier	J. W. Smiser	476,423	June 7	305	71	59	1497
Bill and letter holder or file	T. E. Gould	473,235	Apr. 26	2902	728	59	601
Bill-holder	H. H. Hoffmann	472,576	Apr. 12	880	226	59	182
Bill-holder	A. G. Park	485,750	Nov. 8	917	245	61	777
Bill-holder	E. M. Wiley	483,412	Sept. 27	2424	610	60	1846
Bill-holder	S. F. Woody	484,904	Oct. 25	2170	558	61	477
Bill of fare	J. A. Gunn	479,758	July 26	2678	664	60	560
Bill-of-fare indicator	F. H. Keifer and G. H. Thompson	475,871	May 31	3172	805	59	1307
Bill-of-fare indicator for waiters	C. Kelley	471,124	Mar. 22	2307	592	58	1575
Billet-loop	E. T. Kirkpatrick	477,056	June 14	1291	313	59	1708
Billiard and pool table adjuster and leveler	W. D. Little and E. W. Bogardus	474,750	May 10	1385	350	59	915
Billiard-chalk holder	G. J. Leonhart	479,889	Aug. 2	175	43	60	616
Billiard-cushion	M. Bensinger	481,094	Aug. 16	2153	534	60	1023
Billiard-cushion	M. Bensinger	481,387	Aug. 23	2658	652	60	1129
Billiard-cushion	F. H. Briggs	468,076	Feb. 2	252	62	58	573

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Billiard-score keeper and game-counter	H. S. Wooster	470,275	Mar. 8	971	{ 240 241	{ 58	1296
Billiard scorer and register	R. N. Montgomery	488,480	Dec. 20	2054	510	61	1764
Billiard-table	J. A. Hutton and E. Hubert	471,426	Mar. 22	2765	705	58	1662
Billiard-table	A. E. Scott and J. W. Wright	488,743	Dec. 27	2470	613	61	1861
Billiard-tables. Chalk-holder for	W. Sherwood	468,278	Feb. 2	566	139	58	634
Bin:							
See Flour-bin.							
Bin-support. Convertible	W. T. Cary	470,037	Mar. 1	589	147	58	1213
Binder	C. H. Stoelting	486,989	Nov. 29	2928	755	61	1226
Binder elevator. Self	J. J. Jones	469,572	Feb. 23	2604	668	58	1058
Binder for filing and binding papers	G. A. Huewe	471,055	Mar. 15	2189	564	58	1540
Binder for leaves	G. H. Winslow	484,275	Oct. 11	1149	292	61	247
Binder. Hand	A. Morris	483,468	Sept. 27	2491	627	60	1860
Binder. Harvest	A. G. Reaman	473,780	Apr. 26	2820	{ 708 709	{ 59	585
Binder. Load	H. M. Bradley	467,363	Jan. 19	1722	440	58	343
Binder. Load	J. H. Johnson	467,348	Jan. 19	1703	435	58	340
Binder. Self	O. S. Ellithorp	426,440	Nov. 22	2015	534	61	1029
Binder. Shrub	H. O. Thomas	475,361	May 24	2349	602	59	1136
Binder. Temporary	A. R. Baker	483,706	Oct. 4	276	68	61	58
Binder. Temporary	T. F. Bourne	467,339	Jan. 19	1691	433	58	338
Binder. Temporary	F. Bowman	480,992	Aug. 16	1981	496	60	991
Binder. Temporary	J. F. Brice	476,444	June 7	340	77	59	1503
Binder. Temporary	A. Burt	476,363	June 7	216	53	59	1478
Binder. Temporary	A. G. Burton	472,665	Apr. 12	1006	261	59	204
Binder. Temporary	L. W. Hassenzahl	482,524	Sept. 13	1021	247	60	1549
Binder. Temporary	F. von Hefner-Alteneck	480,324	Aug. 9	931	236	60	771
Binder. Temporary	A. A. Hunziker	468,199	Feb. 2	442	110	58	611
Binder. Temporary	J. J. and W. C. Johnson	470,398	Mar. 8	1206	308	58	1338
Binder. Temporary	G. A. Piper	471,803	Mar. 29	3341	851	58	1777
Binder. Temporary	J. F. Tapley	469,757	Mar. 1	142	37	58	1197
Binders, &c. Grain-conveyer for	G. Schubert	475,423	May 24	2450	625	59	1153
Binding-clip	H. H. Ballard	467,244	Jan. 19	1544	394	58	310
Binding device for periodicals, newspapers, &c	O. F. Westrup	484,268	Oct. 11	1138	290	61	245
Binding or rim. Marginal	L. G. Beers	475,973	May 31	3340	842	59	1338
Bird-trap	L. A. Fort	471,473	Mar. 22	2839	722	58	1676
Bird-trap	J. K. Terrell	466,473	Jan. 5	264	66	58	50
Biscuit-cutter	H. T. Sidway	475,815	May 31	3080	779	59	1288
Bit:							
See Adjustable bit.	Dado or molding bit.						
Bridle-bit.	Medicine-bit.						
Check-bit.	Overcheck-bit.						
Curb-bit.	Saw-bit.						
Bit-box	I. J. Booth	479,180	July 19	1721	432	60	362
Bit-brace	A. D. Goodell	458,691	Dec. 27	2399	594	61	1846
Bit-brace	A. Knudsen	487,123	Nov. 29	3139	895	61	1268
Bit-holder. Adjustable	G. W. Loudon	480,666	Aug. 9	1474	367	60	876
Bit-stock	O. R. Alden	478,248	July 5	303	74	60	61
Bituminous rock. Apparatus for reducing	A. Ford	479,496	July 26	2263	567	60	483
Bituminous rock. Method of and apparatus for reducing natural or artificial	H. J. Warren	470,159	Mar. 1	774	191	58	1248
Bituminous-rock-reducing machine	J. T. Cochran	482,914	Sept. 20	1627	408	60	1678
Bituminous-rock-reducing machine	S. P. Hall and J. W. Wood	484,735	Oct. 18	1870	476	61	402
Black-ash dissolver	G. M. Newhall and C. L. Hamilton	478,630	July 12	868	{ 213 214	{ 60	187
Blackboard	O. A. Weissenborn	483,371	Sept. 27	2365	593	60	1835
Blackboard attachment	J. W. Hungad	466,606	Jan. 5	477	122	58	91
Blackboard. Rotary	J. F. Clark	488,625	Dec. 27	2290	567	61	1826
Blackboard-rubber	D. R. Miller	473,558	Apr. 26	2467	624	59	518
Blacking-box holder	E. W. Perkins	466,895	Jan. 12	963	246	58	193
Blacking-case	E. G. Cameron	475,294	May 24	2243	578	59	1115
Blacking holder and rest. Shoe	R. D. McManus	481,265	Aug. 23	2459	605	60	1095
Blacking kit. Boot	H. Pistorius	487,963	Dec. 13	1186	296	61	1573
Blacking-machine	C. G. Hutcheson	475,773	May 31	3002	762	59	1273
Blacking machine. Coin-operated boot or shoe	N. B. Knight	484,324	Oct. 11	1223	{ 312 313	{ 61	261
Blacking-stand blacking-receptacle	M. A. Popoff	476,066	May 31	3476	877	59	1368
Blacking-stand. Folding	J. A. Cranston	480,074	Aug. 2	506	128	60	679
Blacksmith's vise	G. R. Moore	470,764	Mar. 15	1745	450	58	1454
Blank-case	J. F. Wilmot	482,990	Sept. 20	1745	441	60	1702
Blank-feeding device	W. W. Miner	488,084	Dec. 13	1406	349	61	1620
Blank-feeding mechanism	F. H. Hardman	478,597	July 12	823	203	60	179
Blank form for warranty-deeds, tax-receipts, &c	J. T. Pendleton and J. S. Wilson	485,561	Nov. 1	622	166	61	700
Blanks. Automatic device for feeding	W. P. Devine	488,389	Dec. 20	1909	478	61	1734
Blanket-roll support for soldiers	C. Dodge, Jr.	486,370	Nov. 15	1900	502	61	992
Blast-furnace	M. W. Iles	481,950	Sept. 6	46	10	60	1343
Blast-furnace	M. W. Iles	484,020	Oct. 11	755	190	61	169
Blast-furnace	J. Kennedy	426,110	Nov. 15	1496	394	61	911
Blast-furnace and means for operating the same	J. Gill	470,481	Mar. 8	1338	348	58	1363
Blasting plug. Timber	M. L. Finley	469,297	Feb. 23	2179	559	58	976
Blasting-powder	F. Auchman	483,125	Sept. 27	1954	495	60	1757
Bleaching	C. J. E. de Haën	482,477	Sept. 13	932	60	1530	
Bleaching	D. O. Keene	480,102	Aug. 2	542	137	60	626
Bleaching	J. A. Myrick	481,414	Aug. 23	2706	665	60	1139
Bleaching and dyeing apparatus	G. Young and F. Pearn	479,383	July 19	2045	511	60	426
Bleaching by electrolysis. Process of and apparatus for	A. E. Woolf	471,454	Mar. 22	2806	716	58	1670
Bleaching by electrolysis. Processes of and apparatus for	A. E. Woolf. (Reissue)	11,244	June 7	810	199	59	1599
Bleaching compound	W. B. Brittingham	480,554	Aug. 9	1289	60	840	
Bleaching compound	H. Y. Castner	486,188	Nov. 15	1609	61	934	
Bleaching powder. Apparatus for making	E. C. Nation	480,028	Aug. 2	434	110	60	662

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Blind-fastener.....	T. Corscaden.....	472,635	Apr. 12	967	251	59	197
Blind-fastener.....	L. W. Hammond.....	470,162	Mar. 1	778	192	58	1249
Blind. Inside window.....	J. W. T. Gilham.....	484,957	Oct. 25	2254	581	61	491
Blind. Rolling-slat.....	J. Cahill.....	466,901	Jan. 12	971	248	58	194
Blind-stile-boring machine.....	G. Curtis.....	474,222	May 3	524	127 128	59	739
Blind-stile-mortising machine.....	P. H. Larcher.....	482,849	Sept. 20	1511	376	60	1657
Blind-stop.....	F. Blauss.....	483,096	Sept. 20	1910	483	60	1737
Blind-stop.....	W. S. Deats and D. Brown.....	472,985	Apr. 19	1503	383	59	312
Blind-stop.....	W. E. MacLachlan.....	478,262	July 5	324	78	60	65
Blind-stop.....	J. A. Messina.....	474,258	May 3	572	140	59	749
Blind-stop.....	J. Wilson.....	474,891	May 17	1617	413	59	975
Blind. Venetian.....	J. K. Benway.....	480,548	Aug. 9	1279	321	60	838
Blind. Venetian.....	C. G. Christensen.....	481,473	Aug. 23	2799	688 689	60	1157
Blind. Window.....	W. Z. Brown.....	478,563	July 12	776	190	60	169
Blind. Window.....	H. T. Buhmeier.....	479,398	July 26	2080	521 522	60	447
Blind. Window.....	H. Murdock.....	474,259	May 3	573	141	59	749
Blind. Window.....	E. Stoepfelwerth and C. H. Knefel- kan p.....	481,077	Aug. 16	2124	529	60	1018
Blind. Window.....	H. B. Swartz.....	472,592	Apr. 12	904	232	59	186
Blinds, sashes, &c. Attachment for.....	W. H. Boyle.....	471,939	Mar. 29	3527	901	58	1815
Blinder. Bridle.....	R. G. Cather.....	468,238	Feb. 2	495	121	58	622
Block:							
See Bench-block. Engraving-block.							
Building-block. Interlocking block.							
Building or paving block. Paving-block.							
Ceiling-block. Pavement-block.							
Chain-block. Piano pin-block.							
Curbing-block. Printing-block.							
Differential block. Snatch-block.							
Engraver's block. Stone paving-block.							
Engraver's work- Tackle-block.							
clamping block. Wagon stop-block.							
Block-signal apparatus.....	T. H. Patenall.....	480,411	Aug. 9	1064	266 267	60	795
Block-signals. Automatic device for electric.....	J. B. Stewart.....	480,147	Aug. 2	617	157	60	700
Blotter.....	S. Axtell.....	487,239	Dec. 6	5	2	61	1321
Blotter.....	W. Betts and W. B. Herbert.....	471,531	Mar. 29	2912	741	58	1699
Blotter and ruler. Combined.....	D. C. H. Ross.....	472,079	Apr. 5	104	28	59	21
Blotter for use in bank-books, &c. Attachable.....	C. Davis.....	472,700	Apr. 12	1073	276	59	215
Blotter-holder.....	J. S. Welch.....	473,983	May 3	153	36	59	667
Blotter or pad. Ink.....	C. Scheidereiter.....	483,874	Oct. 4	525	132	61	109
Blotter-pad and ruler. Combined.....	C. W. Chandler.....	487,364	Dec. 6	209	57	61	1362
Blotting-pad.....	R. Frost.....	474,237	May 3	543	133	59	743
Blower. Centrifugal.....	M. R. Ruble.....	487,833	Dec. 13	1065	267	61	1519
Blower. Compound steam-jet.....	W. McClave.....	485,821	Nov. 8	1003	269	61	794
Blower. Fireplace.....	G. H. Tuttle.....	477,582	June 21	2146	533	59	1889
Blower for fireplaces and grates. Rolling.....	D. Tracy.....	474,978	May 17	1759	446	59	1002
Blower or engine. Rotary.....	G. Crowell.....	475,302	May 24	2253	581	59	1117
Blower. Powder.....	W. J. Evans.....	478,744	July 12	1039	255	60	222
Blower. Pressure.....	G. A. Spang.....	466,805	Jan. 12	805	208	58	163
Blower. Rotary.....	J. Hamilton.....	479,642	July 26	2472	615	60	521
Blower. Steam.....	A. Fletcher.....	482,236	Sept. 6	510	121 122	60	1434
Blower. Steam.....	J. Jones.....	486,162	Nov. 15	1578	418	61	928
Blowers or engines. Cylinder for rotary.....	G. Crowell.....	475,301	May 24	2252	580	59	1117
Bowpipe.....	T. H. Aldrich.....	469,670	Mar. 1	1	1	58	1099
Bowpipe.....	J. N. Peabie.....	473,197	Apr. 19	1861	469	59	376
Bowpipe-pad.....	G. W. Melotte.....	480,024	Aug. 2	430	109	60	663
Blue. Apparatus for making ultramarine.....	J. Büttel.....	476,447	June 7	343	78	59	1504
Blue. Making ultramarine.....	J. Büttel.....	484,388	Oct. 18	1322	337	61	293
Board:							
See Advertising-board. Keyboard.							
Bagatelle-board. Match-board.							
Bread-board. Multiple switchboard.							
Bulletin-board. Pastry-board.							
Center-board. Piano sounding-board.							
Dash-board. Sign-board.							
Drawing-board. Sounding-board.							
Dry-board. Stove-board.							
Electrical keyboard. Telephone-exchange							
Electrical switch- switchboard.							
board. Washboard.							
Game-board. Weather-board.							
Ironing-board.....							
Boarders and distributing oil. Apparatus for repel- ling.....	F. Eyle.....	481,615	Aug. 30	3031	741	60	1218
Boat:							
See Folding boat. Surf-boat.							
Life-boat. Torpedo-boat.							
Paddle-wheel boat. Toy boat.							
Pneumatic boat. Wrecking-boat.							
Submarine boat.....							
Boat.....	E. Lachmann.....	486,381	Nov. 15	1913	506	61	995
Boat.....	J. Savage.....	478,763	July 12	1069	265	60	228
Boat-detaching apparatus.....	H. Ashford.....	469,034	Feb. 16	1783	454	58	892
Boat-detaching apparatus.....	T. Turk.....	484,648	Oct. 18	1742	443	61	375
Boat-keel.....	J. Cook.....	486,158	Nov. 15	1573	417	61	927
Boat-launching carriage.....	H. J. Woods.....	486,012	Nov. 8	1320	351	61	859
Boat-lowering apparatus.....	H. E. Bowring.....	479,387	July 19	2054	513	60	428
Boat-lowering apparatus.....	J. H. Throop.....	472,410	Apr. 5	630	161	59	118

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Boat-seat. Adjustable folding.	E. Hardendorf.	468,873	Feb. 16	1504	383	58	838
Boats. Cabin roof and deck for.	G. Hurson.	472,884	Apr. 12	1324	340	59	265
Boats. Foot-rest for row.	J. J. Sherman.	468,211	Feb. 2	457	113	58	614
Bobbin. Electro-magnet.	E. B. Hatch and C. A. Colton.	479,804	Aug. 2	46	11	60	591
Bobbin. Sheet-metal.	H. Krantz.	468,567	Feb. 9	1041	265	58	736
Bobbin stand and carrier.	M. S. Harlow.	470,328	Mar. 8	1093	278	58	1318
Bobbin used in spinning and twisting frames.	J. H. Wilson.	488,045	Dec. 13	1341	332	61	1605
Bobbin-winder.	J. B. Price.	474,187	May 3	466	113	59	728
Bobbin-winder.	G. W. and G. H. Randall.	474,924	May 17	1664	425	59	985
Bobbin winder. Shuttle.	A. W. Allen.	488,176	Dec. 20	1560	391	61	1667
Bobbins. Presser for.	G. W. Cummings.	467,535	Jan. 26	2011	509	58	407
Bobbins. Support for whirls of spindle.	J. and R. Robinson.	482,695	Sept. 13	1277	313	60	1598
Bodkin.	P. R. Stevens.	487,134	Nov. 29	3152	802	61	1271
Bodkin.	E. A. Willard.	471,926	Mar. 29	3507	896	58	1811
Bodkin and stitch-ripper.	S. and S. A. Winters.	438,861	Dec. 27	2657	658	61	1899
Boiler.							
See Culinary boiler.	Portable tubular boiler.						
Furnace-boiler.	Sectional boiler.						
Heating-boiler.	Steam-boiler.						
Hot-water boiler.	Steam and hot-water						
Hot-water or steam	boiler.						
boiler.	Tubular boiler.						
Multitubular boiler.	Wash-boiler.						
Locomotive-boiler.	Water-boiler.						
Locomotive steam-	Water or steam boiler.						
boiler.	Water-tube boiler.						
Boiler.	G. and J. R. Bolton.	473,055	Apr. 19	1609	410	59	332
Boiler.	J. Cahall.	485,087	Oct. 25	2462	634	61	535
Boiler.	J. Cahall.	485,088	Oct. 25	2464	634	61	536
Boiler.	R. Davies.	486,700	Nov. 22	2421	631	61	1109
Boiler.	G. E. Dixon.	481,898	Aug. 30	3499	857	60	1309
Boiler.	F. X. Fischer.	480,081	Aug. 2	514	130	60	680
Boiler.	W. B. Fowler.	482,999	Sept. 20	1760	444	60	1706
Boiler.	H. C. Goulding.	466,933	Jan. 12	1019	260	58	202
Boiler.	C. Hallett.	483,612	Oct. 4	142	36	61	30
Boiler.	J. R. Lintgen.	479,288	July 19	1881	471	60	394
Boiler.	W. B. Mack.	487,535	Dec. 6	496	130	61	1419
Boiler.	M. Mahony.	480,331	Aug. 9	939	238	60	773
Boiler.	H. Martin.	486,116	Nov. 15	1506	397	61	913
Boiler.	E. H. Scribner.	483,369	Sept. 27	2357	591	60	1833
Boiler.	T. L. and T. J. Sturtevant.	487,793	Dec. 13	920	232	61	1521
Boiler.	T. L. and T. J. Sturtevant.	488,229	Dec. 20	1654	413	61	1684
Boiler.	J. H. Waterman.	484,350	Oct. 11	1262	322	61	269
Boiler.	J. Wayman.	474,887	May 17	1612	412	59	974
Boiler and furnace setting.	C. O. Arey.	482,147	Sept. 6	368	87	60	1408
Boiler attachment.	G. F. Johnson.	480,264	Aug. 9	833	213	60	753
Boiler attachment. Range.	W. S. Clark.	478,688	July 12	948	235	60	204
Boiler attachment. Steam.	F. F. Landis.	482,848	Sept. 20	1510	370	60	1657
Boiler-brace.	D. A. Wightman.	473,183	Apr. 19	1840	463	59	372
Boiler-cleaner.	D. N. Baxter.	468,863	Feb. 16	1493	300	58	835
Boiler-cleaner.	J. Q. Cook.	474,369	May 10	788	205	59	800
Boiler-cleaner.	H. Hayes.	483,919	Oct. 4	595	151	61	123
Boiler-cleaner. Automatic.	E. Myers.	466,506	Jan. 5	320	80	58	61
Boiler-cleaner. Steam.	G. E. Truax.	487,651	Dec. 6	669	172	61	1454
Boiler-feed.	G. W. Schilling.	482,564	Sept. 13	1084	263	60	1560
Boiler-feed alarm.	P. Kerekes.	471,311	Mar. 22	2580	657	58	1628
Boiler-feed indicator.	A. Guasco and A. Chusin.	482,171	Sept. 6	414	99	60	1416
Boiler-feeder.	L. Dreux.	483,668	Oct. 4	921	55	61	46
Boiler-feeder.	F. G. Fowler.	467,749	Jan. 26	2353	596	58	470
Boiler-feeder.	H. Ranser, C. Wieber, and A. Sokoloff.	468,209	Feb. 2	454	113	58	614
Boiler-feeder.	C. E. Van Anken.	487,305	Dec. 6	104	31	61	1342
Boiler feeder and indicator.	P. A. Newman.	485,976	Nov. 8	1258	332	61	847
Boiler-feeder. Automatic.	C. B. Bosworth.	467,148	Jan. 19	1399	357	58	282
Boiler-feeder. Automatic.	G. B. Hutchings.	469,250	Feb. 23	2007	339	58	961
Boiler fire-box.	W. McCombie.	478,628	July 12	866	213	60	187
Boiler-fire cleaner.	L. B. Shultz.	488,842	Dec. 27	2628	651	61	1893
Boiler fire-protector. Steam.	H. H. Nieman.	485,112	Oct. 25	2493	640	61	542
Boiler for marine engines.	W. B. Fowler.	483,000	Sept. 20	1762	444	60	1706
Boiler-furnace.	M. A. Foster.	471,966	Mar. 29	3564	910	58	1822
Boiler-furnace.	W. Hurdley.	478,433	July 5	573	138	60	112
Boiler-furnace.	J. Leede.	471,673	Mar. 29	3117	794	58	1736
Boiler-furnace.	S. J. Loughran.	475,329	May 24	2294	590	59	1126
Boiler-furnace.	W. R. Parks.	486,955	Nov. 29	2878	743	61	1216
Boiler-furnace.	E. Reynolds.	484,507	Oct. 18	1517	385	61	331
Boiler-furnace.	C. Schroll.	486,505	Nov. 22	2104	556	61	1047
Boiler-furnace.	G. S. Strong.	475,357	May 24	2343	601	59	1135
Boiler-furnace.	J. F. Wangler.	470,726	Mar. 15	1692	436	58	1444
Boiler-furnace.	E. A. Wheeler.	471,449	Mar. 22	2800	714	58	1669
Boiler-furnace.	J. W. Wilkinson.	478,210	July 5	218	55	60	45
Boiler-furnace and smoke-consumer.	J. Connelly.	486,854	Nov. 29	2677	701	61	1176
Boiler furnace. Locomotive or marine.	F. Barclay.	486,924	Nov. 29	2829	732	61	1207
Boiler furnace. Smoke-consuming steam.	F. Reynolds.	486,167	Nov. 15	1584	419	61	929
Boiler furnace. Steam.	H. C. Ashlin.	480,864	Aug. 16	1778	445	60	951
Boiler furnace. Steam.	F. Barclay.	486,923	Nov. 29	2827	732	61	1206
Boiler furnace. Steam.	J. V. Burke.	487,602	Dec. 6	586	150	61	1438

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Boiler furnace. Steam.....	T. R. Butman	479,733	July 26	2638	{ 654 655 242 243	{ 60	552
Boiler furnace. Steam.....	M. E. Herbert	484,153	Oct. 11	946	{ 242 243	{ 61	207
Boiler furnace. Steam.....	A. Wilkinson	486,747	Nov. 22	2490	{ 650 447 448 449	{ 61	1123
Boiler or other furnace. Steam.....	T. G. Lishman	477,376	June 21	1829	{ 447 448 449	{ 59	1825
Boiler header. Steam.....	E. H. Bennett	484,393	Oct. 18	1334	{ 340	{ 61	295
Boiler-holes. Template for.....	J. McNeil	467,298	Jan. 19	1626	{ 414	{ 58	325
Boiler indicator. Steam.....	G. L. McDermott	487,634	Dec. 6	639	{ 164	{ 61	1448
Boiler-lug and making the same.....	G. L. McGregor	479,331	July 19	1938	{ 484	{ 60	405
Boiler oil-injector.....	O. A. Enholm	485,920	Nov. 8	1166	{ 307 151	{ 61	827
Boiler or othe. furnace.....	E. W. Jones	470,052	Mar. 1	609	{ 152 153	{ 58	1217
Boiler or othe. furnace.....	E. W. Jones	470,053	Mar. 1	613	{ 153	{ 58	1218
Boiler safety appliance. Steam.....	J. Kastner, Jr.	474,135	May 3	385	{ 92, 93	{ 59	713
Boiler safety device. Steam.....	F. G. Parkinson and A. H. Mercer	466,365	Jan. 5	85	{ 24	{ 58	19
Boiler-scraper.....	T. J. Baker	473,809	Apr. 26	2863	{ 719	{ 59	593
Boiler-setting.....	M. F. Eaton	484,878	Oct. 25	2123	{ 546	{ 61	467
Boiler-setting.....	F. G. Gasche	488,241	Dec. 20	1669	{ 417	{ 61	1687
Boiler setting. Steam.....	S. Runser. (Reissue)	11,268	Sept. 6	687	{ 163 164	{ 60	1470
Boile stand. Range.....	J. M. Young	478,494	July 5	661	{ 162	{ 60	131
Boiler-tube.....	H. W. Althouse	469,731	Mar. 1	99	{ 27	{ 58	1118
Boiler-tube cleaner.....	W. B. and J. R. Smith	486,133	Nov. 15	1538	{ 406	{ 61	919
Boiler-tube cutter.....	J. W. Fleming	484,852	Oct. 25	2086	{ 536	{ 61	460
Boiler-tube expander.....	H. Warden	488,589	Dec. 27	2233	{ 553	{ 61	1815
Boiler-tube scraper.....	O. Borchardt	469,676	Mar. 1	11	{ 4	{ 58	1101
Boiler-tubes. Tool for expanding the ends of.....	A. L. Henderer	483,920	Oct. 4	596	{ 151	{ 61	123
Boiler water-front and fire-box.....	J. T. Charest	475,035	May 17	1845	{ 468	{ 59	1019
Boiler water-indicator.....	W. H. Rodgers	486,054	Nov. 8	1382	{ 367	{ 61	871
Boiler water-level recorder.....	W. M. Lewis	483,732	Oct. 4	293	{ 73	{ 61	61
Boilers by gaseous fuel. Apparatus for heating.....	J. L. Hastings	483,355	Sept. 27	2234	{ 587	{ 60	1829
Boilers. Construction of.....	W. S. Shippe	473,167	Apr. 19	1798	{ 454	{ 59	366
Boilers. Construction of movable fire-bars of.....	H. W. Shephard	471,440	Mar. 22	2787	{ 711	{ 58	1666
Boilers. Downdraft-furnace for steam.....	J. F. Wangler	487,896	Dec. 13	1083	{ 271	{ 61	1552
Boilers. Drop-tube for steam or hot water.....	J. A. Scollay	480,786	Aug. 16	1660	{ 415	{ 60	928
Boilers. Expanding device for use in making wash- ington.....	G. W. Andersen and G. M. Hunt- ington.....	485,078	Oct. 25	2447	{ 630	{ 61	532
Boilers. Feed-water heater for steam.....	C. C. Worthington.....	485,570	Nov. 1	640	{ 170 171	{ 61	704
Boilers. Feed-water mechanism for steam.....	S. S. Fleming	468,014	Feb. 2	164	{ 40	{ 58	556
Boilers. Machine for heading water.....	W. S. Shippe	472,957	Apr. 12	1441	{ 367 368	{ 59	286
Boilers. Manhole-cover for steam.....	N. Newman	474,028	May 3	228	{ 55	{ 59	682
Boilers. Pneumatic stack for steam.....	B. F. Taylor	483,589	Oct. 4	111	{ 27	{ 61	24
Boilers. Supplementary heater for range.....	T. W. Rees	471,827	Mar. 29	3373	{ 859	{ 58	1784
Boilers. Support for stew-pans or like utensils in domestic.....	O. T. Priser	482,831	Dec. 27	2602	{ 646	{ 61	1888
Boilers. Water circulator and purifier for steam.....	J. MacDonald	482,183	Sept. 6	432	{ 103	{ 60	1419
Boilers. Water-evaporator for steam.....	G. F. Coleman	467,398	Jan. 19	1774	{ 452	{ 58	353
Boilers. Water-jacket and condensing apparatus for marine.....	T. L. and T. J. Sturtevant.....	481,379	Aug. 23	2646	{ 649	{ 60	1127
Boiling and precipitating tower.....	G. E. Hänisch	477,755	June 28	2450	{ 612	{ 59	1966
Bolster-plate.....	D. B. Oliver	486,890	Nov. 29	2751	{ 714	{ 61	1191
Bolster. Spring.....	E. Gooley	486,462	Nov. 22	2044	{ 541	{ 61	1034
Bolster-standard.....	L. G. Cook	477,650	June 28	2282	{ 571	{ 59	1931
Bolt: See Door-bolt. Milk-can bolt. Flour-bolt. Safety-bolt. Joint-bolt. Spring-bolt. King-bolt. Thill-bolt. Latch-bolt.							
Bolt.....	A. Assorati	475,746	May 31	2960	{ 751	{ 59	1265
Bolt.....	G. Drouet	485,373	Nov. 1	348	{ 93, 94	{ 61	644
Bolt and nut fastening device.....	H. B. Curry	469,993	Mar. 1	529	{ 132	{ 58	1201
Bolt and nut lock.....	C. G. Smith	484,616	Oct. 18	1683	{ 427	{ 61	365
Bolt-clipper.....	H. K. Porter	484,670	Oct. 18	1778	{ 452 453	{ 61	384
Bolt-cutter.....	W. H. Ransom	480,858	Aug. 16	1767	{ 443	{ 60	949
Bolt-header.....	S. Blenkhorn	468,383	Feb. 9	748	{ 186	{ 58	678
Bolt-heading machine.....	W. H. Betts	475,657	May 24	2816	{ 713	{ 59	1225
Bolt holder and wrench.....	W. F. Custer	466,329	Jan. 5	31	{ 7	{ 58	9
Bolt holes. Device for tapping stay.....	J. T. Connelly	475,672	May 24	2834	{ 717	{ 59	1228
Bolt-lock.....	G. Conlon	474,444	May 10	909	{ 235	{ 59	823
Bolt-releasing device.....	P. Pollard	471,429	Mar. 22	2769	{ 706	{ 58	1668
Bolt-threading machine.....	F. Mntimer	480,204	Aug. 2	709	{ 181	{ 60	716
Boltwork. Safe.....	F. H. Bullard	486,817	Nov. 22	2610	{ 679 680	{ 61	1148
Bolts for doors. Manufacture of cases and staples of socket.....	G. Clarke	470,985	Mar. 15	2090	{ 535	{ 58	1521
Bolts. Machine for cutting screw-threads on.....	H. W. Pudan	473,640	Apr. 26	2610	{ 657 658	{ 59	544
Bolts. Making.....	M. Moran	469,261	Feb. 23	2114	{ 543	{ 58	964
Bolting or sifting machine.....	C. Haggemacher	483,286	Sept. 27	2240	{ 563	{ 60	1811
Bolting-reel.....	C. Bolenbaugh and E. B. Wagner	488,866	Dec. 27	2662	{ 659	{ 61	1901
Bolting-reel.....	J. Mills	474,916	May 17	1647	{ 421 422 423	{ 59	982
Bolting-reel.....	B. F. Reinhold	480,345	Aug. 9	960	{ 242 243	{ 60	776
Bolting reel. Flour.....	G. L. Jarrett	487,838	Dec. 13	956	{ 248	{ 61	1535
Bomb-lance.....	D. Kelleher	472,889	Apr. 12	1333	{ 342	{ 59	267

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Bone-cutter. Hand.....	C. H. Farrington	474,728	May 10	1352	343	59	909
Book.....	F. Bowman	483,893	Oct. 4	549	139	61	114
Book.....	W. Chichester	470,861	Mar. 15	1904	487	58	1484
Book.....	J. E. Spears	471,905	Mar. 29	3475	888	58	1805
Book. Account.....	J. E. Ames	477,631	June 28	2257	565	59	1927
Book. Account.....	R. R. Barton	466,316	Jan. 5	2	1,2	58	3
Book. Account.....	W. Lusby	478,197	July 5	200	51	60	41
Book and carbon-sheet holder. Combined	J. S. McDonald	479,014	July 19	1460	363	60	314
Book and holder. Petty-account	C. L. Vale	466,384	Jan. 5	118	33	58	25
Book-back band-marker	H. Trumbull	475,830	May 31	3108	787	59	1294
Book-back. Folding.....	E. Clerk	484,653	Oct. 18	1753	446	61	373
Book-back. Folding.....	W. H. Sugg	485,068	Oct. 25	2431	625	61	529
Book. Bank-account.....	H. J. Stirn	487,456	Dec. 6	377	98	61	1395
Bookbinders' cloth. Finishing.....	T. A. and W. H. Sutton	482,596	Sept. 13	1129	60	1569	
Bookbinder's extensible glue-block	J. F. Glenn	485,760	Nov. 8	928	243 249	61	780
Bookbinding.....	L. P. Allen and J. R. Weber	471,457	Mar. 22	2811	717	58	1671
Bookbinding.....	J. D. Bauer	467,076	Jan. 12	1253	317	58	246
Bookbinding.....	A. C. Hafely	470,866	Mar. 15	1912	489	58	1486
Bookbinding.....	H. H. Roche	474,483	May 10	965	249	59	834
Bookbinding.....	D. Waide	484,349	Oct. 11	1261	322	61	269
				939			
Book binding and covering machine.....	C. W. Lovell and A. Bredenberg....	476,208	May 31	3717	940 941 942	59	1414
Bookbinding, &c. Web for.....	J. A. Wagler	474,509	May 10	1002	258	59	841
Bookbinding-machine.....	R. Burnet	481,894	Aug. 30	3491	855 856	60	1307
Bookbinding-machine.....	J. W. Clark	472,011	Mar. 29	3623	926	58	1834
Book. Blank.....	F. Bowman	467,788	Jan. 26	2408	613	58	481
Book. Blank.....	F. Bowman	467,851	Jan. 26	2511	636	58	500
Book. Blank.....	F. Bowman	468,780	Feb. 16	1368	345	58	811
Book. Blank.....	F. Bowman	469,054	Feb. 16	1811	463	58	898
Book. Blank.....	J. W. Burris	473,291	Apr. 19	2012	506	59	408
Book. Blank.....	J. W. Burris	477,166	June 14	1468	360	59	1744
Book. Blank.....	H. H. and F. H. Hoffmann.....	487,014	Nov. 29	2967	764	61	1233
Book. Blank.....	G. H. Ogden	467,892	Jan. 26	2579	653	58	512
Bookcase.....	C. E. Foster and J. W. Hine	480,693	Aug. 9	1516	377	60	883
Bookcase and desk. Combined	P. Ganzlin	483,669	Oct. 4	221	55	61	46
Bookcase. Revolving.....	F. H. Haley	474,556	May 10	1082	277	59	856
Book. Check.....	G. M. Breinig	475,661	May 24	2820	714	59	1226
Book. Check.....	D. A. McIntyre	472,067	Apr. 5	87	24	59	18
Book. Check.....	R. W. Morgan	468,441	Feb. 9	829	209 210	58	695
Book. Check.....	E. North	472,741	Apr. 12	1126	289	59	226
Book. Check or order.....	E. North.....	471,359	Mar. 22	2663	675 676	58	1643
Book. Conpon.....	W. F. Beck	468,636	Feb. 9	1136	290	58	755
Book-cover.....	G. W. Holden	473,575	Apr. 26	2509	633	59	526
Book cover. Blank.....	J. D. Mets	467,821	Jan. 26	2461	625	58	491
Book-cover protector.....	H. M. Enos	481,015	Aug. 16	2010	502	60	996
Book-cover protector. Adjustable	C. F. Morgan	471,748	Mar. 29	3244	826	58	1759
Book-cover protectors. Blank for	W. B. Harrison	473,502	Apr. 26	2370	601	59	499
Book. Duplicating check.....	J. Oldfield	485,132	Oct. 25	2522	648	61	548
Book. Duplicating check.....	J. Oldfield	488,026	Dec. 27	2758	681	61	1921
Book, file, and conpon system. Combined order	J. W. Hill	473,875	Apr. 26	2973	750	59	614
Book guard. Blank or other.....	J. D. Mets	487,191	Nov. 29	3242	829	61	1288
Book-holder.....	H. H. Baker, Jr.	472,247	Apr. 5	377	99	59	70
Book-holder.....	G. W. Grove	483,611	Oct. 4	140	35	61	29
Book-holder.....	C. D. Merriman and F. W. Tilden ..	480,410	Aug. 9	1062	266	60	795
Book holder. Check.....	J. R. Thompson	467,317	Jan. 19	1652	420	58	330
Book holder. Check.....	J. L. McGervey	467,263	Jan. 19	1572	400	58	316
Book. Index.....	J. L. McGervey	474,917	May 17	1651	422	59	982
Book index attachment.....	L. Hill, Jr.	470,380	Mar. 8	1177	302	58	1333
Book. Indexed.....	W. D. Bevin	482,612	Sept. 13	1173	279	60	1573
Book-indicator.....	E. T. Douglass	472,441	Apr. 5	673	172	59	126
	M. G. Bailey and H. T. Welch ..	480,649	Aug. 9	1446	360	60	870
Bookkeeping apparatus.....	T. P. Pattison	486,386	Nov. 15	1919	509 510	61	997
Book-leaf holder.....	J. R. and J. Ferguson	472,571	Apr. 12	874	225	59	180
Book. Ledger, sales, and billing	J. E. Deput	469,549	Feb. 23	2573	659	58	1052
Book. Manifold.....	J. S. McDonald	467,582	Jan. 26	2091	529 530	58	421
Book. Manifold-copying.....	K. O. St. John	471,724	Mar. 29	3206	817	58	1752
Book. Manifold memorandum.....	E. K. Bottle	469,929	Mar. 1	417	105	58	1181
Book. Manifold memorandum.....	E. K. Bottle	469,930	Mar. 1	418	105	58	1181
Book. Manifold receipt or order.....	J. S. McDonald	466,507	Jan. 5	321	80	58	61
Book-mark.....	S. L. and C. A. L. Saunders ..	475,348	May 24	2334	598	59	1133
Book-mark.....	C. L. Watson	472,632	Apr. 12	965	250	59	197
Book or blank case.....	R. Miller	480,388	Aug. 9	1033	259	60	790
Book or case cover.....	S. A. Stange	468,732	Feb. 9	1287	327	58	786
Book or case for exhibiting goods	W. N. Brewer	469,733	Mar. 1	101	27, 28	58	1119
Book or copy holder.....	B. Gardiner	487,561	Dec. 6	532	137	61	1426
Book or envelope for theaters or other places of amusement.	I. G. Kheiralla and A. F. Haddad ..	473,703	Apr. 26	2707	681	59	563
Book or music-leaf holder.....	A. O. Brown	484,292	Oct. 11	1169	298	61	251
Book or portfolio.....	C. B. Lebkicher	483,068	Sept. 20	1863	472	60	1728
Book or sale-slip. Duplicating memorandum	W. Morton	487,680	Dec. 6	720	184	61	1463
Book or sheet-music holder and leaf-turner	J. A. Jamison	472,125	Apr. 5	182	49	59	34
Book or the like. Note.....	W. Penman	472,073	Apr. 5	94	25	59	20
Book. Pocket check and bank	L. C. Butler and H. R. Chope ..	482,543	Sept. 13	1054	256	60	1555
Book. Press-copy.....	F. Bowman	467,789	Jan. 26	2409	613	58	481
Book-rack.....	E. G. Cook and H. H. Eyman ..	479,788	Aug. 2	22	5, 6	60	586
Book. Receipt and collection-report.....	J. H. Pettibone	480,623	Aug. 9	1403	349	60	862

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Book. Record form.....	O. E. Naegle	467,994	Feb. 2	134	32	58	549
Book-rest	J. R. Lawshe	479,888	Aug. 2	173	43	60	616
Book-rest and writing-slab.....	C. K. Gaines.....	469,133	Feb. 16	1907 { 488 489		58	918
Book rounding and backing mechanism.....	E. Crawley, Sr.....	474,819	May 17	1498 { 383 384		59	952
Book. Scrap.....	F. Bowman.....	477,040	June 14	1261	305	59	1702
Book. Scrap.....	J. V. Houston.....	485,937	Nov. 8	1195	316	61	834
Book. Scrap.....	J. Rooney.....	471,276	Mar. 22	2537	644	58	1618
Book. Shipping receipt.....	J. D. D. Mortimer.....	482,047	Sept. 6	206	49	60	1375
Book-support	J. W. Coultas.....	475,933	May 31	3274	826	59	1326
Book-support	D. H. McPherson.....	477,018	June 14	1225	297	59	1695
Book-support	W. H. Morrison.....	470,207	Mar. 8	867	214	58	1276
Book-support	J. A. Muir.....	481,505	Aug. 23	2847	700	60	1168
Book-supports. Ball-and-socket joint for.....	W. H. Morrison.....	485,471	Nov. 1	495	131	61	672
Book. Trade.....	W. R. M. Cooper.....	469,546	Feb. 23	2570	658	58	1051
Book. Trial-balance.....	S. K. Bardin.....	470,470	Mar. 8	1325 { 344 345		58	1360
Books. Means for locking.....	J. I. Covington.....	468,512	Feb. 9	957	242	58	718
Boomerang.....	C. H. Emerson.....	777,748	June 28	2438	609	59	1964
Boomerang.....	C. G. Stevens.....	482,852	Sept. 20	1518	377	60	1659
Boomerang-gun.....	C. H. Emerson.....	477,747	June 28	2430 { 607 608 609		59	1963
Boot	G. A. Brown.....	480,363	Aug. 9	992	249	60	782
Boot-cleaner	J. B. Prickett.....	468,364	Feb. 9	718	178	58	672
Bootjack	O. M. Haight and C. F. Biffar.....	473,740	Apr. 26	2767	695	59	574
Boot or shoe.....	C. A. Brown.....	468,187	Feb. 2	428	106	58	608
Boot or shoe.....	C. B. Brown.....	470,316	Mar. 8	1064 { 270 271		58	1313
Boot or shoe.....	R. Brunzon.....	474,574	May 10	1116	285	59	863
Boot or shoe.....	G. E. Hadlund.....	475,858	May 31	3155	800	59	1303
Boot or shoe.....	G. B. Hooper.....	485,813	Nov. 8	992	266	61	793
Boot or shoe and making the same. Welted.....	A. Seaver.....	467,743	Jan. 26	2346	594	58	469
Boot or shoe cleaning and polishing machine.....	J. W. Mason.....	480,821	Aug. 16	1716 { 428 429		60	939
Boot or shoe counter.....	W. T. Martin.....	469,258	Feb. 23	2107	541	58	963
Boot or shoe creaser.....	H. P. Roberts.....	482,529	Sept. 13	1028	249	60	1550
Boot or shoe fastening.....	W. E. Bennett.....	477,923	June 28	2721	681	59	2017
Boot or shoe heel.....	N. S. Drake.....	479,560	July 26	2354	587	60	500
Boot or shoe heel.....	E. D. Miller.....	469,746	Mar. 1	124	32	58	1123
Boot or shoe heels. Attaching.....	H. A. Webster.....	483,293	Sept. 27	2253	567	60	1814
Boot or shoe shaping device.....	J. E. Drake.....	475,679	May 24	2844	719	59	1320
Boot or shoe sole.....	J. Green.....	470,046	Mar. 1	602	150	58	1216
Boot or shoe stay.....	W. A. Neely.....	472,197	Apr. 5	292	76	59	55
Boot or shoe upper.....	G. P. Herndon.....	473,314	Apr. 19	2047	514	59	415
Boot or shoe. Ventilated.....	J. W. Turner and J. H. Engle.....	485,243	Nov. 1	134	40	61	801
Boot-stretcher.....	W. L. Faire.....	474,376	May 10	797	208	59	802
Boot-stretcher.....	J. Lyons.....	485,331	Nov. 1	276	75	61	628
Boot-tree.....	G. H. Stephens.....	468,006	Feb. 2	152	36	57	538
Boot-treeing machine.....	C. L. Heisler.....	476,460	June 7	359	84	59	1507
Boot-upper.....	O. Baker.....	478,550	July 12	759	186	60	166
Boots, &c. Art of burnishing heels, &c., of.....	W. F. Sampson.....	466,429	Jan. 5	190	49	58	36
Boots or shoes. Attaching heels to the soles of.....	F. F. Raymond, 2d.....	474,146	May 3	402	97	59	710
Boots or shoes. Dyeing and polishing parts of.....	W. W. Crooker.....	469,325	Feb. 23	2308		58	1002
Boots or shoes. Machine for finishing parts of.....	J. F. Swain.....	469,379	Feb. 23	2300	592	58	1001
Boots or shoes. Machine for inserting screw-threaded wire into the soles of.....	L. Goddu.....	478,055	June 28	2926	731	59	2056
Boots or shoes. Machine for inserting screw-threaded wire into the soles of.....	L. Goddu.....	478,056	June 28	2928	731	59	2056
Boots or shoes. Machine for polishing.....	R. Kunstman.....	469,087	Feb. 16	1853	474	58	906
Boots or shoes. Sock-sole for.....	C. J. Bailey.....	466,592	Jan. 5	449	115	58	87
Booth. Collapsible.....	E. C. Cook.....	482,078	Sept. 6	256	62	60	1386
Booth. Portable wooden.....	C. F. Hodsdon.....	469,017	Feb. 16	1761	449	58	888
Borax. Making.....	J. Ascoug.....	476,592	June 7	554		59	1546
Boring and mortising machine.....	G. A. Adams.....	481,383	Aug. 23	2652	650	60	1128
Boring and screw-driving machine.....	E. Finn.....	487,441	Dec. 6	354	90, 91	61	1391
Boring and shaping machine.....	A. K. Phillips.....	481,307	Aug. 23	2534 { 622 623		60	1107
Boring and shaping machine.....	W. J. Smith.....	473,027	Apr. 19	1569	399	59	325
Boring and tenoning machine.....	A. B. Sharp.....	475,158	May 17	2032	512	59	1056
Boring apparatus.....	F. Gardner.....	488,354	Dec. 20	1854	464	61	1723
Boring apparatus.....	O. Lentz.....	486,877	Nov. 29	2712	707	61	1183
Boring-machine.....	J. W. Day.....	482,231	Sept. 6	503	120	60	1433
Boring-machine.....	S. A. Gould.....	487,407	Dec. 6	292	76	61	1370
Boring-machine.....	C. S. Harris.....	482,791	Sept. 20	1436	356	60	1641
Boring-machine.....	J. Harris.....	473,153	Apr. 19	1773	448	59	361
Boring-machine.....	A. McDougall.....	469,840	Mar. 1	278	72, 73	58	1155
Boring-machine.....	J. Richards.....	470,879	Mar. 15	1934	494	58	1490
Boring-machine.....	J. H. Synt.....	478,266	July 5	323	79	60	66
Boring-machine work-holder.....	F. Scheidt.....	481,737	Aug. 30	3234	788	60	1257
Boring non-circular holes. Machine for.....	W. J. Smith.....	485,233	Nov. 1	118	36	61	598
Boring-tool.....	M. C. Johnson.....	472,541	Apr. 12	836	214	59	172
Boring-tool.....	J. T. Kiehner.....	469,503	Feb. 23	2495	640	58	1036
Bottle.....	R. H. Brown, Jr.....	469,677	Mar. 1	11	5	58	1101
Bottle.....	H. W. Fay.....	486,418	Nov. 15	1976	524	61	1008
Bottle.....	F. F. Ingram.....	481,953	Sept. 6	48	11	60	1344
Bottle.....	A. Schon.....	467,727	Jan. 26	2319	589	58	463
Bottle.....	J. I. Vogeler.....	470,458	Mar. 8	1309	337	58	1357
Bottle-alarm.....	J. A. Trotter.....	475,526	May 24	2619	666	59	1186
Bottle and brush. Mucilage.....	H. C. Seward.....	473,025	Apr. 19	1565	398	59	324
Bottle and stopper.....	H. Crimmel.....	482,230	Sept. 6	501	120	60	1433
Bottle and stopper.....	H. Heartfield.....	482,682	Sept. 13	1252	305	60	1593
Bottle and stopper-cap for the same.....	J. Gilberts.....	475,448	May 24	2490	635	59	1161

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bottle-case	G. C. Suero	476,697	June 7	706	173	59	1577
Bottle-case. Pocket	J. Barnes	474,940	May 17	1691	431	59	991
Bottle-cleaning apparatus or machine	G. E. Wallace	482,110	Sept. 6	306	72	60	1395
Bottle-closure	R. Bloeser	480,168	Aug. 2	655	167	60	707
Bottle-closure	C. Ollendorff	485,052	Oct. 25	2409	620	61	524
Bottle-corking machine	E. Ernold	487,387	Dec. 6	242	65	61	1369
Bottle-corking machine	W. H. Holden	484,591	Oct. 18	1635	415	61	355
Bottle-corking machine. Power	D. Mueller	482,454	Sept. 13	898	217	60	1523
Bottle designed to prevent refilling	E. L. Tevis	482,329	Sept. 6	685	163	60	1470
Bottle filling and corking machine	H. Heartfield	474,044	May 3	258	63	59	687
Bottle filling and stoppering apparatus	D. Wickham	488,859	Dec. 27	2655	657	61	1899
Bottle-filling apparatus	W. H. Bryant	467,150	Jan. 19	1402	358	58	2-3
Bottle-filling apparatus	J. Jackson	485,942	Nov. 8	1201	317	61	835
Bottle-filling apparatus	M. J. McHugh	479,298	July 19	1895	474	60	397
Bottle-filling device	H. Meinhard	485,803	Nov. 8	980	263	61	790
Bottle-filling machine	G. Clauss, Jr., and A. M. Schomburg	482,893	Sept. 20	1597	401	60	1672
Bottle-filling machine	G. Clauss, Jr., and A. M. Schomburg	482,894	Sept. 20	1600	401	60	1673
Bottle-filling machine	A. L. Hatfield	476,795	June 14	866	213	59	1622
Bottle-filling machine	W. M. McCormick	474,965	May 17	1733	440	59	999
Bottle-filling machine. Siphon	F. J. Johnston and G. E. Barton	474,326	May 3	701	181	59	772
Bottle for maulage, &c	C. M. Higgins	471,003	Mar. 15	2120	544	58	1527
Bottle holder. Nursing or feeding	C. H. Leonard	469,480	Feb. 23	2465	632	58	1031
Bottle. Ink	W. F. Hall	471,479	Mar. 22	2846	724	58	1678
Bottle-making machine. Glass	T. W. Synnott	468,140	Feb. 2	354	88	58	593
Bottle-mold	T. W. Synnott	487,498	Dec. 6	440	113	61	1408
Bottle. Nursing	G. A. Bobrick	468,759	Feb. 9	1325	335	58	793
Bottle. Nursing	H. Jensen	467,176	Jan. 19	1438	366	58	2-9
Bottle. Nursing	O. K. Newell	466,361	Jan. 5	80	21	58	18
Bottle. Nursing	O. K. Newell	484,811	Oct. 25	2015	517	61	446
Bottle or similar vessel	J. R. Browne	473,379	Apr. 19	2169	545	59	438
Bottle packing and shipping box	P. C. Leidich	475,456	May 24	2502	638	59	1164
Bottle-sealing device	W. Painter	468,226	Feb. 2	476	117	58	618
Bottle-sealing device	W. Painter	468,258	Feb. 2	535	132	58	629
Bottle-sealing device	W. Painter	468,259	Feb. 2	541	133	58	629
Bottle. Siphon	P. M. Clark	480,763	Aug. 16	1624	407	60	921
Bottle. Siphon	J. K. Welch and G. Brownen	469,878	Mar. 1	241	87	58	1167
Bottle-snap	J. Pithian	480,458	Aug. 9	1150	288	60	811
Bottle-soaking apparatus	J. F. Theurer and R. Birkholz	467,137	Jan. 12	1374	352	58	270
Bottle spout attachment	S. H. Garwood	483,670	Oct. 4	222	55	61	46
Bottle stand. Poison	G. L. Rands	478,818	July 12	1170	290	60	247
Bottle stopper	G. F. Atwood	479,045	July 19	1508	376	60	323
Bottle stopper	T. C. Booth	486,321	Nov. 15	1821	481	61	978
Bottle stopper	J. De Mars	485,093	Oct. 25	2471	635	61	558
Bottle stopper	L. A. Eberhardt	477,202	June 21	1538	376	59	1771
Bottle stopper	W. J. Ferris	481,616	Aug. 30	3032	741	60	1219
Bottle stopper	R. L. Foster and J. S. Crowley	472,041	Apr. 5	44	9	59	10
Bottle stopper	E. Ketterlinus	471,746	Mar. 29	3241	826	58	1758
Bottle stopper	W. J. Kolts	472,761	Apr. 12	1156	296	59	231
Bottle stopper	E. L. Lloyd	474,642	May 10	1217	311	59	882
Bottle stopper	J. T. Mahoney	486,261	Nov. 15	1737	457	61	960
Bottle stopper	J. E. Orr	479,233	Aug. 2	90	23	60	599
Bottle stopper	B. F. Sanborn	485,139	Oct. 25	2535	651	61	550
Bottle stopper	F. Schmidt	469,095	Feb. 16	1864	476	58	909
Bottle stopper	H. B. Stewart	486,359	Nov. 15	1880	495	61	988
Bottle stopper	J. A. Stukey	475,631	May 24	2779	703	59	1218
Bottle stopper	D. H. Talbert	473,031	Apr. 19	1573	400	59	326
Bottle stopper	I. Traube and A. Kattentidt	478,483	July 5	644	158	60	128
Bottle stopper and cover. Automatic	C. Weinedel	481,644	Aug. 30	3071	750	60	1226
Bottle stopper and measuring device	F. W. West	476,342	June 7	181	43	59	1471
Bottle stopper attachment	H. Gerike	470,187	Mar. 8	835	206	58	1270
Bottle stopper. Automatic	R. G. Williams	485,443	Nov. 1	451	121	61	664
Bottle stopper fastener	F. Y. Clark	485,173	Nov. 1	29	10	61	578
Bottle stopper fastener	J. Menke	471,013	Mar. 15	2136	548	58	1529
Bottle stopper lock	F. Jordan	487,748	Dec. 13	839	214	61	1505
Bottle stopper. Protective	J. Librowicz	481,330	Oct. 11	1235	315	61	263
Bottle stoppers or caps. Apparatus for applying	D. Wickham	476,712	June 7	723	178	59	1581
Bottle stoppering device	M. L. Macauley	481,363	Aug. 23	2615	643	60	1122
Bottle valved cap or stopper	W. H. Ricker	486,298	Nov. 15	1787	470	61	970
Bottle-washer	C. Harris and A. T. Goodsell	466,680	Jan. 5	584	151	58	113
Bottle-washer	S. R. King	487,842	Dec. 13	997	251	61	1537
Bottle-washer	W. M. Wise	470,387	Mar. 8	1191	304	58	1335
Bottle washer and rinser	O. Eick	487,999	Dec. 13	1252	311	61	1586
Bottle-washer. Faucet	C. H. Murphey	473,947	May 3	100	23	59	656
Bottle-washing machine	G. Burges, Jr.	476,126	May 31	3573	898	59	1386
Bottle-washing machine	L. A. Koplin	472,368	Apr. 5	564	146	59	106
Bottle-washing machine	J. Masson	474,397	May 10	825	216	59	807
Bottle-washing machine	E. Raidline	480,135	Aug. 2	603	153	60	697
Bottle-washing machine	J. F. Wittemann	474,510	May 10	1063	258	59	841
Bottle-wiring machine	S. Wile and H. La Casse	479,342	July 19	1968	490	60	411
Bottle-wrapping machine	H. J. Mark	472,462	Apr. 5	708	181	59	134
Bottle-wrapping machine	H. J. Mark	472,463	Apr. 5	710	181	59	135
Bottles. Anti-filling valve for	P. B. Moore	485,395	Nov. 1	384	103	61	651
Bottles, &c. Apparatus for capsuling	F. S. Pichler	468,389	Feb. 9	757	188	58	680

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Bottles. Apparatus for fixing capsules on.	C. Scherer	483,019	Sept. 20	1798	{ 453 454 }	{ 60 61 }	1714
Bottles. Attachment for varnish or similar.	T. G. Watson	487,502	Dec. 6	445	115	61	1409
Bottles. Cap for mustard.	M. Ams	476,771	June 14	819	202	59	1613
Bottles. Corking.	C. Schroeder	487,451	Dec. 6	370	97	61	1394
Bottles. Corking.	C. Schroeder	487,452	Dec. 6	372	97	61	1394
Bottles, &c. Device for cleaning.	C. F. Woessner	481,537	Aug. 23	2906	713	60	1179
Bottles. Implement for finishing the necks of.	C. Leug	480,774	Aug. 16	1641	411	60	924
Bottles, &c. Liquid-ejecting device for.	F. S. Cooley	487,088	Nov. 29	3083	792	61	1257
Bottles. Machine for making loops for wiring.	J. H. W. Ortmann	488,612	Dec. 27	2265	562	61	1822
Bottles or similar vessels. Device for closing.	J. E. Clerc	487,385	Dec. 6	237	64	61	1368
Bottler's apron.	A. Fischer	473,698	Apr. 26	2700	679	59	562
Bottling aerated liquids. Machine for.	F. J. Johnston and N. F. Hallett	472,362	Apr. 5	553	{ 143 144 }	{ 59 60 }	104
Bottling apparatus.	A. M. Donally	467,086	Jan. 12	1265	{ 320 321 322 }	{ 58 59 60 }	249
Bottling liquids and sealing bottles. Method of and means for	W. Painter	473,776	Apr. 26	2805	{ 706 707 708 }	{ 59 60 61 }	583
Bottling-machine	G. Feltman	467,574	Jan. 26	2080	{ 526 527 528 529 530 531 532 533 }	{ 58 59 60 61 62 63 64 65 }	419
Bottling-machine	S. Wile and H. La Casse	477,617	June 21	2214	{ 554 555 556 557 }	{ 59 60 61 62 }	1901
Bouquet and badge holder	J. B. Hannan	483,719	Oct. 4	289	72	61	61
Bouquet-holder	J. M. Lucas	475,220	May 17	2126	538	59	1075
Bouquet-holder	E. L. McDowell	484,602	Oct. 18	1655	420	61	359
Bowling-alley	H. Montgomery	471,244	Mar. 22	2489	632	58	1609
Bowling-alley	A. Warth	469,071	Feb. 16	1830	468	58	902
Bowling-alley	A. Warth	470,023	Mar. 1	567	141	58	1209
Bowling-alley. Portable.	S. Hoyt	469,249	Feb. 23	2096	539	58	960
Box:							
See Alarm-box.	Loom-shuttle box.						
Annealing-box.	Mail-box.						
Axle-box.	Mailing and salesman's box.						
Ballot-box.	Match-box.						
Bottle packing and shipping box.	Measuring-box.						
Butter-box.	Miter-box.						
Cake or bread box.	Money-box.						
Coin-holding box.	Music-box.						
Confectionery or other box.	Musical box.						
Core-box.	Packing-box.						
Dice-box.	Paper box.						
Display-box.	Pie-box.						
Door parcel-box.	Power-box.						
Egg-box.	Puzzle-box.						
Envelope - delivery box.	Sand-box.						
Fancy box.	Sheet-metal box.						
Fare-box.	Shelf-box.						
Fare-box.	Show-box.						
Feed-box.	Signal-box.						
File-box.	Sluice-box.						
Folding box.	Stamp and match box.						
Folding or knock-down box.	Stationery-box.						
Fruit-box.	Stereotype-box.						
Fuse-box.	Stuffing-box.						
Game-box.	Telegraph-box.						
Garbage-box.	Tote-box.						
Hat-box.	Twine-box.						
Journal-box.	Vehicle-box.						
Junction-box.	Veneer box.						
Knockdown box.	Wagon-box.						
Letter-box.	Wood and coal box.						
Box	Work-box.						
Box	A. Ames, Jr.	478,947	July 12	1344	333	60	281
Box	J. M. Baker	475,121	May 31	3567	897	59	1385
Box	H. Gass	472,114	Apr. 5	165	45	59	31
Box	W. B. Howe and F. B. Davidson	482,479	Sept. 13	934	228	60	1530
Box	F. H. Palmer	477,572	June 21	2133	530	59	1886
Box and fastening	C. W. Manning	475,129	May 17	1991	504	59	1048
Box attachment.	E. Buyer	480,999	Aug. 16	1988	498	60	992
Box-blinding channel-strips. Machine for making	J. G. Lettelier	482,484	Sept. 13	940	{ 229 230 }	{ 60 61 }	1531
Box-board matcher and jointer	E. Fischer	481,752	Aug. 30	3262	794	60	1263
Box-bottoms. Machine for tonguing and cutting	C. H. Fuchs	469,059	Feb. 16	1816	464	58	899
Box-clamping machine	A. A. Fuchs	468,094	Feb. 2	275	67	58	578
Box-closure	H. Molt	475,135	May 17	2001	506	59	1050
Box-corner	J. Austin	486,844	Nov. 29	2663	696	61	1173
Box-corners. Machine for trimming	C. H. Fuchs	468,095	Feb. 2	277	67	58	578
Box-cover	F. V. Ettlinger	476,453	June 7	349	81	59	1505
Box-cover	F. V. Ettlinger	485,790	Nov. 8	965	259	61	787
Box-cover	V. A. and M. A. Lehucher and A. Mathieu	482,258	Sept. 6	550	131	60	1442
Box-covers. Locking device for.	F. Stickney	467,960	Feb. 2	81	19	58	540
Box-covers. Machine for making.	G. A. Barnes	473,184	Apr. 19	1841	{ 463 464 }	{ 59 60 }	373

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Box-covering machine	D. F. Lafean and F. X. Devlin	475,324	May 24	2283	587	59	1124
Box-fastener	S. S. Barrett	470,968	Mar. 15	2060	528	58	1515
Box-fastener	S. S. Barrett	485,524	Nov. 1	563	150	61	687
Box-fastener	C. W. Beehler	483,953	Oct. 4	639	160	61	131
Box-fastener	E. Dietz	487,667	Dec. 6	696	178	61	1459
Box-fastener	J. G. Giesberg and E. Schenltz, Jr.	479,416	July 26	2112	529	60	453
Box-fastener	C. C. Martin	484,373	Oct. 11	1294	330	61	276
Box-fastener	C. C. Martin	484,663	Oct. 18	1769	450	61	382
Box-fastener	J. Niese	473,436	Apr. 19	2250	567	59	454
Box-fastener	J. G. Peace	468,687	Feb. 9	1219	310	58	772
Box-fastener	W. D. Prideaux	467,357	Jan. 19	1714	438	58	342
Box-fastener	C. D. Suffrins	487,082	Nov. 29	3069	788	61	1254
Box-filling machine	W. H. Butler and W. R. Landfear	482,542	Sept. 13	1047	{ 253 254 255 }	60	1553
Box for blacking, &c.	I. Eisenstaedt	476,619	June 7	595	142	59	1555
Box for hats, bonnets, &c.	W. H. Bickelhaupt	477,494	June 21	2014	499	59	1862
Box for holding cigarettes, &c.	B. F. Warren	488,910	Dec. 27	2737	675	61	1916
Box for stationery, &c.	G. B. Hard	474,062	May 3	288	69	59	693
Box-lid holder	A. D. Hoffman	487,566	Dec. 6	539	138	61	1428
Box-lid support	A. H. Raymond	486,503	Nov. 22	2102	556	61	1047
Box-lid support	C. H. Schaeffer	480,832	Aug. 16	1731	432	60	942
Box-lid support	C. B. Struble	478,655	July 12	901	223	60	194
Box-machine	J. Godfrey	483,649	Oct. 4	195	49	61	40
Box-machine	A. M. Murray and D. N. Stutsman	484,041	Oct. 11	782	197	61	175
Box-machine	J. Neff	488,086	Dec. 13	1408	350	61	1620
Box-machine	C. W. Roberts	487,967	Dec. 13	1190	297	61	1573
Box-making machine	R. L. Coons	474,545	May 10	1063	{ 272 273 }	59	852
Box-making machine	J. C. McEwen	478,456	July 5	603	147	60	119
Box-nailer	J. A. Cain	485,530	Nov. 1	573	154	61	690
Box-nailing machine	S. H. Edwards	482,866	Sept. 20	1539	{ 383 384 385 }	60	1663
Box-nailing machine	B. Muller	480,735	Aug. 16	1582	{ 396 397 }	60	912
Box or basket	E. Behnē	472,849	Apr. 12	1273	326	59	254
Box-stapling machine	C. Beck	473,813	Apr. 26	2568	720	59	591
Box-strap. Metal	S. C. Cary	485,150	Oct. 25	2555	656	61	534
Box-support	W. D. Smith	488,485	Dec. 20	2064	513	61	1766
Box-supporter	W. D. Smith	483,751	Oct. 4	342	86	61	71
Box-tenoning machine	C. H. Fuchs	468,036	Feb. 2	278	68	58	578
Boxes. Apparatus for making metal	F. J. King	487,186	Nov. 29	3233	828	61	1286
Boxes. Former for making	A. Folger	467,986	Feb. 2	120	29	58	547
Boxes from paste or straw board. Making	J. Godfrey	483,958	Oct. 4	654	164	61	136
Boxes. Machine for stripping paste or straw board	J. Godfrey	475,552	May 24	2658	{ 676 677 }	59	1193
Boxer's ring	G. E. Sterry, Jr.	485,896	Nov. 8	1131	299	61	820
Brace:							
See Bed-brace.	Fence-post brace.						
Bedstead-brace.	Rail-brace.						
Bit-brace.	Ratchet-brace.						
Boiler-brace.	Ratchet-drill brace.						
Carving-brace.	Shoulder-brace.						
Dental jaw-brace.	Spinal brace.						
Excavation-brace.	Universal-jointed brace.						
Extensible brace.	Vehicle-spring brace.						
Brace-bit attachment	G. Larson	468,771	Feb. 9	1345	340	58	798
Bracelet	T. O. Smith	488,701	Dec. 27	2411	598	61	1849
Bracelet	C. Bachem	466,883	Jan. 12	944	241	58	189
Bracelet	L. Cremonesi	482,229	Sept. 6	500	119	60	1433
Bracelet-gage	W. Jones	470,684	Mar. 15	1626	422	58	1430
Bracelets. Calipers for	G. C. Van Roden	466,986	Jan. 12	1106	280	58	219
Bracket:							
See Adjustable bracket.	Roof-scaffold bracket.						
Dental bracket.	Scaffold-bracket.						
Electric-heater bracket.	Shade-bracket.						
Extension-bracket.	Shelf-bracket.						
Gas and electric-light bracket.	Shingling-bracket.						
Insulator-bracket.	Sign-bracket.						
Metal bracket.	Swinging bracket.						
Piano lamp-bracket.	Tool-bracket.						
	Towel-bracket.						
	Wire shelf-bracket.						
Bracket	W. D. Gridley	482,086	Sept. 6	268	65	60	1388
Bracket	J. Huff and E. Johnson	479,424	July 26	2128	532	60	457
Bracket	R. and J. Ingal	488,692	Dec. 27	2400	595	61	1847
Bracket	D. M. Ireland	481,177	Aug. 23	2301	567	60	1064
Bracket	H. J. O'Neil	485,215	Nov. 1	92	29	61	591
Braid	H. W. Struss	467,584	Jan. 26	2093	530	58	422
Braid case	C. F. Sundstrom	485,995	Nov. 8	1295	344	61	855
Braid. Machine for softening cotton	J. H. Hecox	473,747	Apr. 26	2774	697	59	576
Braiding-machine	A. Fornander	468,649	Feb. 9	1157	295	58	760
Braiding-machine	G. McKay	468,225	Feb. 2	474	117	58	618
Braiding-machine	W. Mundt	468,997	Feb. 16	1723	439	58	881
Braiding-machine	H. W. Struss	467,585	Jan. 26	2093	531	58	422
Braiding-machine	G. K. Winchester and A. S. Hood	468,432	Feb. 9	818	206	58	693
Braiding-machine. Rotary	H. W. Struss	479,474	July 26	2226	559	60	475
Braiding-machine spool-carrier	J. E. Lee	478,341	July 5	436	107	60	87
Braiding-machines. Combined spool-holder and stop-motion for	W. Mundt	469,974	Mar. 1	501	124	58	1195

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Brake:							
See Air-brake.	Locomotive-brake.						
Automatic brake.	Locomotive-driver brake.						
Bicycle-brake.	Magnetic brake.						
Car-brake.	Pressure-brake.						
Car-coupling brake.	Rail-brake.						
Car-ratchet-brake.	Railway-brake.						
Carriage-brake.	Roller-brake.						
Cycle-brake.	Safety-brake.						
Electro-magnetic brake.	Sled-brake.						
Elevator-brake.	Sleigh-brake.						
Flax and hemp brake.	Track-brake.						
Hemp-brake.	Tramway-brake.						
	Vehicle-brake.						
	Wagon-brake.						
Brake	H. M. Lofton	476,283	June 7	77	17	59	1453
Brake-adjuster. Automatic	M. E. McKee	487,636	Dec. 6	641	164	61	1449
Brake-adjusting device	A. Rauh	478,638	July 12	878	165	60	190
Brake apparatus. Automatic vacuum	J. Gresham	471,382	Mar. 22	2696	687	58	1650
Brake-beam	J. W. Baker. (Reissue).	11,292	Dec. 6	749	689	61	1469
Brake-beam	J. Green	477,057	June 28	2930	731	59	2057
Brake-beam	P. Hien	480,194	Aug. 2	695	176	60	713
Brake-beam	R. T. Markee	474,669	May 10	1260	322	50	891
Brake-beam	J. Pearce	467,234	Jan. 19	1523	3-9	58	306
Brake-beam	H. B. Robischung	466,984	Jan. 12	1103	279	58	218
Brake-beam	H. B. Robischung	475,802	May 31	3048	771	59	1282
Brake-beam	H. B. Robischung	485,823	Nov. 8	1007	270	61	795
Brake-beam	H. B. Robischung	486,218	Nov. 15	1656	438	61	942
Brake-beam	H. B. Robischung	486,568	Nov. 22	2199	578	61	1064
Brake-beam	J. M. Shook	468,421	Feb. 9	804	200	58	690
Brake-beam	C. D. Wiley	486,835	Nov. 22	2640	689	61	1154
Brake-beam. Metallic	W. A. Pungs	466,534	Jan. 12	846	217	58	171
Brake-beams. Core for hollow	T. Fielden	468,910	Feb. 16	1559	397	58	848
Brake-beams. Strut for	C. T. Schoen	468,830	Feb. 16	1439	366	58	825
Brake-handle	R. L. Fosburgh and J. F. Milligan	469,401	Feb. 23	2336	600	58	1007
Brake-handle	R. L. Fosburgh and J. F. Milligan	484,954	Oct. 25	2251	580	61	493
Brake-hose-support. Air	E. M. Roberts	468,693	Feb. 9	1229	313	58	774
Brake mechanism. Automatic	E. G. Shortt	473,789	Apr. 26	2-33	712	59	587
Brake mechanism. Automatic fluid-pressure	W. F. De Forest	468,240	Feb. 2	497	122	58	622
Brake mechanisms. Air-pump for	M. B. Mills	476,756	June 7	792	195	59	1595
Brake-operating mechanism	G. Harrisou	473,553	Apr. 26	2450	620	59	513
Brake-piston indicator	J. J. Hannan	469,823	Mar. 1	255	65	58	1151
Brake-shoe	S. K. Buell	484,404	Oct. 18	1349	344	61	298
Brake-shoe	D. N. Cook	466,655	Jan. 5	543	141	58	105
Brake-shoe	M. A. Penney	471,891	Mar. 29	3460	883	58	1802
Brake-shoe	W. D. Sargent	468,581	Feb. 9	1060	270	58	740
Brake-shoe	C. T. Schoen	481,973	Sept. 6	77	20	60	1350
Brake-shoe	J. Shaaber	480,833	Aug. 16	1732	433	60	942
Brake-shoe	J. G. Wharton	478,671	July 12	922	229	60	198
Brake-shoe	C. F. Wohlforth	480,982	Aug. 16	1969	492	60	988
Brake-shoes. Art of and apparatus for making	C. T. Schoen	484,866	Oct. 25	2103	542	61	464
Bran-duster	A. Heine	485,667	Nov. 8	1077	286	61	809
Branding-stamp	J. S. Fitzmaurice	483,050	Sept. 20	1839	467	60	1723
Branding-tool	J. R. Todd	487,304	Dec. 6	103	30	61	1342
Brazing device. Electrical	W. Mitchell	478,201	July 5	207	52	60	43
Bread and applying butter thereto. Means for dividing	A. W. Kiddie	470,200	Mar. 8	857	211	58	1274
Bread and pastry cabinet	E. Jackson	468,623	Feb. 9	1121	285	58	752
Bread. Apparatus for baking altar	P. H. Horan	474,601	May 10	1151	292	59	869
Bread-board	T. H. Kinsman	488,712	Dec. 27	2426	601	61	1852
Bread-board	J. Woolridge	469,413	Feb. 23	2355	604	58	1011
Bread-cutting plate	F. F. Sevey	471,198	Mar. 22	2422	616	58	1596
Bread-pan, &c.	A. H. Stevens	479,997	Aug. 2	369	92	60	651
Bread-raiser and cabinet	J. Miltonberger	478,200	July 5	206	52	60	42
Bread. Receptacle for	P. Krebs	467,672	Jan. 26	2223	565	58	445
Breakwater, &c.	A. M. Shannon	480,288	Aug. 9	869	221	60	761
Breast-strap attachment	T. B. Jackson	484,433	Oct. 18	1402	357	61	308
Breast-strap attachment	B. Lukens	468,669	Feb. 9	1192	358	58	767
Breast-strap slide	H. D. Stoddard	477,079	June 14	1335	323	59	1717
Breech mechanism. Rapid-fire	A. Mercer	487,631	Dec. 6	633	163	61	1447
Breweries. Cooling-room for	C. D. Stanford	472,936	Apr. 12	1404	359	59	281
Brewing	C. F. Lawton	468,808	Feb. 16	1405	356	58	818
Brewing beer	C. H. and B. O. Frings	478,188	July 5	184	.....	60	39
Brick	C. Borgner	474,285	May 3	616	152	59	756
Brick	L. H. and H. H. de Fernelmont	483,105	Sept. 20	1922	487	60	1740
Brick	P. S. Loveridge	481,700	Aug. 30	3162	772	60	1244
Brick	J. L. Stevenson	480,879	Aug. 16	1797	449	60	955
Brick and making the same. Enameled	I. T. Rue	479,021	July 19	1471	.....	60	315
Brick and tile cutter	J. W. Boltz	473,446	Apr. 26	2277	574	59	481
Brick and tile cutter	W. Broughton	473,565	Apr. 26	2491	629	59	522
Brick and tile cutting machine	R. A. Drawdy	473,301	Apr. 19	2026	509	59	411
Brick and tile machine	J. J. Kulage	484,897	Oct. 25	2161	556	61	475
Brick and tile machine	J. Thompson	478,481	July 5	642	157	60	128
Brick and tile machine cutter	O. W. Johnson	478,436	July 5	577	139	60	111

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Brick. Building.....	J. Rapp.....	468,990	Feb. 16	1715	436	58	879
Brick. Building.....	L. A. Steiger.....	468,838	Feb. 16	1453	371	58	828
Brick. Coloring.....	J. C. Anderson.....	468,321	Feb. 9	648	161	58	659
Brick-cutting machine.....	C. T. Fitch and A. Schantz.....	488,883	Dec. 27	2685	664 665 623	61	1905
Brick-cutting machine.....	H. A. Riggs.....	479,663	July 26	2502	624 625	60	527
Brick-cutting machine.....	J. A. Snell.....	477,915	June 28	2709	678	59	2014
Brick-cutting machine.....	E. Stern.....	479,159	July 19	1684	421	60	356
Brick-drier.....	F. E. McElfresh.....	482,690	Sept. 13	1264	309 310	60	1595
Brick-drier-car.....	N. Harper.....	486,931	Nov. 29	2839	735	61	1208
Brick. Drying.....	C. J. Dion.....	487,827	Dec. 13	969	244	61	1532
Brick. Drying and burning.....	C. C. Kinzel.....	485,199	Nov. 1	71	22	61	587
Brick-drying car.....	C. Chambers, Jr.....	488,936	Dec. 27	2771	684	61	1924
Brick-elevator.....	C. Olsen.....	466,542	Jan. 5	370	92	58	71
Brick-grinding machine.....	W. F. Stedman.....	469,643	Feb. 23	2690	692	58	1077
Brick-handling implement.....	C. and C. Hansen.....	468,872	Feb. 16	1503	383	58	838
Brick in kilns. Setting.....	F. Alsip.....	484,170	Oct. 11	974	249	61	213
Brick. Interlocking.....	L. A. Steiger.....	468,840	Feb. 16	1455	372	58	828
Brick-kiln.....	M. A. T. Boeshucke and D. D. McLean.....	475,433	May 24	2464	628	59	1156
Brick-kiln.....	J. Conley and J. M. Wolfe.....	477,993	June 28	2823	706	59	2038
Brick-kiln.....	J. Conley and J. M. Wolfe.....	477,994	June 28	2824	707	59	2039
Brick-kiln.....	J. Conley and J. M. Wolfe.....	487,174	Nov. 29	3217	824	61	1253
Brick-kiln.....	C. B. Coxe.....	486,557	Nov. 22	2174	573	61	1060
Brick-kiln.....	W. Crumlie.....	475,237	May 17	2158	547	59	1081
Brick-kiln.....	S. Dewhirst.....	480,561	Aug. 9	1297	325	60	842
Brick-kiln.....	A. Dimpfl.....	475,267	May 17	2201	562	59	1090
Brick-kiln.....	J. B. Griswold.....	466,676	Jan. 5	577	149 150	58	112
Brick-kiln.....	J. Henney.....	477,364	June 21	1813	443	59	1822
Brick-kiln.....	M. J. Hynes.....	477,418	June 21	1891	465 466	59	1838
Brick-kiln.....	J. C. Kinzel.....	471,769	Mar. 29	3271	835	58	1765
Brick-kiln.....	C. Klose.....	469,151	Feb. 16	1933	495	58	923
Brick-kiln.....	W. A. Koneman.....	484,595	Oct. 18	1642	416 417	61	357
Brick-kiln.....	G. C. Little.....	467,981	Feb. 2	112	28	58	545
Brick-kiln.....	J. W. Penfield.....	480,935	Aug. 16	1882	469 470	60	972
Brick-kiln.....	J. W. Penfield.....	480,936	Aug. 16	1884	470 471	60	972
Brick-kiln.....	S. J. Plant.....	474,922	May 17	1660	424	59	984
Brick-kiln.....	W. Radford.....	480,134	Aug. 2	600	152 153	60	697
Brick-kiln.....	L. H. Reppell.....	487,158	Nov. 29	3193	818	61	1279
Brick-kiln.....	W. Sercombe.....	472,404	Apr. 5	621	158 159	59	117
Brick-kiln.....	C. A. Snow.....	483,638	Oct. 4	180	45	61	38
Brick-kiln.....	W. H. B. Stout.....	480,940	Aug. 16	1889	472 473	60	974
Brick-kiln.....	W. Swindell.....	479,679	July 26	2536	652	60	533
Brick-kiln. Continuous.....	W. Johnson.....	472,926	Apr. 12	1388	356	59	278
Brick-kiln. Continuous.....	C. F. Kaul.....	486,972	Nov. 29	2901	749	61	1221
Brick-kiln furnace.....	W. H. Martin.....	472,738	Apr. 12	1122	287	59	225
Brick-machine.....	J. C. Anderson.....	468,059	Feb. 2	228	56	58	568
Brick-machine.....	S. P. Babcock.....	488,106	Dec. 13	1437	361 362	61	1626
Brick-machine.....	N. T. Barnes.....	466,763	Jan. 12	730	189 190	58	149
Brick-machine.....	M. Bierline.....	469,225	Feb. 23	2062	530 531	58	954
Brick-machine.....	W. Burkman.....	478,915	July 12	1297	322 323	60	272
Brick machine.....	T. C. Fawcett.....	485,323	Nov. 1	262	71. 72	61	625
Brick-machine.....	H. Harlan.....	482,248	Sept. 6	531	127	60	1438
Brick-machine.....	G. Isaacs.....	484,319	Oct. 11	1216	309	61	259
Brick-machine.....	J. A. C. Jackson.....	467,813	Jan. 26	2452	622 623	58	489
Brick-machine.....	G. T. Jacobs.....	482,252	Sept. 6	536	128 129	60	1439
Brick-machine.....	W. Johnson.....	480,726	Aug. 16	1569	392 393	60	909
Brick-machine.....	H. W. Mead.....	471,677	Mar. 29	3124	796 797	58	1738
Brick-machine.....	J. B. Mowry.....	468,396	Feb. 9	770	191 192	58	683
Brick-machine.....	R. N. Ross and H. H. Keller.....	487,161	Nov. 29	3198	819 820	61	1280
Brick-machine.....	W. C. Vanneman.....	473,705	June 7	715	175 176	59	1579
Brick-machine.....	B. C. White.....	488,622	Dec. 27	2277	565 566	61	1824
Brick-machine.....	T. T. Wood.....	481,454	Aug. 23	2766	680 681 682	60	1151
Brick-machine and mold-sander.....	J. Farnen and J. Mulloy.....	469,399	Feb. 23	2324	599 600	58	1005
Brick-machine. Hydraulic.....	J. Beggs and T. A. Gordon.....	475,747	May 31	2962	751 752	59	1265
Brick-machine. Re-pressing.....	J. A. Frey and J. Thompson.....	472,618	Apr. 12	946	244 245	59	194

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Brick-machines. Loading-barrow for	E. New	472,138	Apr. 5	201	54	59	38
Brick-marking machine.....	J. E. Ennis	483,910	Oct. 4	582	{ 146 147 525 326 }	61	121
Brick-mold sander	C. A. Adams	470,963	Mar. 15	2054	134	58	1513
Brick-mold sander	G. Carnell	472,334	Apr. 5	518	134	59	97
Brick-mold sander	J. Farnen and J. Mulloy	469,400	Feb. 23	2334	600	58	1007
Brick-mold sander	E. O. Leach	468,810	Feb. 16	1409	357	58	819
Brick or fuel press	M. Nirdlinger	477,060	June 14	1295	315	59	1710
Brick or tile cutter	A. Z. Williams	488,343	Dec. 20	1833	{ 458 459 }	61	1719
Brick or tile machine	E. M. Freese	468,651	Feb. 9	1161	296	58	760
Brick or tile machine	J. C. Titus	478,267	July 5	330	80	60	66
Brick or tile machine die	G. C. Skinner	478,136	July 5	86	23	60	20
Brick. Paving.....	D. Lance	478,612	July 12	844	208	60	123
Brick. Paving.....	L. C. Turley	487,652	Dec. 6	670	172	61	1454
Brick-press	G. H. Babcock	488,049	Dec. 13	1349	{ 334 335 555 556 }	61	1607
Brick-press	J. J. Kulage	484,896	Oct. 25	2159	555	61	475
Brick-press	J. J. Kulage	485,549	Nov. 1	604	161	61	696
Brick-press	S. McCarter	478,625	July 12	860	212	60	186
Brick-press. Hydraulic.....	J. J. Koch	480,818	Aug. 16	1707	{ 426 427 428 }	60	937
Brick-press steam-heater	B. C. White	488,623	Dec. 27	2286	566	61	1825
Brick-pressing machine	C. W. Raymond	476,928	June 14	1087	{ 262 263 }	59	1667
Brick-re-pressing machine	F. Grant and A. H. Murray	485,191	Nov. 1	55	17, 18	61	584
Brick-re-pressing machine	W. W. Wallace and R. C. Penfield	480,912	Aug. 16	1250	461	60	966
Brick-sanding machine	W. W. Wallace and R. C. Penfield	482,705	Sept. 13	1291	316	60	1601
Bricks. Composition for	W. Wade	468,404	Feb. 9	783	58	65	685
Bricks. Composition of matter for	A. S. Baker	477,632	June 28	2258	59	1927	
Bricks. Compound for preserving the color of finishing- ing.....	J. D. Graybill	479,640	July 26	2471	60	521	
Bricks. Device for conveying	W. Griffith	472,922	Apr. 12	1382	{ 354 355 }	59	277
Bricks. Manufacture of vitreous.....	J. C. Anderson	468,320	Feb. 9	648	58	659	
Bricks. Process of and composition for manufacturing sand	E. H. Lewis	471,844	Mar. 29	3398	58	1789	
Bridge	L. Barnes	487,819	Dec. 13	957	242	61	1529
Bridge	T. H. Kosure	478,438	July 5	580	{ 140 141 }	60	114
Bridge	G. Parsons-Miller	467,013	Jan. 12	1144	290	58	225
Bridge. Draw	C. A. Zimmerman	486,552	Nov. 22	2165	572	61	1859
Bridge-flooring	J. R. Worcester	480,483	Aug. 9	1186	298	60	819
Bridge for sidewalks, &c. Draw.....	J. F. Schultz	479,533	July 26	2314	578	60	493
Bridge-gate	N. Bosmann	472,009	Mar. 29	3620	{ 925 926 }	58	1833
Bridge-gate	E. Delia	478,755	Dec. 27	2484	618	61	1864
Bridge-gate	C. Dietz	472,208	Apr. 5	317	82	59	60
Bridge-gate	C. Eickhorst and J. Idstein	466,401	Jan. 5	140	38, 39	58	29
Bridge-gate	W. Haynes	474,125	May 3	370	89	59	709
Bridge-gate	J. W. Rhodes	477,700	June 28	2358	590	59	1943
Bridge-gate	J. Schenbeck	469,321	Feb. 23	2209	567	58	982
Bridge-gate	A. J. Smith	474,420	May 10	869	227	59	816
Bridge-gate	A. J. Smith	484,470	Oct. 18	1455	371	61	318
Bridge-gate	C. Stocker, Jr	484,122	Oct. 11	884	225	61	196
Bridge gate. Draw.....	A. G. Anderson	486,483	Nov. 29	2658	{ 695 696 }	61	1173
Bridge gate. Draw.....	F. A. Philbrick	486,793	Nov. 22	2568	669	61	1138
Bridge gate. Safety	H. J. Rohlf	486,738	Nov. 22	2473	645	61	1120
Bridge guard. Draw.....	F. Boucher	482,291	Sept. 6	608	144	60	1453
Bridge. Iron	H. A. Loomis	482,017	Sept. 6	158	38	60	1366
Bridge or platform. Float	H. B. Seaman	474,487	May 10	970	250	59	834
Bridge-piers. Method of and means for building and anchoring	F. E. Sickels	472,277	Apr. 5	420	108	59	79
Bridge. Portable.....	J. T. Cassidy	484,086	Oct. 11	843	213	61	187
Bridge. Suspension truss.....	G. A. Stephenson	479,081	July 19	1560	391	60	332
Bridge. Truss	J. F. Hardesty	485,689	Nov. 8	819	219	61	757
Bridge. Truss.....	J. H. Stone	484,686	Oct. 18	1800	458	61	388
Bridges. Expansion-bearing for	G. S. Morison	484,971	Oct. 25	2277	{ 587 588 620 621 }	61	498
Bridges. Guard-gate for draw.....	W. Herrick	483,445	Sept. 27	2465	621	60	1855
Bridges. Hinged expansion-gear for	C. J. Westwood and H. Rigby	480,863	Aug. 16	1777	444	60	951
Bridges. Safety-gate for draw.....	W. Goddard	482,499	Sept. 13	976	236	60	1539
Bridges. Self-acting gate for draw.....	L. Gabele and H. Mattes	470,118	Mar. 1	710	176	58	1237
Bridges. Shaft-coupling for lift.....	G. B. Clark	469,314	Feb. 23	2199	563	58	980
Bridges. Wire-support on draw.....	J. B. Seace	485,662	Nov. 8	785	209	61	749
Bridge	G. B. Goodell and B. S. Hopkins	485,685	Nov. 8	815	217	61	756
Bridge	A. and L. Hasselbauer	487,565	Dec. 6	538	138	61	1428
Bridge	L. D. Jones	473,396	Apr. 19	2200	552	59	444
Bridge	S. A. Nolen	476,675	June 7	670	163	59	1370
Bridge and relievable bit. Safety.....	J. Atkinson	468,293	Feb. 2	609	152	58	641
Bridge appliance for subduing horses	G. R. Hollingsworth	474,739	May 10	1371	347	59	913
Bridge attachment	W. L. Guthrie	486,376	Nov. 15	1907	504	61	994
Bridge attachment	J. W. Peace	483,472	Sept. 27	2496	628	60	1861
Bridge-bit	W. J. Barndollar	488,051	Dec. 13	1354	336	61	1608
Bridge-bit	J. U. Beckeman and D. W. Lukens	480,487	Aug. 9	1190	299	60	820
Bridge-bit	G. Brockington	466,485	Jan. 5	279	70	58	53
Bridge-bit	L. F. Brown	484,994	Oct. 25	2321	599	61	506
Bridge-bit	O. Combs	477,102	June 14	1368	333	59	1724
Bridge-bit	A. H. Conn	474,368	May 10	788	205	59	800

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Bridle-bit	J. Dean	483,103	Sept. 20	1921	486	60	1739
Bridle-bit	J. Dean	483,104	Sept. 20	1922	486	60	1740
Bridle-bit	C. E. Heinze	481,172	Aug. 23	2296	566	60	1063
Bridle-bit	A. W. Helms	475,110	May 17	1967	498	59	1043
Bridle-bit	J. W. James	478,866	July 12	1225	304	60	258
Bridle-bit	J. W. James	478,867	July 12	1226	304	60	258
Bridle-bit	B. M. Johnson	470,051	Mar. 1	608	151	58	1217
Bridle-bit	J. Maddox, Jr.	485,638	Nov. 8	740	194	61	740
Bridle-bit	W. Nichols	471,493	Mar. 22	2862	728	58	1681
Bridle-bit	G. S. Parsons	477,779	June 28	2462	621	59	1972
Bridle-bit	A. F. Ruhlow	484,342	Oct. 11	1250	319	61	267
Bridle-bit	O. M. Sloat	479,070	July 26	2521	627	60	531
Bridle-bit	C. Smith	468,309	Feb. 2	627	157	58	645
Bridle-bit	H. S. Squier	472,145	Apr. 5	212	56	59	40
Bridle-bit	N. Stalker	471,833	Mar. 29	3380	861	58	1786
Bridle-bit	W. E. Hudson	475,864	May 31	3163	802	59	1305
Bridles. Draft	P. F. King	469,653	Feb. 23	2707	696	58	1081
Bridles. Elastic overdraw head-check for	J. M. Harter and S. E. Harsh	476,638	June 7	621	149	59	1560
Bridles. Overcheck-loop for	C. G. Collins	470,181	Mar. 8	826	204	58	1269
Brine. Purification of	F. P. Werner	482,604	Sept. 13	1138		60	1571
Brocade or gold cloth. Producing an imitation of	J. W. Brady	480,316	Aug. 9	919	232	60	769
Broiler	L. L. Briggs	476,916	June 14	1068	257	59	1602
Broiler	T. Barnett	476,508	June 7	429	100	59	1521
Broiler and toaster	J. A. Varley	483,882	Oct. 4	535	135	61	111
Broiler and toaster. Combined	R. Martin	486,880	Nov. 29	2716	708	61	1184
Broiler or toaster	M. B. Noland	471,134	Mar. 22	2319	595	58	1577
Broiling-pan	H. H. Dew. (Reissue)	11,232	Apr. 12	1459	{ 372 373 }	59	291
Bromine. Extracting	W. B. Silverlock	467,957	Feb. 2	76	18, 19	58	540
Bronzing-machine	J. Myers	475,139	May 17	2007	507	59	1051
Brooder	C. E. Watkins	483,409	Sept. 27	2421	608	60	1246
Brooder. Chicken	E. Barney	483,417	Dec. 20	1959	489	61	1744
Brooder. Poultry	E. Barney	471,460	Mar. 22	2815	718	58	1672
Brooder. Poultry	J. A. Porter	477,309	June 21	1727	{ 422 423 }	59	1806
Broom	A. M. Sanders	477,782	June 28	2485	622	59	1973
Broom attachment	G. H. Abrams	486,066	Nov. 8	1403	371	61	875
Broom attachment	J. B. Anfuldish	467,127	Jan. 12	1353	345	58	266
Broom-corn cleaner	F. W. Reese	488,251	Dec. 20	1683	{ 420 421 }	61	1690
Broom-guard	H. J. Bennett	483,733	Oct. 4	313	78	61	66
Broom-head	E. Ehrenberg	472,986	Apr. 19	1504	383	59	313
Broom-holder	H. H. Draper	470,480	Mar. 8	1337	348	58	1363
Broom-holder	J. M. Haise	467,932	Feb. 2	47	11	58	534
Broom-holder	A. E. Johnson	475,569	May 24	2686	681	59	1199
Broom-holders. Machine for making spring-wire	M. D. Kremer	469,911	Mar. 1	392	98	58	1177
Broom or brush drilling apparatus	H. Besson	487,362	Dec. 6	205	56, 57	61	1361
Broom shoulder cutter	W. F. Settle	480,287	Aug. 9	867	221	60	760
Broom-support	C. A. Hudson	488,501	Dec. 20	2088	519	61	1771
Broom-support and bridle	R. A. Batte	466,764	Jan. 12	733	190	58	150
Brooms. Attachment for street-rail	F. S. Wardwell	467,213	Jan. 19	1469	381	58	300
Brooms, &c. Holder for	D. A. Smith and E. W. Harding	470,880	Mar. 15	1985	495	58	1490
Brush	W. Melius	485,642	Nov. 8	744	196	61	741
Brush	W. Melius	485,616	Nov. 8	995	267	61	793
Brush	E. I. Miller	484,107	Oct. 11	867	221	61	192
Brush	L. Sin Clair	467,778	Jan. 26	2393	608	58	478
Brush	S. P. Storrs	479,082	July 19	1562	{ 391 392 }	60	333
Brush. Air	C. L. Burdick	474,157	May 3	417	101	59	719
Brush. Air	C. L. Burdick	474,158	May 3	420	101	59	720
Brush and making the same	A. H. Wolcott	482,666	Sept. 13	1223	298	60	1587
Brush. Blacking	W. R. Derr	476,449	June 7	345	79	59	1504
Brush-block-boring machine	V. P. Willcox	480,053	Aug. 2	476	121	60	673
Brush. Bottle	A. Zolper	488,784	Dec. 27	2533	629	61	1874
Brush. Bottle-washing	J. Bahis	474,625	May 10	1192	303	59	877
Brush bridle. Paint	W. H. Humphrey	475,114	May 17	1974	500	59	1044
Crush bridles. Machine for the manufacture of paint	F. W. H. Weishaup	487,309	Dec. 6	111	{ 32 33 34 }	61	1344
Brush case and pencil-holder combined. Tooth	S. S. Fox	482,631	Sept. 13	1178	285	60	1578
Brush. Electric	R. E. Williams	479,321	July 19	1926	481	60	403
Brush-ferrule	L. Z. Jenkins	485,467	Nov. 1	489	130	61	672
Brush-fiber clamp	W. H. Gates	471,606	Mar. 29	3016	768	58	1718
Brush. Flue	L. B. Shultz	477,074	June 14	1327	321	59	1716
Brush. Fountain benzine	H. S. Banta and W. I. Bamberger	470,461	Mar. 8	1312	338	58	1358
Brush. Fountain marking	H. S. Brewington	469,990	Mar. 1	524	131	58	1200
Brush handle. Adjustable	C. F. Myers	476,060	May 31	3469	875	59	1366
Brush-heads. Apparatus for inserting plugs in	C. E. Thompson	485,670	Nov. 8	795	212	61	752
Brush-holder	J. O. King	472,365	Apr. 5	559	145	59	105
Brush-holder	F. J. Haeseler	479,802	Aug. 2	42	10, 11	60	590
Brush-holder	W. J. Myers	467,046	Jan. 12	1203	304	58	237
Brush-makers. Knot-picker for	W. Lewis	470,003	Mar. 1	542	134	58	1204
Brush or broom	J. R. Coffman	472,435	Apr. 5	665	170	59	125
Brush or mirror back	W. M. Welling	467,268	Jan. 19	15-2	403	58	317
Brush. Revolving hair	W. J. Miller	481,264	Aug. 23	2458	605	60	1095
Brush. Scrubbing	J. J. Beilmann and E. Levi	483,128	Sept. 27	1958	496	60	1758
Brush. Shoe	M. A. Goodman	469,633	Feb. 23	2678	689	58	1075
Brush. Tanner's sign	C. Grau	483,350	Sept. 27	2332	586	60	1829
Brush. Tooth	L. T. Foss	479,796	Aug. 2	33	8	60	588
Brushes. Bridle for paint	C. Boeckh, Jr.	472,425	Apr. 5	652	166	59	122
Brushes. Bridle for paint	F. W. H. Weishaup	468,405	Feb. 9	785	194	58	686
Brushes. Device for use in the manufacture of leather-bound	C. R. Baker	488,685	Dec. 27	2388	591	61	1844
Brushes, dusters, &c. Holder for	W. F. Loan	468,036	Feb. 2	196	48	58	562

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drawg.	Vol.	Page.
Brushes, &c. Handle-holder for	W. E. Barnett and B. R. Chalk	482,221	Sept. 6	491	117	60	1431
Brushes. Machine for making	P. Kennedy, C. J. Diss, and R. Can- nan.	469,479	Feb. 23	2457	629 630 631 632 633 809 810	58	1030
Brushes. Machine for the manufacture of	G. and T. Shaw and J. P. Ditchfield.	471,709	Mar. 29	3170	810	58	1746
Bucket cover. Sap.....	J. L. Shigley	472,180	Apr. 5	268	70	59	50
Bucket. Dinner.....	J. C. Dunfee	480,184	Aug. 2	679	172	60	711
Bucket. Dinner.....	W. F. Janeway	478,606	July 12	837	206	60	182
Bucket. Dinner.....	H. J. Sibley	482,761	Sept. 20	1399	345	60	1633
Bucket. Dumping.....	W. E. Ludlow	476,285	June 7	79	18	59	1453
Bucket-elevator	J. Cavanagh	482,941	Sept. 20	1662	418	60	1686
Bucket. Fire.....	J. M. Miller	488,321	Dec. 20	1795	451	61	1711
Bucket. Iron	W. and A. McLauchlan	470,947	Mar. 15	2033	520	58	1509
Bucket. Lunch.....	A. Miller	469,162	Feb. 16	1949	499	58	926
Bucket. Milk.....	A. Porttens	483,581	Oct. 4	101	25	61	22
Bucket sinker. Well.....	W. Howze	473,576	Apr. 26	2510	633	59	526
Buckets. Apparatus for riveting ears upon.....	C. Stollberg	480,881	Aug. 16	1799	450	60	956
Buckets. Automatic latch-opener for	C. P. Dole	484,782	Oct. 25	1967	501 502	61	436
Buckets. Automatic trip for dumping.....	W. E. Ludlow	476,284	June 7	78	17	59	1453
Buckets. Bail-car for	M. Thoeni	483,798	Oct. 4	415	103	61	87
Buckets, pails, &c. Trimming for.....	E. L. Bailey	483,641	Oct. 4	183	46	61	38
Buckle	G. E. Adams	480,540	Aug. 9	1268	318	60	836
Buckle	G. E. Adams	484,279	Oct. 11	1154	294	61	248
Buckle	G. E. Adams	488,174	Dec. 20	1559	391	61	1667
Buckle	G. E. Adams	488,175	Dec. 20	1560	391	61	1667
Buckle	J. F. Ballard	470,652	Mar. 15	1578	411	58	1421
Buckle	T. J. Clark	480,397	Aug. 9	1046	262	60	792
Buckle	S. E. Cook	482,915	Sept. 20	1629	408	60	1678
Buckle	C. R. Harris	485,628	Nov. 8	726	189	61	737
Buckle	S. T. Hisley	479,003	July 19	1443	358	60	310
Buckle	E. J. Kraetzer	483,356	Sept. 27	2339	588	60	1830
Buckle	G. La Chapelle	485,104	Oct. 25	2484	638	61	540
Buckle	F. H. La Pierre	478,285	July 5	356	86	60	72
Buckle	M. Logan	477,947	June 28	2757	691	59	2025
Buckle	A. G. Mead	478,120	July 5	64	17	60	15
Buckle	H. C. Milligan	477,601	June 21	2180	511	59	1896
Buckle	J. Sebaf	473,477	Apr. 26	2333	591	50	492
Buckle	M. Scheuer	469,982	Mar. 1	516	128	58	1198
Buckle	M. Schodsky	466,803	Jan. 12	801	206	58	162
Buckle	C. C. Shelby	471,439	Mar. 22	2786	711	58	1666
Buckle	D. L. Smith	469,440	Feb. 23	2390	613	58	1018
Buckle	D. L. Smith	476,565	June 7	510	121	59	1538
Buckle	D. L. Smith	476,566	June 7	512	121	59	1539
Buckle	D. L. Smith	476,567	June 7	514	121	59	1539
Buckle	D. L. Smith	477,024	June 14	1235	299	59	1697
Buckle	D. L. Smith	478,826	July 12	1179	292	60	249
Buckle	J. Stovell	480,217	Aug. 2	744	188	60	723
Buckle	F. R. Tate	474,198	May 3	483	117	59	731
Buckle	J. G. Taylor	481,079	Aug. 16	2126	529	60	1018
Buckle	J. A. Traut	481,213	Aug. 23	2359	581	60	1076
Buckle	M. Tuch	470,625	Mar. 8	1533	400	58	1404
Buckle	G. Williamson and C. de Negri	482,030	Sept. 6	178	42	60	1370
Buckle	A. M. Ziegler	487,043	Nov. 29	3008	774	61	1211
Buckle	J. Zeigler	482,289	Sept. 6	601	143	60	1452
Buckle and snap-hook. Combined.....	G. D. Hayes	487,325	Dec. 6	146	42	61	1349
Buckle and snap-hook. Combined.....	T. E. Page	486,536	Nov. 22	2146	566	61	1055
Buckle case. Suspender.....	J. A. Traut	471,250	Mar. 22	2512	638	58	1613
Buckle. Cast-off	J. A. Traut	480,791	Aug. 16	1666	416	60	929
Buckle. Clasping.....	C. Hollweg	485,544	Nov. 1	599	160	61	685
Buckle-clip	C. L. Wiedrich	468,028	Feb. 2	186	46	58	560
Buckle. Cross-lute	A. P. Story	474,195	May 3	460	116	59	731
Buckle. Harness.....	T. M. Guthrie	487,619	Dec. 6	615	158	61	1444
Buckle. Harness.....	R. Yerington	466,647	Jan. 5	533	139	58	103
Buckle. Hitching.....	S. B. Burwell	487,415	Dec. 6	308	79	61	1382
Buckle-plate	H. J. Lewis	469,063	Feb. 16	1822	466	58	900
Buckle. Rein.....	W. C. Edge	487,474	Dec. 6	403	104	61	1400
Buckle-shield	R. A. Wooding	466,959	Jan. 12	1058	268	58	210
Buckle. Suspender.....	B. J. Balliett	480,650	Aug. 9	1447	360	60	871
Buckle. Suspender.....	S. E. Cook	475,386	May 24	2394	611	59	1143
Buckle. Suspender.....	J. Fritz	474,599	May 10	1149	292	59	869
Buckle. Suspender.....	C. R. Harris	475,860	May 31	3159	801	59	1304
Buckle. Suspender.....	H. Lieberthal	479,074	July 19	1550	387	60	330
Buckle. Suspender.....	H. P. Richards	476,172	May 31	3652	924	59	1403
Buckle. Suspender.....	W. A. Springer	473,409	Apr. 19	2218	557	59	448
Buckle. Suspender.....	J. A. Traut	474,199	May 3	484	117	59	731
Buckle. Suspender.....	J. A. Traut	480,680	Aug. 9	1497	373	60	879
Buckle. Suspender.....	R. M. Wilson	484,274	Oct. 11	1148	292	61	247
Buckle. Suspender.....	A. M. Ziegler	487,044	Nov. 29	3010	774	61	1241
Buckle. Trace.....	A. R. Hamilton	470,485	Mar. 8	1346	350	58	1364
Buckle. Wire.....	C. R. Harris	485,411	Nov. 1	409	110	61	656
Buffing-roll	J. Bussfield	485,170	Nov. 1	17	5	61	576
Buffing-wheel	W. W. Crooker	472,287	Apr. 5	439	113	59	83
Buggy-boot	J. W. Chambers	485,486	Nov. 1	515	136	61	677
Buggy-curtains. Device for raising and lowering.....	W. Wright	467,966	Feb. 2	86	21	58	541
Buggy-spring equalizer	C. Glatty	484,309	Oct. 11	1203	306	61	257
Buggy spring-gearing	S. E. O'Dell and C. Van Liew	480,274	Aug. 9	847	215	60	757
Buggy-top	J. C. Coss	468,460	Feb. 9	860	217	58	701
Buggy-top	D. Shivel	488,459	Dec. 20	2018	504	61	1757
Buggy-top	J. T. Watkins and W. C. Bayless	472,154	Apr. 5	223	59	59	42
Buggy-top attachment	J. King	473,758	Apr. 26	2785	700	59	578
Buggy-top lock	D. J. Shultz	474,193	May 3	478	115	59	730

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et	Vol.	Page.
Buggy-tops. Lever for raising and lowering	H. Toresen	480,531	Aug. 9	1254	315	60	833
Building	R. Quaternmass	488,451	Dec. 20	2007	501	61	1755
Building	M. Schmid	474,647	May 10	1225	313	59	883
Building	H. Zogmann	475,842	May 31	3129	{ 793 794 }	59	1298
Building-block	G. E. Briggs	479,054	July 19	1519	378	60	325
Building-block	W. R. Forbush	469,083	Feb. 16	1848	473	58	905
Building-block	C. Grünzweig	482,890	Sept. 20	1590	-----	60	1671
Building-block	A. A. Mellen	485,289	Nov. 1	202	57	61	614
Building-cell	L. H. Giraud	486,284	Nov. 15	1770	466	61	967
Building-covering	M. P. Schetzel	487,585	Dec. 6	563	144	61	1433
Building. Exhibition	O. Hammerstein	469,472	Feb. 23	2444	{ 626 627 }	58	1028
Building foundation	J. E. Robinson	468,229	Feb. 2	482	118	58	619
Building. Frame	J. A. Boyd	467,533	Jan. 26	2004	{ 507 508 }	58	405
Building-front	A. Brunkhorst, A. Wieden, and C. T. Richards.	478,974	July 12	1392	{ 343 344 }	60	289
Building-front	F. Mesker and T. O. Arbegust	481,115	Aug. 16	2185	541	60	1029
Building-front	C. T. Richards	480,909	Aug. 16	1846	{ 459 460 }	60	965
Building-front. Sheet-metal	C. D. Pruden	483,163	Sept. 27	2021	{ 511 512 }	60	1771
Building. Horticultural	H. W. Gibbons	471,356	Mar. 22	2658	674	58	1642
Building-material elevator	J. J. Kierst	480,329	Aug. 9	936	{ 237 238 }	60	772
Building or paving block	G. M. Graham	470,377	Mar. 8	1173	300	58	1332
Building. Portable	W. E. Brock	468,785	Feb. 16	1376	347	58	813
Building. Portable	A. Chase	469,638	Feb. 23	2684	{ 690 691 }	58	1076
Building. Portable	J. H. Van Dorn	485,306	Nov. 1	223	63	61	618
Buildings. Constructing foundations for	J. E. Robinson	468,228	Feb. 2	481	118	58	618
Buildings. Construction of	R. Guastavino	418,296	Feb. 2	603	151	58	640
Buildings. Construction of	B. Russell	484,244	Oct. 11	1092	277	61	236
Buildings. Construction of	W. T. Sears	470,901	Mar. 15	1961	{ 501 502 }	58	1496
Buildings. Construction of fireproof	R. Guastavino, Jr	468,871	Feb. 16	1501	382	58	837
Buildings. Fire-shield for	A. A. Hagen	472,479	Apr. 5	738	183	59	140
Buildings. Metal framework for	J. M. Larimer	485,870	Nov. 8	1083	{ 287 288 }	61	810
Buildings. Metallic facing for	L. L. Sagendorph	483,240	Sept. 27	2142	543	60	1794
Buildings. Structural work for	J. M. Larimer	485,871	Nov. 8	1084	288	61	811
Buildings. System and apparatus for heating, cooling and ventilating	W. M. Decker	468,645	Feb. 9	1151	293	58	758
Built-up work for pew-backs, &c. Making	M. Lancaster	486,479	Nov. 22	2069	518	61	1040
Bullet-greasing machine	W. C. Stewart	476,175	May 31	3661	926	59	1403
Bullets. Machine for swaging and creasing	J. F. McGrail	481,731	Aug. 30	3221	786	60	1255
Bulletin-board	W. P. Rankin	468,550	Feb. 9	1012	259	58	731
Bundle-carrier	J. J. Courtney	476,981	June 14	1172	{ 283 284 }	59	1683
Bundle-carrier and band-cutter	A. Booth	487,707	Dec. 13	764	196	61	1489
Bundle carrier and shocker	R. Woods	472,155	Apr. 5	224	59, 60	59	42
Bung	M. Anthony and W. C. Savage	483,035	Sept. 20	1820	462	60	1719
Bung	J. Baumele	482,713	Sept. 20	1311	321	60	1617
Bung	J. Baumele	482,714	Sept. 20	1313	321	60	1617
Bung	C. R. Martin	471,011	Mar. 15	2132	547	58	1529
Bung-extracting machine	J. U. Kraft	477,599	June 21	2178	540	59	1895
Bung-extracting tool	W. H. Stauton	480,835	Aug. 16	1733	433	60	942
Bung for bottlers	A. M. Donally	468,437	Feb. 9	823	207	58	693
Bung-holes. Temporary covering for	G. A. Will	470,415	Mar. 8	1232	315	58	1342
Bunsen burner	G. Reimann	478,364	July 5	475	115	60	94
Buoy. Bell	V. Fountain	488,552	Dec. 27	2166	535	61	1801
Bureau	D. C. Clapp	469,542	Feb. 23	2552	656	58	1049
Bureau	N. H. Clark	484,948	Oct. 25	2244	578	61	492
Bureau and wash-stand. Combined	H. Couillard	481,848	Aug. 30	3419	839	60	1293
Bureau, commode, and writing-desk. Combined	F. Hamblin	470,378	Mar. 8	1174	301	58	1332
Bureaus, &c. Construction of	E. P. Lurker	484,662	Oct. 18	1767	149	61	382
Burglar-alarm	W. W. Climensen	488,162	Dec. 13	1533	385	61	1645
Burglar-alarm	J. I. Covington	467,922	Feb. 2	28	7	58	531
Burglar-alarm	F. A. Goelze	485,101	Oct. 25	2440	638	61	540
Burglar-alarm	B. F. Kraft	476,945	June 14	1120	269	59	1673
Burglar-alarm	F. H. Neal and J. R. Donnelly	480,340	Aug. 9	948	240	60	775
Burglar-alarm	L. Pentz	469,365	Feb. 23	2274	584	58	995
Burglar-alarm	J. H. Pruitt	486,893	Nov. 29	2754	715	61	1191
Burglar-alarm	H. W. Reynolds	487,128	Nov. 29	3146	806	61	1269
Burglar-alarm	I. L. Silverberg, M. Reichman, and G. Troxler, Jr.	468,444	Feb. 9	835	211	58	696
Burglar-alarm	A. Stromberg	484,761	Oct. 18	1917	489	61	413
Burglar-alarm	P. G. Trone	479,320	July 19	1925	181	60	402
Burglar-alarm	R. G. Vassar	474,980	May 17	1761	446	59	1003
Burglar-alarm	H. T. Wilson	482,464	Sept. 13	909	221	60	1525
Burglar-alarm and door-closing device	G. F. Snider	475,903	May 31	3230	817	59	1317
Burglar-alarm and door-fastener. Combined	C. K. Donnell	472,340	Apr. 5	527	137	59	99
Burglar-alarm cabinet	A. Stromberg	486,908	Nov. 29	2801	{ 726 727 }	61	1202
Burglar-alarm contact	N. M. Hopkins	483,844	Oct. 4	483	120	61	100
Burglar-alarm. Electric	A. Stromberg	483,728	Oct. 4	304	75, 76	61	64
Burglar-alarm. Electrical	H. T. Wilson	483,625	Oct. 4	162	40	61	34
Burglar-alarm for windows. Electrical	F. C. Page	469,266	Feb. 23	2122	545	58	965
Burglar-alarm. Portable	D. D. Nolley	484,232	Oct. 11	1073	272	61	23
Burglar-alarm systems. Automatic test for	A. Stromberg	477,712	June 28	2380	595	59	1953
Burglar-alarm systems. Test-circuit for	E. R. Wilder	486,149	Nov. 15	1562	414	61	924
Burglar and fire alarm. Combined electric	D. D. Nolley	484,233	Oct. 11	1074	272	61	233
Burglaries. Device for preventing	T. Andrews and J. H. Fitzpatrick	468,557	Feb. 9	1029	262	58	734

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'g.	Vol.	Page.
Burial apparatus.....	J. B. Bengler.....	481,840	Aug. 30	3406	836	60	1291
Burial apparatus.....	F. Hang.....	468,995	Feb. 16	1720	438	58	880
Burial apparatus.....	C. C. Shults.....	470,767	Mar. 15	1750	451	58	1455
Burial apparatus.....	M. L. Smith.....	466,629	Jan. 5	507	130 131	58	97
Burial apparatus.....	S. D. Wagor.....	479,904	Aug. 2	193	48	60	620
Burial-case.....	J. G. Gray.....	480,427	Aug. 9	1097	274	60	800
Burial-casket.....	J. A. Jones and C. E. Myers.....	483,304	Sept. 27	2268	571	60	1817
Burial-casket.....	J. A. Jones and C. E. Myers.....	483,305	Sept. 27	2269	571	60	1817
Burial-casket.....	J. N. Pruser.....	481,370	Aug. 23	2624	645	60	1124
Burner:							
See Bunsen burner.	Injector-burner.						
Flash-light burner.	Lamp-burner.						
Fuel-burner.	Oil-burner.						
Gas-burner.	Oil or gas burner.						
Gas-lighting burner.	Oil or vapor burner.						
Hydrocarbon-burn- er.	Petroleum-burner.						
Hydrocarbon-oil burner.	Smoke-burner.						
Hydrocarbon-vapor burner.	Stove-burner.						
	Straw-burner.						
	Vapor-burner.						
Burner.....	E. T. Wigg.....	482,145	Sept. 6	363	86, 87	60	1407
Burner.....	T. A. Williamson.....	470,091	Mar. 1	671	165	58	1229
Burner attaching.....	T. W. Bartholomew.....	486,525	Nov. 22	2133	563	61	1052
Burner-fastening.....	B. T. Steber.....	487,455	Dec. 6	376	98	61	1395
Burning solid carbonaceous fuels. Means for.....	W. McClave.....	485,820	Nov. 8	999	268	61	794
Burnisher.....	L. A. Buchanan.....	467,600	Jan. 26	2120	538	58	426
Burnisher.....	T. Lloyd.....	485,416	Nov. 1	415	111	61	657
Burnishing-machine.....	J. H. Busell and E. H. Taylor.....	475,032	May 17	1841	467	59	1018
Bushing and venting apparatus for barrels.....	S. G. Derham.....	475,756	May 31	2975	755	59	1268
Butter-box.....	G. R. Meloney and J. T. Criswell.....	481,801	Aug. 30	3342	818	60	1279
Butter-box lining.....	G. E. Dumas.....	467,858	Jan. 26	2525	640	58	503
Butter-cutter.....	C. G. Bjorlin.....	476,442	June 7	337	77	59	1503
Butter-cutter.....	J. A. Kaiser.....	484,023	Oct. 11	758	191	61	170
Butter-cutter.....	L. Linkiewicz.....	477,905	June 28	2693	674	59	2011
Butter-cutter.....	C. Neustadt.....	477,019	June 14	1227	207	59	1696
Butter-extractor. Centrifugal.....	G. M. Anderson.....	487,316	Dec. 6	129	39	61	1346
Butter-extractor. Centrifugal.....	O. Ohlsson.....	487,055	Nov. 29	3025	777	61	1245
Butter from milk. Separating.....	C. G. P. de Laval.....	484,916	Oct. 25	2195	565 566	61	482
Butter-jar.....	L. Van Vleck.....	469,729	Mar. 1	96	26	58	1117
Butter-knife.....	T. Miller.....	475,789	May 31	3025	766	59	1277
Butter. Manufacture of.....	W. Cole.....	478,736	July 12	1029	252	60	220
Butter-mold.....	S. H. Jones.....	486,043	Nov. 8	1366	363	61	869
Butter molding or shaping machine.....	W. Foster.....	472,921	Apr. 12	1380	354	59	277
Butter-package.....	J. F. Bly.....	482,613	Sept. 13	1155	279	60	1573
Butter-package.....	C. L. Kneeland.....	485,011	Oct. 25	2347	604	61	511
Butter-package.....	F. M. Peck.....	479,095	July 19	1585	396	60	337
Butter-packing machine.....	H. J. Brine.....	473,494	Apr. 26	2358	598	59	496
Butter-print machine.....	J. C. Harris.....	476,634	June 7	616	148	59	1559
Butter stamp and cutter.....	W. Hallenbeck, G. W. Witt, and W. Pattison.....	474,243	May 3	551	135	59	744
Butter-tub closure.....	O. Duesler.....	470,835	Mar. 15	1875	480	58	1478
Butter-worker.....	H. J. Anderson.....	483,201	Sept. 27	2085	528	60	1783
Butter-worker.....	P. L. Kimball.....	478,113	July 5	54	15	60	13
Butter-worker.....	F. R. C. Struver.....	476,429	June 7	318	73	59	1499
Butter worker and weigher.....	T. Muir.....	485,968	Nov. 8	1245	329	61	844
Buttercup-cutter.....	N. A. Walker.....	486,917	Nov. 29	2820	730	61	1205
Button.....	G. E. Adams.....	469,902	Mar. 1	377	95	58	1173
Button.....	M. Apfelbaum.....	472,845	Apr. 12	1268	325	59	253
Button.....	C. A. Bryant.....	482,959	Sept. 20	1696	426	60	1692
Button.....	G. J. Capewell.....	487,344	Dec. 6	170	48	61	1354
Button.....	G. J. Capewell.....	487,345	Dec. 6	171	48	61	1354
Button.....	C. Erlanger.....	474,445	May 10	910	235	59	823
Button.....	C. S. Franke.....	487,359	Dec. 6	247	66	61	1369
Button.....	C. S. Gooding.....	486,461	Nov. 22	2043	540	61	1034
Button.....	A. Hall.....	486,871	Nov. 29	2706	706	61	1182
Button.....	G. Heuser.....	477,892	June 28	2518	632	59	1978
Button.....	W. E. Jackson.....	474,252	May 3	562	138	59	747
Button.....	W. E. Jackson.....	483,674	Oct. 4	227	57	61	47
Button.....	G. B. Keplinger.....	467,662	Jan. 26	2204	561	58	442
Button.....	G. B. Keplinger.....	467,663	Jan. 26	2206	561	58	442
Button.....	G. B. Keplinger.....	467,671	Jan. 26	2222	565	58	445
Button.....	F. H. Larter.....	479,191	July 19	1740	437	60	365
Button.....	R. Liebmann.....	472,375	Apr. 5	579	148	59	109
Button.....	H. M. Nester.....	485,111	Oct. 25	2492	640	61	542
Button.....	A. E. Newcomb.....	484,810	Oct. 25	2014	517	61	446
Button.....	G. H. Perrine.....	485,848	Nov. 8	1047	280	61	803
Button.....	C. Radcliffe.....	474,969	May 17	1744	412	59	1000
Button.....	J. B. Righter.....	482,651	Sept. 13	1201	292	60	1553
Button.....	G. Rossberg.....	476,076	May 31	3490	880	55	1371
Button.....	S. W. Shorey.....	474,150	May 3	405	99	59	717
Button.....	R. Sutro.....	471,911	Mar. 29	3481	890	58	1807
Button.....	F. E. Williams.....	473,861	Apr. 26	2949	744	59	610
Button and buttonhole. Adjustable.....	F. S. Rudge.....	488,090	Dec. 13	1414	351	61	1621
Button and fastener. Combined.....	R. D. Wirt.....	486,009	Nov. 8	1316	350	61	858
Button and fastener. Cuff.....	J. F. Poage.....	484,669	Oct. 18	1777	452	61	384
Button and lacing hook. Combined.....	A. J. Miller.....	481,767	Aug. 30	3290	801	60	1269
Button and pin clasp.....	G. H. Merrill.....	474,025	May 3	223	54	59	681
Button-attaching machine.....	C. E. Denton.....	479,705	July 26	2582	643	60	542
Button-attaching machine.....	C. M. Platt.....	481,587	Aug. 30	2984	732	60	1210
Button-attaching machine.....	C. M. Platt.....	481,588	Aug. 30	2985	732	60	1210

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & E.	Vol.	Page.
Button-attaching machine	C. Radcliffe	486,895	Nov. 29	2759	{ 716 717 718 719 719	61	1192
Button-attaching machine	C. Radcliffe	486,896	Nov. 29	2770	{ 720 721 722	61	1195
Button. Bachelor	J. F. Platt	488,219	Dec. 20	1636	408	61	1681
Button-bars. Forming	I. G. Platt	480,032	Aug. 2	442	111	60	666
Button-blanks. Device for grinding	J. Huebner	487,741	Dec. 13	828	{ 211 212	61	1502
Button. Collar	D. O. Parks	488,026	Dec. 13	1302	324	61	1508
Button. Crochet	C. Kessler	477,806	June 28	2523	633	59	1979
Button. Cuff	L. F. Brooks	484,291	Oct. 11	1168	297	61	251
Button. Cuff or sleeve	G. F. Peck	470,411	Mar. 8	1226	313	58	1341
Button-cutting machines, &c. Tool-holder for	F. E. Beckwith, Jr.	485,147	Oct. 25	2549	655	61	553
Button-die	C. Wagenführ	475,476	May 24	2536	646	59	1170
Button-drilling machine. Multiple	J. W. Lewerth	466,610	Jan. 5	482	124	58	92
Button-fastener	A. W. Currier and G. Clark ..	482,621	Sept. 13	1160	282	60	1576
Button-fastener	J. C. Townsend	479,538	July 26	2320	50	60	494
Button-fastening	E. A. Giles	484,853	Oct. 25	2086	537	61	460
Buttonhole-cutter	M. Carmody	471,950	Mar. 29	3540	{ 904 905	58	1817
Buttonhole-machine cam	J. F. Wischerth	480,054	Aug. 2	478	122	60	673
Buttonhole-reinforce for collars	F. Engelhard	488,806	Dec. 27	2568	637	61	1881
Buttonhole-thrums. Machine for over stitching	R. W. Thomson and E. M. Phelps..	484,647	Oct. 18	1739	{ 441 442 443	61	375
Button-hook	T. F. Krueger	487,054	Nov. 29	3024	777	61	1245
Button-hook	J. Van Patten	473,035	Apr. 19	1579	402	59	326
Button. Link	F. E. Williams	470,731	Mar. 15	1699	438	58	1445
Button link. Safety cuff	J. C. Bioren	477,349	June 21	1782	436	59	1817
Button link. Sleeve or cuff	P. H. Lettré	479,649	July 26	2482	618	60	523
Button-machine	A. Bender	467,394	Jan. 19	1767	451	58	352
Button-machine	F. H. Hardman	474,320	May 3	683	{ 178 179	59	769
Button-machine	F. H. Hardman	477,115	June 14	1382	337	59	1727
Button-machine	A. Phelps	484,976	Oct. 25	2230	591	61	500
Button-machine. Pearl	H. and T. Tonks	485,338	Nov. 1	286	77. 78	61	630
Button-making machine	J. H. Lawles	466,693	Jan. 5	602	156	58	116
Button-polishing machine	D. B. Shantz	477,274	June 21	1664	406	59	1792
Button sale-card	C. F. G. R. Schwerdt	484,677	Oct. 18	1790	455	61	367
Button. Separable	R. Monday	480,336	Aug. 9	945	239	60	774
Button. Separable	C. E. Perry	468,037	Feb. 2	198	49	58	563
Button. Separable	C. M. Sherer	478,174	July 5	163	42	60	34
Button. Separable	W. A. Turner	480,352	Aug. 9	972	245	60	778
Button-setting machine	C. E. Denton	479,704	July 26	2579	643	60	541
Button-setting machine	E. P. Merwin and J. D. Stürckler ..	487,678	Dec. 6	712	{ 182 183	61	1462
Button-setting machine	I. G. Platt	480,031	Aug. 2	440	111	60	665
Button-setting machine	F. A. Ray	483,694	Oct. 4	257	63. 64	61	54
Button-setting machine	I. H. Sisson	482,700	Sept. 13	1283	315	60	1600
Button-setting machine	A. G. Wilkins	484,835	Oct. 25	2057	527	61	455
Button-setting machine	E. Woodward	477,347	June 21	1779	435	59	1816
Button-setting tool	J. Mathison	479,824	Aug. 2	78	20	60	597
Button-setting tool	E. Noelle	470,628	Mar. 8	1543	402	58	1405
Button-setting tool	F. A. Ray	483,695	Oct. 4	260	64	61	54
Button. Sleeve	W. E. Cook	472,941	Apr. 12	1411	360	59	282
Buttons. Attaching	J. Mathison	484,105	Oct. 11	866	220	61	192
Buttons from plastic material. Machine for making ..	M. Stirn	482,144	Sept. 6	360	86	60	1406
Buttons from vegetable ivory. Manufacture of	D. B. Shantz	467,563	Jan. 26	2066	522	58	416
Buttons, &c. Link attachment for	W. C. Edge	485,320	Nov. 1	258	70	61	625
Buttons. Machine for making sheet-metal	J. Mathison	479,823	Aug. 2	73	{ 17 18 19	60	596
Buttons. Making pearl	W. E. Taft	487,234	Nov. 29	3342	850	61	1305
Buttons. Sale-card for	C. F. G. R. Schwerdt	481,832	Aug. 30	3394	834	60	1288
Buttons, &c. Tool for making pearl	W. E. Taft	487,233	Nov. 29	3341	850	61	1304
Cab	D. J. O'Donnell	479,300	July 19	1898	475	60	397
Cabinet	W. I. Ohmer	479,748	July 26	2664	661	60	556
Cabinet	J. Stein	484,121	Oct. 11	884	225	61	196
Cabinet	R. D. Willson	473,541	Apr. 26	2436	617	59	510
Cabinet. Blank	F. W. Cooley	474,948	May 17	1707	434	59	993
Cabinet for displaying sample goods	A. T. Selden	484,166	Oct. 11	964	248	61	211
Cabinet for holding postage-stamps, &c	M. P. Exline	475,685	May 24	2854	721	59	1232
Cabinet. Scrap	G. H. Cruzan	474,904	May 17	1636	417	59	979
Cable	J. H. L. Tuck	488,640	Dec. 27	2310	572	61	1829
Cable-conduits. Automatic trap for	I. Bishop and A. F. L. Bell	478,910	July 12	1289	320	60	270
Cable-crossing	H. A. Benedict	484,772	Oct. 25	1947	497	61	432
Cable-crossing	W. Bowers	488,262	Dec. 20	1699	424	61	1693
Cable-crossings. Automatic release for	F. W. Smith	484,346	Oct. 11	1257	321	61	268
Cable elevator. Sprocket	M. Garland	482,239	Sept. 6	515	123	60	1435
Cable-grip	A. H. De Camp	469,909	Mar. 1	389	98	58	1176
Cable-grip	G. F. Elliott	475,684	May 24	2852	721	59	1232
Cable-grip	E. R. Guerra	473,221	Apr. 19	1903	480	59	385
Cable-grip	T. Otto	469,318	Feb. 23	2204	{ 565 566	58	981
Cable-grip	T. Otto	474,185	May 3	461	112	58	727
Cable-grip	J. Schirra	475,896	May 31	3220	814	59	1316
Cable-grip	F. A. Yard	483,952	Oct. 4	638	160	61	131
Cable-grip-adjusting device	C. L. Anderson and G. H. Fairchild.	468,555	Feb. 9	1026	261	58	733
Cable-grip-adjusting device	H. H. Lynch	468,064	Feb. 2	236	58	58	570
Cable-grips. Automatic release for	A. D. and F. W. Smith. (Reissue) ..	11,375	Oct. 4	699	175	61	144

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cable-grips. Lifting mechanism for.....	I. Bishop and A. F. L. Bell.....	478,911	July 12	1291	321	60	270
Cable-gripper.....	W. A. Butler.....	480,489	Aug. 9	1192	299	60	820
Cable-grippers. Automatic release for.....	A. J. Smith.....	481,431	Aug. 23	2732	671	60	1144
Cable-hanger.....	J. J. Nate.....	475,600	May 24	2738	691	59	1207
Cable junction-box.....	J. D. McLeod.....	477,218	June 21	1567	385	59	1776
Cable. Machine for making hollow wire.....	O. Preston.....	475,889	May 31	3211	813	59	1314
Cable. Metallic-circuit.....	C. E. Jackson.....	476,464	June 7	367	85	59	1508
Cable-rack.....	W. M. Goodridge.....	472,947	Apr. 12	1418	362 363	59	284
Cable-road carrier-pulley.....	M. H. Bronsdon.....	477,885	June 28	2663	666	59	2005
Cable-securing device.....	W. F. Bossert and J. H. Findlay.....	482,930	Sept. 20	1659	418	60	1686
Cable splice. Electric.....	F. A. C. Perrine.....	484,045	Oct. 11	788	198	61	176
Cable system.....	J. B. Mahaffey.....	473,233	Apr. 19	1921	483 484	59	389
Cable systems. Distributing-box for.....	C. H. Wilson.....	468,765	Mar. 1	152	39, 40	58	1129
Cable take-up.....	W. B. Upton.....	471,446	Mar. 22	2796	713	58	1668
Cable-traction mechanism.....	W. A. Butler.....	478,046	June 28	2909	726 727	59	2053
Cable-traction system.....	G. Muller.....	481,413	Aug. 23	2703	664 665	60	1139
Cable-way grip mechanism.....	W. Hewitt.....	474,249	May 3	557	137 138	59	746
Cables. Grip mechanism for duplex.....	A. Bryson, Jr., J. H. Pendleton, and A. R. Benn.....	475,846	May 31	3135	795 796	59	1208
Cables into conduits. Means for drawing.....	T. F. O'Connor and J. W. Marsh.....	482,270	Sept. 6	571	135	60	1446
Caddy. Grocer's.....	C. Toohy.....	482,285	Sept. 6	596	142	60	1451
Caisson.....	J. F. O'Rourke.....	480,127	Aug. 2	587	149 150	60	694
Cake and confectionery machine.....	L. G. Ferraioli.....	467,003	Jan. 12	1126	285	58	222
Cake-box.....	E. E. Bailey.....	482,434	Sept. 13	863	207	60	1517
Cake-cutter.....	E. A. C. Petersen.....	467,828	Jan. 26	2471	627	58	493
Cake-cutter.....	L. W. Snell.....	468,836	Feb. 16	1450	370	58	827
Cake-cutter.....	L. W. Snell.....	477,278	June 21	1669	407	59	1795
Cake-cutter.....	F. R. Woodward.....	473,281	Apr. 19	1996	502	59	405
Cake-dish.....	T. H. and A. M. Ressler.....	470,827	Mar. 15	1861	477	58	1476
Cake-machine.....	J. J. Langlés.....	485,201	Nov. 1	73	23	61	587
Cake or bread box.....	G. H. Ennis.....	480,718	Aug. 16	1560	389	60	907
Cake-tin.....	A. S. Stebbins.....	468,073	Feb. 2	249	61	58	572
Calculating apparatus. Interest.....	G. Meyer.....	484,538	Oct. 18	1565	398	61	341
Calculating-instrument.....	G. M. Andrews.....	486,070	Nov. 15	1413	374	61	896
Calculating-machine.....	W. M. McCafferty.....	478,885	July 12	1252	310	60	263
Calculating-machine.....	F. C. Osborn.....	484,814	Oct. 25	2019	518	61	447
Calculator.....	C. H. Clarridge.....	479,629	July 26	2451	611	60	518
Calculator.....	H. V. Dunn.....	473,833	Apr. 26	2899	727	59	600
Calculator.....	J. Herran y Bolado.....	475,177	May 17	2063	519	59	1062
Calculator. Mechanical.....	T. Mader.....	469,579	Feb. 23	2612	670	58	1060
Calendar.....	P. Burmeister.....	466,395	Jan. 5	130	37	58	27
Calendar.....	W. C. Hawkins.....	467,114	Jan. 12	1331	336 337	58	262
Calendar.....	W. C. Hawkins.....	467,115	Jan. 12	1334	337	58	262
Calendar.....	W. C. Hawkins.....	467,116	Jan. 12	1336	337	58	263
Calendar.....	W. C. Hawkins.....	467,117	Jan. 12	1338	338	58	263
Calendar.....	W. C. Hawkins.....	467,118	Jan. 12	1339	338 339 340 341 342	58	263
Calendar.....	W. C. Hawkins.....	467,119	Jan. 12	1344	342 343	58	264
Calendar.....	W. C. Hawkins.....	475,500	May 24	2573	655	59	1177
Calendar.....	W. C. Hawkins.....	475,501	May 24	2574	656 657	59	1178
Calendar.....	W. C. Hawkins.....	475,502	May 24	2582	657	59	1179
Calendar.....	J. Hochheimer.....	476,461	June 7	362	84	59	1507
Calendar.....	J. Hochheimer.....	476,462	June 7	365	85	59	1508
Calendar.....	C. N. Hoyt.....	474,602	May 10	1152	293	59	869
Calendar.....	C. N. Hoyt.....	481,563	Aug. 30	2949	724 725	60	1203
Calendar.....	L. Lane.....	487,929	Dec. 13	1140	284	61	1564
Calendar.....	C. H. Rendell and E. S. Pinney.....	482,929	Sept. 20	1644	414	60	1682
Calendar.....	A. Sachs.....	476,929	June 14	1089	263	59	1667
Calendar.....	A. F. Sittig.....	467,283	Jan. 19	1604	409	58	321
Calendar.....	J. Wallin.....	488,461	Dec. 20	2021	505	61	1758
Calendar and desk article. Combined.....	J. T. Hawkins.....	474,449	May 10	920	236	59	825
Calendar and key-ring. Perpetual.....	A. B. Dwigans.....	474,725	May 10	1349	342	59	908
Calendar for watch-charms. Perpetual.....	F. W. Roe.....	475,156	May 17	2029	512	59	1055
Calendar-holder.....	W. E. Gary.....	479,876	Aug. 2	155	39	60	612
Calendar-holder and pencil-sharpenor. Combined.....	J. P. Reilly.....	466,704	Jan. 5	617	160	58	119
Calendar. Perpetual monthly.....	J. Guidinger.....	476,263	June 7	54	12	59	1448
Calendar. Perpetual monthly.....	B. S. Hoyt.....	471,120	Mar. 22	2302	591	58	1574
Caliper-joint.....	W. H. Isbell.....	483,065	Sept. 20	1860	472	60	1728
Caliper-joint.....	M. Ullmann.....	485,339	Nov. 1	288	78	61	631
Caliper-joint. Differential.....	G. T. Bechtol.....	482,331	Sept. 13	692	165	60	1485
Calipers.....	W. F. Durand.....	470,912	Mar. 15	1977	505	58	1499
Calipers. Automatic indicating.....	J. W. Porter.....	486,810	Nov. 22	2595	676	61	1144
Calipers. Inside.....	R. C. Nugent.....	484,813	Oct. 25	2017	518	61	447
Calipers. Micrometer.....	E. L. Holcomb.....	479,807	Aug. 2	49	12	60	591
Calipering-machine. Automatic.....	P. Kämmerer.....	471,557	Mar. 29	2944	749 750	58	1705
Calk-sharpenor.....	J. H. E. Clark.....	479,204	July 19	1758	441	60	369
Call system for buildings. Messenger.....	F. H. Fuller and C. B. Perkins.....	486,282	Nov. 15	1768	463	61	966
Cam-cutter.....	Z. T. French and W. C. Meyer.....	471,381	Mar. 22	2693	66 67	58	1649
Cam. Extension.....	B. F. White.....	477,978	June 28	2793	700	59	2033

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 56	Vol.	Page.
Cams. Machine for laying out.....	L. Schultz.....	466,758	Jan. 5	718	185	58	137
Cams. Machine for laying out or cutting.....	L. Schultz.....	466,757	Jan. 5	717	185	58	136
Camera:							
See Magazine-camera. Solar camera.							
Photographic camera.							
Camera.....	A. B. Dobbs.....	470,783	Mar. 15	1777	457	58	1460
Camera.....	F. E. Ives.....	475,084	May 17	1918	488	59	1034
Camera.....	R. A. Ripley.....	487,159	Nov. 29	3195	818	61	1279
Camera and photograph-exhibitor. Combined.....	W. V. Esmond.....	488,331	Dec. 20	1814	454	61	1716
Camera attachment.....	E. De Moulins.....	480,808	Aug. 16	1694	422	60	934
Camera film-holder.....	G. D. Milburn.....	485,393	Nov. 1	380	102	61	650
Camera plate attachment.....	G. L. Minear.....	481,802	Aug. 30	3344	818	60	1279
Camera shutter.....	A. Barker.....	477,588	June 21	2161	536	59	1892
Camera-shutter.....	T. H. Blair and F. H. Kelley.....	478,909	July 12	1288	320	60	270
Camera-shutter.....	W. H. Bristol.....	480,995	Aug. 16	1984	497	60	991
Camera-shutter.....	W. H. Bristol.....	481,343	Aug. 23	2591	{ 636 637 }	{ 60 61 }	1117
Camera-shutter.....	G. Eastman.....	486,397	Nov. 15	1941	514	61	1001
Camera-shutter.....	J. W. Grantland.....	487,833	Dec. 13	976	{ 246 247 }	{ 61 62 }	1533
Camera-shutter.....	L. M. Kords.....	477,012	June 14	1218	295	59	1694
Camera-shutter.....	H. C. Platt.....	484,456	Oct. 18	1431	366	61	315
Camera-tripod.....	J. Rodas.....	487,295	Dec. 6	87	26	61	1339
Cameras. Finder attachment for.....	W. B. Cogswell.....	484,179	Oct. 11	985	252	61	215
Cameras. Magazine for.....	M. B. Feeney.....	471,715	Mar. 29	3190	813	58	1749
Cameras or other purposes. Support for.....	F. Servus.....	473,357	Apr. 19	2126	533	59	430
Can:							
See Filter-can. Milk-can.							
Fire-extinguisher can. Oil-can.							
can. Paint-can.							
Fruit-can. Paper can.							
Ice-can. Preserving-can.							
Jacketed can. Sealed can.							
Key-opening can. Sheet-metal can.							
Key-opening sheet-metal can. Shipping can.							
Measuring-can. Silver can.							
Tin can.							
Can.....	W. H. Atkinson.....	471,528	Mar. 29	2909	741	58	1699
Can.....	C. C. Lockstaedt.....	484,936	Oct. 25	2230	575	61	489
Can-body-forming machine.....	R. D. Hume.....	488,476	Dec. 20	2050	509	61	1763
Can-body. Sheet-metal.....	I. H. Taylor.....	483,660	Oct. 4	210	52	61	43
Can, bottle, &c. Automatically-closing.....	H. Johnson.....	475,775	May 31	3006	762	59	1274
Can capping and crimping machine.....	M. Jensen.....	470,575	Mar. 8	1462	{ 380 381 }	{ 58 59 }	1389
Can-capping machine.....	W. Wedgwood.....	470,368	Mar. 8	1157	296	58	1329
Can-cleaning machine.....	G. Roth.....	477,703	June 28	2364	591	59	1950
Can-cooling machinery.....	C. B. Kendall.....	469,389	Feb. 23	2312	595	58	1003
Can cover and cooler. Milk.....	N. H. Terens.....	473,481	Apr. 26	2337	592	59	493
Can-covers. Locking device for.....	O. D. Phillips and G. H. Littlewood.....	467,196	Jan. 19	1464	374	58	295
Can-crimping machine.....	J. A. Peck.....	477,575	June 21	2136	531	59	1887
Can-crimping machine.....	J. W. Roberts.....	476,558	June 7	495	{ 117 118 }	{ 59 60 }	1535
Can filler and holder. Fruit.....	H. Martin.....	466,724	Jan. 5	668	171	58	127
Can-filling device.....	A. Siebert.....	469,278	Feb. 23	2143	550	58	969
Can-filling machine.....	J. T. Cox.....	469,992	Mar. 1	527	{ 131 132 }	{ 58 59 }	1201
Can-filling machine.....	G. L. Merrell.....	472,583	Apr. 12	888	{ 223 229 }	{ 59 60 }	183
Can-filling machine.....	J. S. Moore.....	468,888	Feb. 16	1527	389	58	842
Can-filling machine.....	E. Wildi.....	486,746	Nov. 22	2487	{ 649 650 }	{ 61 62 }	1123
Can float. Creaming.....	P. L. Kimball.....	469,149	Feb. 16	1931	494	58	922
Can for liquids.....	A. Roling.....	477,455	June 21	1949	483	59	1849
Can for oil, &c.....	A. E. Kubns.....	481,233	Aug. 23	2396	591	60	1033
Can forming and soldering machine.....	L. Keller.....	476,927	June 14	1084	{ 261 262 }	{ 59 60 }	1667
Can-head-feeding apparatus.....	C. B. Kendall.....	469,388	Feb. 23	2311	595	58	1003
Can-heading machine.....	B. Adriance.....	472,284	Apr. 5	432	{ 111 112 }	{ 59 60 }	81
Can-heading machine.....	L. E. Curtis.....	470,135	July 19	1646	412	60	348
Can-heading machine.....	C. W. Sleeper.....	474,534	May 10	1045	{ 267 268 }	{ 59 60 }	848
Can-heading machine.....	M. A. Wheaton.....	477,584	June 21	2149	{ 534 535 }	{ 59 60 }	1890
Can-jacket. Sheet-metal.....	I. Sexton.....	483,750	Oct. 4	241	85	61	71
Can-labeling machine.....	F. X. Gaudrie.....	488,273	Dec. 20	1717	433	61	1697
Can-labeling machine.....	W. H. Leach.....	488,791	Dec. 27	2543	631	61	1876
Can-labeling machine.....	C. E. Newell.....	470,165	Mar. 1	782	193	58	1250
Can-labeling machine.....	C. E. Newell.....	470,166	Mar. 1	784	194	58	1251
Can-labeling machine.....	J. C. Taylor, A. P. Benjamin, and G. F. Allen.....	469,906	Mar. 1	351	96	58	1174
Can-labeling machine.....	B. W. Wright and E. E. Rogers.....	488,346	Dec. 20	1841	{ 460 461 }	{ 61 62 }	1720
Can-lacquering machine.....	R. D. Hume.....	487,571	Dec. 6	545	140	61	1429
Can machine.....	J. B. Foote.....	480,256	Aug. 9	810	208	60	748
Can nozzle. Oil.....	C. W. Beehler.....	470,776	Mar. 15	1770	455	58	1458
Can-opener.....	W. G. Browne and J. L. Benton.....	475,222	May 17	2128	538	59	1076
Can-opener.....	S. Ehenger.....	479,256	July 19	1835	460	60	324
Can-opener.....	A. Fenton and J. Barnes.....	480,868	Aug. 16	1782	446	60	953
Can-opener.....	J. H. Golding.....	482,057	Sept. 6	220	52	60	1378
Can-opener.....	C. Morgan.....	479,011	July 19	1457	361	60	313
Can-opener.....	A. E. Newton.....	476,164	May 31	3610	921	59	1401
Can-opener.....	M. B. Schofield.....	471,776	Mar. 29	3288	839	58	1768
Can-opener.....	W. H. Shay.....	470,710	Mar. 15	1669	432	58	1439

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Can-opener.....	F. A. Vogt.....	486,307	Nov. 15	1805	475	61	973
Can-opener.....	A. Ward.....	470,087	Mar. 1	666	164	58	1228
Can-opener.....	A. T. Welch.....	470,024	Mar. 1	568	141	58	1209
Can-opener and painter's tool. Combined.....	W. W. Minnerly.....	471,562	Mar. 29	2953	753	58	1706
Can or vessel stopper. Fluid.....	W. H. Payno.....	483,082	Sept. 20	1884	477	60	1732
Can, pail, &c.....	L. C. Corey.....	483,902	Oct. 4	569	143	61	118
Can-screw and fancet.....	H. F. Bartlett.....	472,157	Apr. 5	229	61	59	43
Can-screw-top.....	C. N. Tyler.....	480,793	Aug. 16	1668	417	60	929
Can-spout.....	H. Stiles.....	474,507	May 10	998	257	59	840
Can-stand.....	E. Thomas.....	479,099	July 19	1590	398	60	338
Can-stopper.....	B. P. Field.....	476,623	June 7	599	143	59	1556
Can-tester.....	B. F. Buckley.....	469,396	Feb. 23	2321	{ 597 598 }	58	1004
Can-testing machine.....	J. B. Foote.....	471,353	Mar. 22	2654	674	58	1641
Can-testing machine.....	C. B. Kendall and H. Schaake.....	481,764	Aug. 30	3379	{ 799 790 }	60	1267
Can-testing machine.....	W. B. Page.....	469,302	Feb. 23	2184	560	58	977
Can-testing machines. Can-holding frame for use with.....	C. H. Emery.....	475,446	May 24	2487	634	59	1161
Can-washer.....	C. H. Southard.....	482,763	Sept. 20	1401	346	60	1633
Can-wiping machine.....	C. A. Burr.....	467,397	Jan. 19	1771	452	58	352
Cans, &c. Fastening for the caps of.....	G. J. Record.....	476,309	June 7	121	29	59	1462
Cans. Machine for capping and seaming the ends of.....	A. D. Coleman.....	473,171	Apr. 19	1811	{ 456 457 458 }	59	368
Cans. Pouring-nozzle for.....	E. Norton.....	485,295	Nov. 1	211	60	61	615
Cans. Pouring-nozzle for.....	E. Norton.....	485,296	Nov. 1	213	60	61	615
Cans. Screw-nozzle for.....	L. A. Norton.....	486,293	Nov. 15	1783	468	61	970
Cans. Valve-nozzle for oil.....	J. F. Fisk, Jr.....	486,373	Nov. 15	1905	503	61	993
Cans. Vent for shipping.....	D. A. Lisk and T. D. Brown.....	476,281	June 7	75	16	59	1452
Canning apparatus.....	W. N. Macqueen.....	485,957	Nov. 8	1232	325	61	841
Canning apparatus. Corn.....	G. L. Merrell.....	473,885	Apr. 26	2987	{ 754 755 }	59	617
Canning device. Fruit.....	J. J. Isler.....	477,805	June 28	2532	633	59	1979
Canning or preserving jar.....	R. C. Sheeley.....	476,690	June 7	695	170	59	1575
Candle-holder.....	W. H. Pohlmann.....	468,313	Feb. 9	718	177	58	672
Candle-holder.....	J. F. Young.....	474,768	May 10	1411	359	59	921
Candle-holder and shade-holder. Combined.....	B. M. Kent and J. T. Asbby.....	469,189	Feb. 16	1995	509	58	934
Candle-molding machine.....	A. A. Royau.....	475,521	May 24	2612	{ 664 665 }	59	1184
Candle. Ornamented.....	T. V. Forster.....	471,992	Mar. 29	3597	919	58	1828
Candle-shade holder.....	C. A. Moran.....	475,790	May 31	3026	767	59	1277
Candles, lamps, or flowers. Portable appliance for supporting and suspending.....	J. Sydney.....	475,093	May 17	1942	492	59	1037
Candles. Machine for marking or ornamenting.....	C. Forster.....	471,991	Mar. 29	3596	918	58	1828
Candles. Ornamenting.....	T. V. Forster.....	471,499	Mar. 23	2870	731	58	1682
Candles. Ornamenting.....	T. V. Forster.....	472,945	Apr. 12	1416	362	59	283
Candlestick.....	J. P. Dalen.....	481,225	Aug. 23	2384	588	60	1081
Candlestick.....	F. V. Eavenson.....	473,149	Apr. 19	1768	447	59	360
Candlestick.....	H. M. Hamrick.....	479,362	July 19	2011	502	60	420
Candlestick.....	S. Szegthy.....	473,797	Apr. 26	2846	715	59	590
Candy-cream heater and cooler.....	H. Heide.....	470,822	Mar. 15	1853	475	58	1474
Candy-machine.....	B. Thoens.....	480,119	Aug. 2	620	157	60	701
Candy. Machine for forming shapes of.....	C. M. Kurtz.....	481,234	Aug. 23	2397	592	60	1084
Candy-mold.....	M. M. June.....	480,469	Aug. 9	1165	293	60	814
Cane.....	W. A. Chapman and E. Gash.....	470,873	Mar. 15	1925	492	58	1488
Cane.....	W. S. Sharpneck.....	486,131	Nov. 15	1535	405	61	919
Cane and flag. Combined.....	E. Gash.....	477,359	June 21	1804	441	59	1820
Cane and flag. Combined.....	E. Gash.....	479,590	July 26	2393	596	60	597
Cane and stool. Combined.....	F. Benoit.....	486,074	Nov. 15	1420	375	61	897
Cane and stool. Combined.....	R. T. More.....	484,334	Oct. 11	1242	316	61	265
Cane and stool. Combined.....	C. Walhis and R. Mader.....	482,214	Sept. 6	481	115	60	1429
Cane-cutter.....	F. B. Alexander.....	479,611	July 26	2428	605	60	513
Cane-juice and other saccharine liquors. Treating.....	H. E. Niese.....	471,060	Mar. 15	2197		58	1541
Cane-juice-bleaching apparatus.....	A. F. Slangerup.....	483,022	Sept. 20	1802	455	60	1715
Cane-juice. Purifying.....	W. V. Fry.....	472,959	Apr. 19	1509		59	313
Cane-mill.....	J. Fisher.....	482,084	Sept. 6	265	64	60	1387
Cane-mill.....	J. N. Sanders and D. C. Herrington.....	488,031	Dec. 13	1313	327	61	1600
Cane-mill.....	D. Skekel.....	480,522	Aug. 9	1237	311	60	830
Cane. Whip.....	M. O. Felker.....	482,895	Sept. 20	1603	402	60	1674
Canes. Electric appliance for.....	S. D. Smith.....	484,618	Oct. 18	1685	428	61	365
Canes, umbrellas, &c. Attachment for.....	C. A. Rudyard.....	485,506	Nov. 8	984	204	61	791
Canister.....	G. E. Knight.....	472,892	Apr. 12	1337	343	59	268
Canisters. Label-holder for.....	H. Macarthy.....	472,794	Apr. 12	1200	308	59	240
Canisters. Machine for making metal.....	A. E. Bentley.....	478,389	July 5	508	{ 123 124 }	60	100
Cannon.....	T. L. Willson.....	475,071	May 17	1900	482	59	1030
Cannon. Breech-loading.....	S. Seabury.....	474,974	May 17	1751	{ 444 445 }	59	1001
Cannon. Breech-loading.....	S. Seabury.....	479,609	July 26	2421	604	60	512
Cannon. Breech-loading.....	S. Seabury.....	479,957	Aug. 2	286	71, 72	60	637
Cannon-pinion.....	J. B. Jobson.....	486,933	Nov. 29	2841	736	61	1209
Cannon. Telescopic sight for.....	V. Berberich.....	484,285	Oct. 11	1161	295	61	249
Canopy-frame.....	C. Williams.....	468,280	Feb. 2	573	142	58	635
Canopy-rod holder.....	R. F. Painter.....	471,317	Mar. 22	2595	659	58	1630
Canteeu or coffee-flask. Sectional.....	W. A. Anderson.....	475,331	May 17	2145	543	59	1079
Caoutchouc balls. Process of and apparatus for the manufacture of hollow.....	G. L. Hille.....	482,088	Sept. 6	271	65, 66	60	1389
Cap.....	J. E. McLoughlin.....	473,427	Apr. 19	2242	564	59	452
Cap.....	D. Sammel.....	473,784	Apr. 26	2825	710	59	586
Cap-attacher.....	C. H. Griffin.....	487,562	Dec. 6	535	137	61	1427
Cap. Bathing.....	H. B. Williams.....	482,773	Sept. 20	1411	319	60	1636
Caps and fuses for giant-powder. Coupler for.....	K. McFarland.....	468,590	Feb. 16	1531	389	58	842
Cape and cap. Combined.....	A. T. Aldrich.....	484,945	Oct. 25	2241	577	61	491

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Capo tasto.....	H. Dahlman and T. Blomgren.....	468,193	Feb. 2	434	107	58	609
Capo tasto.....	V. T. Johnsen.....	480,429	Aug. 9	1099	274	60	801
Capping-machine.....	J. F. Wittemann.....	481,626	Aug. 30	3047	744	60	1221
Capsule-filler.....	C. F. Hausmann.....	487,886	Dec. 13	1069	268	61	1550
Capsule-filling machine.....	W. K. Johnston.....	479,812	Aug. 2	56	13	60	533
Car.....	M. E. Heacock and T. H. Lovejoy.....	470,125	Mar. 1	719	179	58	1239
Car.....	H. M. Jones.....	479,945	Aug. 2	265	65	60	633
Car.....	D. B. Williams.....	470,089	Mar. 1	669	165	58	1229
Car. Air dump.....	C. H. Dow.....	479,253	July 19	1832	460	60	384
Car and air-brake coupling.....	W. H. Thresher.....	468,372	Feb. 9	728	180	58	674
Car and air-brake coupling. Combined.....	J. B. Thomas.....	481,984	Sept. 6	95	24	60	1353
Car and hose coupling. Combined.....	J. H. Carroll.....	478,400	July 5	526	129	60	104
Car and truck. Elevated-street-railway.....	H. Paige.....	466,364	Jan. 5	83	23	58	19
Car and truck safety attachment.....	A. Ellis.....	485,918	Nov. 8	1163	307	61	826
Car. Bicycle electric.....	E. M. Boynton.....	474,331	May 3	715	186 187	59	774
Car. Bicycle passenger, day-palace, and sleeping.....	E. M. Boynton.....	471,340	Mar. 22	2624	666 667	58	1636
Car-body.....	W. N. Haring.....	487,925	Dec. 13	1133	283	61	1562
Car-holster.....	C. T. Schoen.....	475,023	May 17	1830	464	59	1016
Car-brake.....	C. H. Allen.....	479,236	July 19	1804	452	60	378
Car-brake.....	J. E. Anger.....	484,693	Oct. 18	1809	460	61	690
Car-brake.....	F. A. Baier.....	478,902	July 12	1276	316 317	60	267
Car-brake.....	D. L. Barnes.....	477,922	June 28	2720	620	59	2017
Car-brake.....	J. W. Barnes.....	483,414	Sept. 27	2427	610	60	1847
Car-brake.....	H. P. Bassett.....	473,606	Apr. 26	2559	615	59	535
Car-brake.....	T. F. Clark.....	469,963	Mar. 1	483	120	58	1192
Car-brake.....	T. F. Clark.....	476,871	June 14	929	240	59	1647
Car-brake.....	C. A. Dahlstrom.....	481,163	Aug. 23	2284	503	60	1061
Car-brake.....	G. R. Elliott.....	484,783	Oct. 25	1969	502	61	437
Car-brake.....	S. Fairman.....	483,118	Dec. 13	1456	367	61	1629
Car-brake.....	R. Fallis.....	488,965	Dec. 27	2823	697	61	1935
Car-brake.....	J. A. Fisher.....	473,501	Apr. 26	2370	601	59	498
Car-brake.....	J. W. Fisher.....	477,172	June 14	1478	362	59	1746
Car-brake.....	W. B. Flinn.....	471,635	Mar. 29	3057	778	58	1725
Car-brake.....	C. Fries, W. H. Richardson, and I. W. Hackett.....	472,965	Apr. 12	1450	370	59	289
Car-brake.....	W. P. Gibbs.....	478,003	June 28	2847	712	59	2042
Car-brake.....	W. N. Haring.....	487,391	Dec. 6	250	67	61	1370
Car-brake.....	H. Hinckley.....	488,314	Dec. 20	1783	449	61	1709
Car-brake.....	S. P. Hollingsworth.....	474,958	May 17	1720	437 438	59	996
Car-brake.....	J. and H. R. Howard.....	485,385	Nov. 1	365	98	61	647
Car-brake.....	J. Hughes.....	488,676	Dec. 27	2375	588	61	1842
Car-brake.....	H. H. Kelley.....	486,718	Nov. 22	2443	637	61	1113
Car-brake.....	H. H. Kenkel.....	468,409	Feb. 9	789	196	58	686
Car-brake.....	E. A. Kinley.....	473,319	Apr. 19	2051	515	59	416
Car-brake.....	P. J. Lawrence and M. F. Garrettson.....	486,785	Nov. 22	2553	666	61	1135
Car-brake.....	T. A. Marriott.....	487,868	Dec. 13	1040	261	61	1545
Car-brake.....	A. P. Massey.....	472,929	Apr. 12	1393	357	59	279
Car-brake.....	J. McArthur.....	467,257	Jan. 19	1562	397 398	58	314
Car-brake.....	I. R. McCormick.....	488,695	Dec. 27	2404	595	61	1848
Car-brake.....	P. McMullen.....	487,681	Dec. 6	721	184	61	1463
Car-brake.....	J. B. Meadley.....	480,503	Aug. 9	1215	303	60	825
Car-brake.....	M. H. Molloy.....	469,423	Feb. 23	2370	608	58	1013
Car-brake.....	J. Morrow.....	471,014	Mar. 15	2136	548	58	1529
Car-brake.....	J. W. Neumann and J. R. Pflanz.....	474,261	May 3	575	141	59	750
Car-brake.....	J. W. Neumann and J. R. Pflanz.....	483,859	Oct. 4	504	125	61	104
Car-brake.....	J. W. Neumann and J. R. Pflanz.....	487,151	Nov. 29	3181	815	61	1276
Car-brake.....	E. Peckham.....	467,896	Jan. 26	2586	655	58	514
Car-brake.....	L. Pingst.....	487,768	Dec. 13	870	221	61	1511
Car-brake.....	J. H. Pfieger.....	486,792	Nov. 22	2566	669	61	1138
Car-brake.....	F. I. Rego.....	485,135	Oct. 25	2529	650	61	549
Car-brake.....	J. Taylor.....	471,444	Mar. 22	2792	713	58	1667
Car-brake.....	J. H. Tong.....	480,910	Aug. 16	1848	460	60	966
Car-brake.....	J. Trendley.....	486,501	Nov. 22	2578	672	61	1140
Car-brake.....	R. C. Wright.....	484,486	Oct. 18	1484	378	61	324
Car-brake adjuster.....	L. T. Knowles.....	488,359	Dec. 20	1861	466	61	1725
Car brake and starter.....	P. D. Van Vradenburg.....	486,140	Nov. 15	1547	408 409	61	921
Car-brake attachment. Automatic.....	H. Hinckley.....	475,015	May 17	1818	461	59	1014
Car-brake. Automatic.....	R. Condon.....	480,250	Aug. 9	802	205 206	60	746
Car-brake. Automatic.....	E. Farnsworth.....	486,453	Nov. 22	2029	536	61	1032
Car-brake. Automatic.....	W. B. Guernsey.....	473,457	Apr. 26	2301	582 583	59	485
Car-brake. Automatic.....	L. H. Main and C. McMahan.....	467,508	Jan. 26	1962	499	58	397
Car-brake. Automatic.....	W. T. Rickman.....	471,022	Mar. 15	2148	552	58	1531
Car-brake. Automatic.....	M. E. Stockwell.....	484,620	Oct. 18	1688	428	61	366
Car-brake. Electric.....	E. S. Amrock.....	469,383	Feb. 23	2305	593	58	1002
Car-brake. Electric.....	J. Redmond.....	470,505	Mar. 8	1370	358	58	1370
Car-brake. Grip.....	W. Byrnes.....	474,900	May 17	1621	416	59	978
Car-brake handle.....	A. B. Collett.....	483,779	Oct. 4	390	67	61	82
Car-brake mechanism.....	H. V. Hartz.....	479,420	July 26	2118	530	60	454
Car-brake mechanism.....	J. and H. R. Howard.....	474,451	May 10	924	238	59	825
Car-brake mechanism.....	J. E. Loughbridge.....	484,597	Oct. 18	1647	418	61	358
Car-brake mechanism.....	J. E. Loughbridge.....	484,598	Oct. 18	1049	418	61	358
Car-brake mechanism.....	J. Murray.....	486,384	Nov. 15	1917	508 509	61	997
Car-brake mechanism. Street.....	H. H. Kelley.....	473,510	Apr. 26	2388	605	59	502
Car-brake. Railway.....	G. L. McCallum.....	480,338	Aug. 9	947	240	60	774

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car brake. Railway.....	R. C. Sayer.....	471,849	Mar. 29	3402	868	58	1790
Car-brake regulator.....	W. C. Farnum.....	468,562	Feb. 9	1035	263	58	735
Car-brake shoe.....	G. Sands.....	472,955	Apr. 12	1438	367	59	287
Car-brake slack-take-up.....	H. Hinckley.....	475,014	May 17	1816	460 461	59	1013
Car brake. Street.....	F. W. Wood and J. Fowler.....	472,597	Apr. 12	908	233	59	187
Car-brakes. Coupling for pneumatic.....	R. W. Tinsley.....	486,001	Nov. 8	1301	347	61	856
Car-brakes. Device for automatically operating power.....	B. C. Rowell.....	475,893	May 31	3217	814	59	1315
Car-brakes. King-post for.....	W. M. Johns.....	470,682	Mar. 15	1623	421	58	1430
Car-brakes. Power-transmitting device for.....	W. B. Turner.....	474,815	May 10	1179	299	59	874
Car-brakes. Slack-adjuster for.....	F. J. Cole.....	481,784	Aug. 30	3315	810	60	1274
Car-brakes. Slack-adjuster for.....	G. L. Harvey.....	477,842	June 28	2595	650	59	1993
Car-brakes. Slack-adjuster for.....	W. H. Marshall.....	484,859	Oct. 25	2093	539	61	462
Car-brakes. Slack-adjuster for.....	W. H. Marshall.....	484,860	Oct. 25	2095	540	61	462
Car-brakes. Slack-adjuster for.....	R. A. Parke.....	480,341	Aug. 9	949	241	60	775
Car-buffer.....	T. A. Bissell.....	482,538	Sept. 13	1041	251 252	60	1552
Car-buffer.....	W. H. Wild.....	469,051	Feb. 16	1806	461 462	58	897
Car bundle-rack.....	J. M. Cotton.....	483,283	Sept. 27	2236	562	60	1811
Car. Burglar-proof.....	J. Beermaker.....	478,554	July 12	764	186 187	60	167
Car. Cable.....	A. Martinez.....	466,355	Jan. 5	69	18	58	16
Car carrying attachment. Hand.....	J. W. Greene.....	481,021	Aug. 16	2021	505	60	998
Car-check.....	J. M. De Witt.....	468,061	Feb. 2	231	57	58	569
Car. Combined freight and passenger.....	J. Haish.....	479,068	July 19	1542	385	60	329
Car. Combined freight and stock.....	E. R. Steinhilber.....	480,635	Aug. 9	1422	354	60	866
Car construction.....	H. C. Hodges.....	468,176	Feb. 2	407	101	58	603
Car construction.....	S. A. Jennings.....	485,198	Nov. 1	67	20 21 22	61	586
Car cooler and ventilator. Passenger.....	A. Black.....	483,710	Oct. 4	280	70	61	59
Car-coupling.....	J. Acuff.....	476,768	June 14	815	201	59	1613
Car-coupling.....	A. J. Allen.....	472,245	Apr. 5	375	93	59	70
Car-coupling.....	C. O. Allison.....	467,220	Jan. 19	1500	394	58	302
Car-coupling.....	C. A. Anderson.....	477,399	June 21	1865	459	59	1833
Car-coupling.....	D. L. Barnes.....	477,489	June 21	2006	498	59	1860
Car-coupling.....	D. L. Barnes.....	478,835	July 12	1191	296	60	251
Car-coupling.....	L. Barnes.....	474,466	May 10	940	242	59	829
Car-coupling.....	T. J. and J. Baylor.....	472,328	Apr. 5	504	131	59	95
Car-coupling.....	W. C. Beal.....	466,594	Jan. 5	453	116	58	87
Car-coupling.....	U. Beauséjour.....	470,464	Mar. 8	1317	340	58	1359
Car-coupling.....	T. A. Beckwith.....	475,103	May 17	1953	495	59	1040
Car-coupling.....	D. Bellon.....	478,778	July 12	1093	270 271	60	233
Car-coupling.....	B. Bernstein.....	476,864	June 14	980	238	59	1646
Car-coupling.....	W. R. Betham.....	474,806	May 17	1479	377	59	948
Car-coupling.....	R. L. and J. L. Bird.....	473,445	Apr. 26	2275	574	59	481
Car-coupling.....	A. Bittner.....	479,623	July 26	2443	609	60	516
Car-coupling.....	J. H. Bolitho.....	471,376	Mar. 22	2685	685	58	1648
Car-coupling.....	T. J. Booz.....	481,891	Aug. 30	3485	854	60	1306
Car-coupling.....	W. H. Borchers.....	470,976	Mar. 15	2078	531	58	1518
Car-coupling.....	W. H. Borchers.....	486,949	Nov. 29	2870	742	61	1215
Car-coupling.....	J. Bradford.....	487,243	Dec. 6	11	3	61	1323
Car-coupling.....	J. G. Brady.....	469,055	Feb. 16	1812	463	58	898
Car-coupling.....	J. N. Braun.....	482,614	Sept. 13	1156	280	60	1574
Car-coupling.....	D. Brewer.....	482,615	Sept. 13	1158	280	60	1574
Car-coupling.....	O. M. Brunningham.....	467,365	Jan. 19	1724	441	58	344
Car-coupling.....	E. Brockway.....	481,660	Aug. 30	3097	755	60	1231
Car-coupling.....	F. D. Broga.....	470,616	Mar. 8	1527	398	58	1402
Car-coupling.....	T. B. Brower.....	487,694	Dec. 6	740	189	61	1467
Car-coupling.....	F. H. Brown.....	468,739	Feb. 9	1298	330	58	788
Car-coupling.....	F. R. Brown.....	472,103	Apr. 5	145	39	59	27
Car-coupling.....	F. R. Brown.....	472,249	Apr. 5	380	100	59	71
Car-coupling.....	J. H. Browne.....	480,803	Aug. 16	1687	420 421	60	932
Car-coupling.....	W. B. Bruce.....	471,463	Mar. 22	2819	719	58	1672
Car-coupling.....	H. C. Buhoep.....	467,680	Jan. 26	2232	568 569	58	447
Car-coupling.....	H. C. Buhoep.....	480,839	Aug. 16	1737	434	60	943
Car-coupling.....	J. C. Burbank.....	468,327	Feb. 9	658	163	58	660
Car-coupling.....	J. M. Burton.....	476,784	June 14	843	208	59	1618
Car-coupling.....	E. M. Butler.....	478,087	July 5	20	7	60	7
Car-coupling.....	W. H. Callaway and C. C. West.....	477,989	June 28	2815	704	59	2037
Car-coupling.....	C. H. Carpenter.....	488,963	Dec. 27	2819	695	61	1934
Car-coupling.....	J. B. Carpenter.....	472,857	Apr. 12	1283	329	59	256
Car-coupling.....	J. L. Carr.....	469,540	Feb. 23	2550	655	58	1048
Car-coupling.....	J. C. Carrick.....	481,525	Aug. 23	2883	708	60	1175
Car-coupling.....	L. W. Carson.....	469,541	Feb. 23	2551	656	58	1048
Car-coupling.....	F. J. Case and G. T. Challiss.....	485,452	Nov. 1	465	124	61	667
Car-coupling.....	C. Cissner.....	485,172	Nov. 1	28	10	61	578
Car-coupling.....	W. B. Clark.....	481,325	Aug. 23	2564	630	60	1113
Car-coupling.....	W. B. Clark.....	484,997	Oct. 25	2326	606	61	507
Car-coupling.....	W. P. Clark.....	468,192	Feb. 2	433	107	58	609
Car-coupling.....	W. P. Clark.....	477,168	June 14	1470	360	59	1745
Car-coupling.....	M. M. Clarke.....	482,546	Sept. 13	1056	257	60	1555
Car-coupling.....	I. L. Coffman and D. P. Denney.....	487,251	Dec. 6	20	6	61	1325
Car-coupling.....	W. N. Colam.....	486,086	Nov. 15	1436	380	61	901
Car-coupling.....	D. Cole.....	470,180	Mar. 8	825	204	58	1208
Car-coupling.....	J. H. Coleman.....	482,569	Sept. 13	1090	264	60	1561
Car-coupling.....	R. Condon.....	474,815	May 17	1494	381	59	951
Car-coupling.....	O. P. Conley.....	476,786	June 14	846	209	59	1619
Car-coupling.....	T. Courser.....	486,693	Nov. 22	2404	627	61	1105

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car-coupling	A. J. Cover	476,919	June 14	1071	258	59	1663
Car-coupling	R. A. Cowell	480,807	Aug. 16	1693	422	60	934
Car-coupling	F. C. Crowe	468,415	Feb. 9	796	198	58	688
Car-coupling	J. H. Crumb	488,873	Dec. 27	2672	661	61	1903
Car-coupling	C. H. Dale	481,930	Sept. 6	15	4.5	60	1337
Car-coupling	I. David	477,047	June 14	1276	309	59	1705
Car-coupling	W. H. Davis	480,866	Aug. 16	1780	445	60	952
Car-coupling	F. De Ford	485,736	Nov. 8	902	242	61	774
Car-coupling	M. M. Decker	486,091	Nov. 15	1467	{ 386 387 }	61	905
Car-coupling	H. Deitz	487,662	Dec. 6	689	176	61	1458
Car-coupling	H. Deitz	487,663	Dec. 6	690	176	61	1458
Car-coupling	H. Deitz	487,664	Dec. 6	691	176	61	1458
Car-coupling	H. Deitz	487,665	Dec. 6	693	177	61	1459
Car-coupling	H. Deitz	487,666	Dec. 6	694	{ 177 178 }	61	1459
Car-coupling	C. Demanrez	466,713	Jan. 5	649	167	58	124
Car-coupling	C. Demanrez (Reissue)	11,265	Aug. 23	2912	715	60	1181
Car-coupling	C. Demanrez	486,826	Nov. 22	2628	686	61	1152
Car-coupling	J. P. Derr	488,873	Dec. 27	2675	662	61	1904
Car-coupling	J. C. Devlin	478,993	July 19	1427	{ 353 354 }	60	307
Car-coupling	F. Dickey	484,412	Oct. 18	1361	{ 347 348 }	61	300
Car-coupling	G. W. Dickey	468,598	Feb. 9	1082	276	58	744
Car-coupling	C. W. Diederich	487,916	Dec. 13	1120	279	61	1560
Car-coupling	J. Dixon	471,843	Mar. 29	3396	866	58	1789
Car-coupling	P. Doersom	487,885	Dec. 13	1067	268	61	1550
Car-coupling	D. Donahue	474,573	May 10	793	206	59	801
Car-coupling	D. Donahue	476,450	June 7	346	79	59	1504
Car-coupling	H. R. Dore	473,213	Apr. 19	1883	474	59	381
Car-coupling	S. B. Dover	479,635	July 26	2463	613	60	520
Car-coupling	R. H. Dowling	467,463	Jan. 19	1868	477	58	372
Car-coupling	R. H. Dowling	474,772	May 10	1417	361	59	922
Car-coupling	W. Duechting	478,578	July 12	796	196	60	173
Car-coupling	C. A. Dunn	475,268	May 17	2203	{ 562 563 }	59	1091
Car-coupling	E. P. Eastwick, Jr.	475,682	May 24	2849	720	59	1231
Car-coupling	E. P. Eastwick, Jr.	475,683	May 24	2850	721	59	1231
Car-coupling	W. M. Edwards	475,269	May 17	2205	563	59	1091
Car-coupling	W. S. Edwards	488,065	Dec. 13	1381	343	61	1614
Car-coupling	J. M. Elliott, Jr.	483,047	Sept. 20	1835	467	60	1722
Car-coupling	J. M. Elliott, Jr.	483,048	Sept. 20	1837	467	60	1722
Car-coupling	T. J. Emery	487,475	Dec. 6	404	104	61	1400
Car-coupling	F. Enos	486,578	Nov. 22	2220	{ 582 583 }	61	1067
Car-coupling	J. Faubion, Sr.	479,262	July 19	1845	462	60	386
Car-coupling	T. W. Felton	480,456	Aug. 9	1148	287	60	811
Car-coupling	C. C. Fields	475,040	May 17	1852	470	59	1021
Car-coupling	A. Fisk	468,600	Feb. 9	1066	277	58	745
Car-coupling	M. Flanagan	476,008	May 31	3388	855	59	1349
Car-coupling	W. A. Flook	486,864	Nov. 29	2698	704	61	1181
Car-coupling	J. E. Forsyth and E. R. Merrell	488,551	Dec. 27	2165	535	61	1500
Car-coupling	W. H. Foster	480,459	Aug. 9	1151	288	60	811
Car-coupling	F. A. Fox	467,822	Jan. 26	2564	649	58	510
Car-coupling	F. A. Fox	468,765	Feb. 9	1337	338	58	796
Car-coupling	A. Frantz	469,340	Feb. 23	2236	574	58	987
Car-coupling	H. A. Frantz	472,290	Apr. 5	442	114	59	83
Car-coupling	S. J. Freeman	474,730	May 10	1355	344	59	910
Car-coupling	H. Gallager	468,885	Dec. 27	2687	665	61	1906
Car-coupling	W. E. Gallaher	482,121	Sept. 6	325	77	60	1398
Car-coupling	S. J. Galloway and G. P. Cramer	488,922	Dec. 27	2752	679	61	1919
Car-coupling	G. W. Gardner	471,853	Mar. 29	3409	869	58	1791
Car-coupling	J. W. Gardner	474,553	May 10	1078	276	59	855
Car-coupling	R. L. Garlick	472,534	Apr. 12	829	211	59	171
Car-coupling	F. von Garn	484,419	Oct. 18	1371	351	61	302
Car-coupling	W. B. Gasser	479,497	July 26	2265	567	60	483
Car-coupling	C. Gates	472,871	Apr. 12	1303	334	59	261
Car-coupling	E. Géant	483,437	Sept. 27	2457	618	60	1853
Car-coupling	C. Geschwindner	472,992	Apr. 19	1513	386	59	314
Car-coupling	T. C. Gibson	487,367	Dec. 6	213	58.59	61	1362
Car-coupling	T. H. Gilbert	467,249	Jan. 19	1550	395	58	312
Car-coupling	J. Globig	486,460	Nov. 22	2042	540	61	1034
Car-coupling	C. H. Gohl	482,353	Sept. 13	735	{ 176 177 }	60	1494
Car-coupling	J. H. Goode and W. H. Anthony	477,176	June 14	1483	363	59	1747
Car-coupling	C. A. Gould	466,342	Jan. 5	54	14	58	13
Car-coupling	C. A. Gould	478,747	July 12	1042	255	60	222
Car-coupling	H. B. Grant	485,928	Nov. 8	1174	309	61	828
Car-coupling	D. U. Graveline	474,123	May 3	368	89	59	708
Car-coupling	D. D. Green	468,602	Feb. 9	1088	277	58	745
Car-coupling	J. Green	476,630	June 7	611	146	59	1558
Car-coupling	S. F. Green	474,124	May 3	369	89	59	709
Car-coupling	W. Greenlees	476,742	June 7	774	190	59	1591
Car-coupling	E. Grund	486,375	Nov. 15	1906	504	61	994
Car-coupling	C. J. Gustafson	486,930	Nov. 29	2835	{ 734 735 }	61	1208
Car-coupling	A. Hamilton	476,633	June 7	615	148	59	1559
Car-coupling	O. Hanson	473,742	Apr. 26	2769	696	59	574
Car-coupling	W. N. Haring	487,924	Dec. 13	1132	283	61	1562
Car-coupling	G. C. Harlin	482,125	Sept. 6	330	78	60	1399
Car-coupling	O. C. Harris	473,574	Apr. 26	2508	633	59	526
Car-coupling	W. H. Harris	481,399	Aug. 23	2680	657	60	1133
Car-coupling	G. A. Haslup	472,877	Apr. 12	1312	337	59	262

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car-coupling	C. C. Haub and J. F. Dasha	488,120	Dec. 13	1459	368	61	1630
Car-coupling	E. S. Hawkins	474,992	May 17	1783	{ 450 451 }	59	1007
Car-coupling	I. Hazelton	477,414	June 21	1886	464	59	1637
Car-coupling	A. R. Heath	467,807	Jan. 26	2440	620	58	487
Car-coupling	S. P. Heath	472,350	Apr. 5	541	140	59	101
Car-coupling	S. P. Heath and T. Burr	475,239	May 17	2162	550	59	1082
Car-coupling	W. Herrick	480,092	Aug. 2	530	134	60	683
Car-coupling	P. Hien	476,958	June 14	1141	275	59	1677
Car-coupling	P. Hien	487,926	Dec. 13	1135	{ 283 284 }	61	1562
Car-coupling	J. A. Hinson	482,358	Sept. 13	742	179	60	1495
Car-coupling	P. Hoff	476,016	May 31	3398	857	59	1351
Car-coupling	Q. J. Hoke	474,909	May 17	1641	419	59	980
Car-coupling	W. Holly	484,430	Oct. 18	1394	356	61	306
Car-coupling	O. Hood	479,881	Aug. 2	162	40	60	613
Car-coupling	W. H. Hooper	487,030	Nov. 29	2991	770	61	1237
Car-coupling	F. A. Hotchkiss	430,584	Aug. 9	1335	333	60	849
Car-coupling	L. W. Houghton	487,568	Dec. 6	542	140	61	1428
Car-coupling	W. W. Hubbell	476,273	June 7	66	14	59	1451
Car-coupling	J. B. Hulett and L. J. Beers	488,814	Dec. 27	2576	640	61	1883
Car-coupling	J. S. Hunter	481,567	Aug. 30	2955	726	60	1204
Car-coupling	D. W. and G. Jewell	481,906	Aug. 30	3512	800	60	1312
Car-coupling	C. Johnson and N. Olander	485,042	Oct. 25	2395	615	61	521
Car-coupling	F. A. Johnson	467,375	Jan. 19	1740	444	58	346
Car-coupling	E. H. Johnston	467,739	Jan. 26	2334	592	58	466
Car-coupling	J. T. Jones	483,848	Oct. 4	490	122	61	101
Car-coupling	F. W. Jost	470,198	Mar. 8	853	210	58	1274
Car-coupling	D. B. Kelsey	487,148	Nov. 29	3177	814	61	1275
Car-coupling	L. B. Kenney	468,662	Feb. 9	1179	301	58	764
Car-coupling	J. M. Keogh	485,500	Nov. 1	533	141	61	621
Car-coupling	H. E. Kies	477,258	June 21	1643	401	59	1789
Car-coupling	C. T. Kincaid	487,751	Dec. 13	814	215	61	1506
Car-coupling	J. Kindelberger	481,907	Aug. 30	3514	860	60	1312
Car-coupling	E. King and C. L. Tuch	486,342	Nov. 15	1854	488	61	983
Car-coupling	D. Kint	476,749	June 7	782	192	59	1593
Car-coupling	R. S. Kirkpatrick	482,010	Sept. 6	139	34	60	1363
Car-coupling	J. P. and J. E. Kirwan, Jr	470,579	Mar. 8	1470	383	58	1390
Car-coupling	R. Kleinert	482,904	Sept. 20	1614	404	60	1676
Car-coupling	J. E. Kline	468,348	Feb. 9	696	173	58	668
Car-coupling	E. Kling	479,371	July 19	2025	506	60	422
Car-coupling	I. Kling	467,418	Jan. 19	1801	460	58	358
Car-coupling	J. W. Klingler	469,576	Feb. 23	2698	609	58	1059
Car-coupling	J. W. Klingler	487,532	Dec. 6	492	129	61	1418
Car-coupling	W. R. Knight and W. R. Ownby	485,200	Nov. 1	72	22	61	587
Car-coupling	E. H. B. Knowlton	473,761	Apr. 26	2789	701	59	579
Car-coupling	J. Krebbel	475,573	May 24	2691	682	59	1200
Car-coupling	J. La Burt	475,219	May 17	2125	537	59	1075
Car-coupling	J. H. Langschmidt	472,505	Apr. 5	783	200	59	148
Car-coupling	J. W. Latta	475,326	May 24	2286	588	59	1194
Car-coupling	C. Lee	487,420	Dec. 6	313	80, 81	61	1353
Car-coupling	W. A. Lee	479,885	Aug. 2	167	42	60	615
Car-coupling	C. Leischer	488,078	Dec. 13	1400	348	61	1618
Car-coupling	E. J. Lemon	467,421	Jan. 19	1804	461	58	359
Car-coupling	S. F. Lenoir	488,792	Dec. 27	2547	632	61	1877
Car-coupling	H. Lesly	477,561	June 21	2120	526	59	1884
Car-coupling	G. R. Lewis	479,106	July 19	1601	400	60	340
Car-coupling	J. C. Look	474,090	May 3	328	78, 79	59	700
Car-coupling	R. Loomis	488,768	Dec. 27	2505	623	61	1868
Car-coupling	R. F. Ludlow	473,938	May 3	87	19, 20	59	653
Car-coupling	R. F. Ludlow	478,445	July 5	590	144	60	116
Car-coupling	R. F. Ludlow	478,446	July 5	592	144	60	117
Car-coupling	R. F. Ludlow	488,769	Dec. 27	2506	{ 623 624 }	61	1862
Car-coupling	A. B. Lutber	478,620	July 12	854	210	60	185
Car-coupling	E. W. Mackenzie-Hughes	467,172	Jan. 19	1434	365	58	288
Car-coupling	E. W. Mackenzie-Hughes	467,173	Jan. 19	1435	365	58	289
Car-coupling	E. W. Mackenzie-Hughes	467,174	Jan. 19	1436	365	58	289
Car-coupling	A. Mainman	475,351	May 24	2300	591	59	1127
Car-coupling	J. B. Maines	480,110	Aug. 2	555	139	60	688
Car-coupling	A. C. Martin	472,580	Apr. 12	885	227	59	182
Car-coupling	A. C. Martin	472,581	Apr. 12	886	228	59	183
Car-coupling	A. C. Martin	472,582	Apr. 12	887	228	59	183
Car-coupling	C. B. Martin	488,339	Dec. 20	1828	457	61	1718
Car-coupling	L. C. Martin	485,829	Nov. 8	1018	273	61	797
Car-coupling	G. W. Mason	487,536	Dec. 6	497	130	61	1419
Car-coupling	J. Mason	485,468	Nov. 1	489	130	61	672
Car-coupling	J. L. Matson	486,193	Nov. 15	1615	429	61	935
Car-coupling	W. A. Mayhall	475,696	May 24	2875	727	59	1235
Car-coupling	D. A. McCollum	486,291	Nov. 15	1780	468	61	969
Car-coupling	F. S. McConnell	488,173	Dec. 13	1552	389	61	1648
Car-coupling	W. McConway	471,881	Mar. 29	3447	{ 879 880 }	58	1799
Car-coupling	A. C. McCord. (Reissue)	11,220	Feb. 2	642	160	58	649
Car-coupling	A. C. McCord	482,500	Sept. 13	977	237	60	1539
Car-coupling	V. McDonald	485,969	Nov. 8	1247	329	61	844
Car-coupling	J. McFarlane	487,424	Dec. 6	320	82	61	1384
Car-coupling	J. W. McGill	477,438	June 21	1923	{ 474 475 }	59	1843
Car-coupling	T. L. McKeen	472,799	Apr. 12	1206	310	59	241
Car-coupling	G. C. McMichael	485,211	Nov. 1	86	26, 27	61	590
Car-coupling	J. B. Meadley	480,504	Aug. 9	1216	304	60	825
Car-coupling	S. J. Meeker	469,327	Feb. 23	2321	570	58	984
Car-coupling	A. C. Merritt	487,756	Dec. 13	854	217	61	1508

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car-coupling	W. Miggott	484,939	Oct. 25	2234	576	61	490
Car-coupling	M. T. Miles	485,965	Nov. 8	1242	328	61	843
Car-coupling	J. W. Millican	488,571	Dec. 27	2203	545	61	1809
Car-coupling	R. Y. Mitchell	487,632	Dec. 6	636	163	61	1447
Car-coupling	H. E. Moomaw	486,409	Nov. 15	1963	521	61	1005
Car-coupling	H. Moore	479,717	July 26	2608	648	60	546
Car-coupling	R. T. Morrison, Jr.	475,283	May 17	2226	571	59	1096
Car-coupling	R. S. Morrow and D. W. Glenn	486,449	Nov. 22	2081	551	61	1042
Car-coupling	R. L. Munson	480,118	Aug. 2	570	145	60	691
Car-coupling	J. A. Murden	468,679	Feb. 9	1206	307	58	770
Car-coupling	P. H. Murphy	469,166	Feb. 16	1953	500	58	927
Car-coupling	O. R. Myers	476,401	June 7	277	65	59	1492
Car-coupling	I. Neckerman	470,144	Mar. 1	744	185	58	1244
Car-coupling	C. C. Neff	478,125	July 5	69	18	60	16
Car-coupling	S. P. Nelson	467,014	Jan. 12	1146	291	58	226
Car-coupling	S. C. Noble	486,601	Nov. 22	2259	590	61	1075
Car-coupling	J. O'Haire	485,878	Nov. 8	1092	290	61	812
Car-coupling	H. and B. Oakes	481,900	Oct. 25	2164	557	61	476
Car-coupling	C. H. Olds	473,951	May 3	107	25	59	657
Car-coupling	N. J. Parish	473,588	Apr. 26	2534	639	59	530
Car-coupling	C. S. Park	485,894	Nov. 8	981	263	61	791
Car-coupling	A. Parkinson	471,019	Mar. 15	2145	551	58	1531
Car-coupling	E. W. Parrow	481,451	Oct. 18	1427	364	61	313
Car-coupling	C. W. Patton	485,218	Nov. 1	96	29	61	592
Car-coupling	B. H. Paugh	482,926	Sept. 20	1641	413	60	1682
Car-coupling	T. Penn	476,168	May 31	3647	923	59	1402
Car-coupling	C. B. Pentz	476,169	May 31	3648	923	59	1402
Car-coupling	C. A. Pooley	471,568	Mar. 29	2960	754	58	1708
Car-coupling	J. W. Poston	485,333	Nov. 1	278	75, 76	61	629
Car-coupling	G. W. Powell	472,509	Apr. 5	7-9	202	59	150
Car-coupling	L. Z. Preston and O. H. Wursig	474,691	May 10	1300	332	59	898
Car-coupling	J. F. Pursley	482,809	Sept. 20	1454	361	60	1645
Car-coupling	R. Quaternmass	478,463	July 5	617	150	60	122
Car-coupling	J. T. Railsback	475,796	May 31	3035	769	59	1279
Car-coupling	J. L. Randolph	469,197	Feb. 16	2006	511	58	936
Car-coupling	P. M. Reagan	467,282	Jan. 19	1602	409	58	321
Car-coupling	P. M. Reagan	469,409	Feb. 23	2348	603	58	1010
Car-coupling	P. M. Reagan	485,356	Nov. 1	322	86	61	638
Car-coupling	R. Reardon	475,153	May 17	2025	511	59	1054
Car-coupling	E. B. Reid	487,772	Dec. 13	878	223	61	1513
Car-coupling	R. J. Reynolds	479,989	Aug. 2	358	88	60	649
Car-coupling	R. J. Reynolds and J. P. Pittman	468,828	Feb. 16	1437	{ 365 } { 366 }	58	825
Car-coupling	D. L. Richards	483,945	Oct. 4	625	158	61	129
Car-coupling	L. S. Riggs	471,023	Mar. 15	2149	552	58	1532
Car-coupling	T. L. Rivers	472,395	Apr. 5	611	155	59	114
Car-coupling	T. L. Rivers	482,833	Sept. 20	1490	{ 370 } { 371 }	60	1653
Car-coupling	R. S. Robertson	479,079	July 19	1556	389	60	331
Car-coupling	W. N. Robinson	473,346	Apr. 19	2109	529	59	427
Car-coupling	J. P. Rollins	479,990	Aug. 2	359	89	60	649
Car-coupling	F. T. Russell	485,061	Oct. 25	24-1	622	61	526
Car-coupling	R. S. Russell	477,577	June 21	2139	532	59	1883
Car-coupling	F. M. Ryan	488,718	Dec. 27	2436	604	61	1854
Car-coupling	J. E. Sague	480,628	Aug. 9	1414	352	60	864
Car-coupling	W. A. Salisbury	471,195	Mar. 22	2417	615	58	1595
Car-coupling	J. A. Sample	482,461	Sept. 13	906	220	60	1525
Car-coupling	S. Q. Saunders	475,706	May 24	2888	730	59	1238
Car-coupling	H. Schaeffer	488,507	Dec. 20	2098	521	61	1773
Car-coupling	C. Schleicher	466,967	Jan. 12	1070	271	58	211
Car-coupling	A. W. Schoeb	488,907	Dec. 27	2734	674	61	1916
Car-coupling	A. Schroeder	485,062	Oct. 25	2423	623	61	527
Car-coupling	M. T. Scott	485,752	Nov. 8	919	246	61	778
Car-coupling	M. T. Scott and J. L. Brasfield	475,707	May 24	2889	731	59	1238
Car-coupling	J. H. Seidel	485,232	Nov. 1	118	36	61	598
Car-coupling	S. Shepardson	487,297	Dec. 6	90	27	61	1339
Car-coupling	G. K. Smith	480,631	Aug. 9	1417	353	60	865
Car-coupling	H. K. Smith	481,071	Aug. 16	2115	527	60	1016
Car-coupling	S. D. Smith	472,958	Apr. 12	1442	368	59	288
Car-coupling	W. H. Snow	487,353	Dec. 6	189	52	61	1358
Car-coupling	J. H. Snyder	486,905	Nov. 29	2796	725	61	1200
Car-coupling	N. R. Solcer	467,903	Jan. 26	2600	657	58	517
Car-coupling	H. Sommerfeld	468,311	Feb. 2	630	157	58	646
Car-coupling	G. C. Spreng and J. C. Smith	477,466	June 21	1970	489	59	1853
Car-coupling	C. F. Springer	476,322	June 7	148	36	59	1466
Car-coupling	D. Stark	467,614	Jan. 26	2137	543	58	429
Car-coupling	J. Steiner	483,658	Oct. 4	207	51	61	42
Car-coupling	C. W. Stillians	481,076	Aug. 16	2123	528	60	1017
Car-coupling	B. F. Stone	485,512	Nov. 1	547	146	61	684
Car-coupling	J. W. Stout	471,910	Mar. 29	3480	890	58	1806
Car-coupling	J. C. Stuart	483,640	Oct. 4	182	45	61	38
Car-coupling	T. M. Stuart	469,284	Feb. 23	2159	554	58	972
Car-coupling	W. H. Stults	488,153	Dec. 13	1518	381	61	1641
Car-coupling	E. Suprenant	475,168	May 17	2048	515	59	1059
Car-coupling	C. H. Taylor	480,836	Aug. 16	1734	433	60	942
Car-coupling	J. Teel	475,829	May 31	3107	787	59	1293
Car-coupling	E. S. Thomas and J. E. Littlejohn	483,879	Oct. 4	531	134	61	110
Car-coupling	F. Thompson	482,598	Sept. 13	1131	273	60	1570
Car-coupling	G. R. Thompson	488,586	Dec. 27	2228	552	61	1814
Car-coupling	C. A. Tower	482,105	Sept. 6	300	71	60	1394
Car-coupling	C. A. Tower	484,125	Oct. 11	890	{ 226 } { 227 }	61	197
Car-coupling	C. A. Tower	487,546	Dec. 6	512	133	61	1422

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Car-coupling	C. A. Tower	487,649	Dec. 6	663	171	61	1453
Car-coupling	C. A. Tower	487,650	Dec. 6	616	171	61	1453
Car-coupling	M. W. Trexler	474,703	May 10	1314	335	59	902
Car-coupling	S. G. Trine	467,839	Jan. 26	2490	631	58	497
Car-coupling	R. M. Tucker	468,846	Feb. 16	1466	374	58	830
Car-coupling	D. G. Turner	480,481	Aug. 9	1153	297	60	819
Car-coupling	O. Tweeden	481,477	Oct. 18	1471	375	61	321
Car-coupling	W. H. Underwood and W. E. Chum	482,769	Sept. 20	1407	348	60	1635
Car-coupling	F. Vaughan	466,639	Jan. 5	522	136	58	101
Car-coupling	W. H. Violett	481,446	Aug. 23	2754	677	60	1149
Car-coupling	A. G. Vogt	488,857	Dec. 27	2651	656	61	1898
Car-coupling	J. G. Waggoner	486,516	Nov. 22	2120	559	61	1050
Car-coupling	J. E. Walker	419,926	Aug. 2	235	58	60	627
Car-coupling	W. E. Wall	468,449	Feb. 9	841	212	58	697
Car-coupling	F. W. Wallis	470,228	Mar. 8	898	292	58	1282
Car-coupling	F. N. Ward	487,377	Dec. 6	198	55	61	1360
Car-coupling	C. Weeks and J. E. Bush	482,566	Sept. 13	1046	263	60	1561
Car-coupling	E. C. Welch	481,449	Aug. 23	2758	678	60	1149
Car-coupling	T. Welch	488,159	Dec. 13	1528	383	61	1644
Car-coupling	F. L. Wells	471,702	Mar. 29	3161	806	58	1744
Car-coupling	O. Wells	467,326	Jan. 19	1663	424	58	333
Car-coupling	O. Wells	467,327	Jan. 19	1666	425	58	333
Car-coupling	M. Werner	487,590	Dec. 6	570	146	61	1435
Car-coupling	R. W. Weymouth and H. T. Fulton	487,341	Dec. 6	167	47	61	1353
Car-coupling	E. D. Whipple	485,249	Nov. 1	143	43	61	603
Car-coupling	G. W. Wilkinson	482,605	Sept. 13	1539	275	60	1571
Car-coupling	J. W. Wilks and C. Whitus	470,230	Mar. 8	899	222	58	1282
Car-coupling	J. W. Wilks and C. Whitus	483,194	Sept. 27	2071	523	60	1781
Car-coupling	D. Williams	482,445	Sept. 13	884	213	60	1520
Car-coupling	J. A. and L. R. Williams	488,490	Dec. 20	2071	514	61	1768
Car-coupling	S. R. Williams	482,288	Sept. 6	600	143	60	1452
Car-coupling	W. D. Williams	472,840	Apr. 12	1262	323	59	252
Car-coupling	W. E. Williams	467,126	Jan. 12	1351	344	58	265
Car-coupling	J. R. Williamson	471,045	Mar. 15	2176	560	58	1537
Car-coupling	J. H. Wilson	472,418	Apr. 5	639	163	59	120
Car-coupling	R. R. Wilson	479,729	July 26	2634	653	60	551
Car-coupling	J. J. Wisla	481,991	Sept. 6	105	26	60	1355
Car-coupling	J. A. Wiswall	482,771	Sept. 20	1413	349	60	1636
Car-coupling	H. G. Wood	486,011	Nov. 8	1318	350	61	859
Car-coupling	R. M. Woodard	483,196	Sept. 27	2074	524	60	1781
Car-coupling	F. B. Woodman	476,349	June 7	191	45	59	1473
Car-coupling	A. E. Woolf	478,492	July 5	656	161	60	130
Car-coupling	S. W. Wright	479,483	July 26	2245	563	60	479
Car-coupling	E. A. Yeaton	469,110	Feb. 16	1881	481	58	912
Car-coupling	J. D. Young	476,351	June 7	194	46	59	1474
Car-coupling	S. Young and M. Moskowitz	466,481	Jan. 5	273	69	58	52
Car-coupling	S. Young and M. Moskowitz	471,739	Mar. 29	3231	822	58	1756
Car coupling and buffing mechanism	H. C. Buhoup	482,496	Dec. 20	2079	516	61	1770
Car-coupling. Automatic	E. Bowen	469,228	Feb. 23	2068	532	58	955
Car-coupling. Automatic	A. J. Cleland	470,932	Mar. 29	3542	905	58	1818
Car-coupling brake	J. P. Seawell	479,024	July 19	1476	367	60	316
Car-couplings. Draft-rigging for	J. A. Hinson	466,348	Jan. 5	60	15, 16	58	14
Car-couplings. Lifting device for twin-jaw	T. L. McKeen	472,627	Apr. 12	959	248	59	196
Car-couplings. Pin-lifter for	J. W. Wilks and C. Whitus	483,193	Sept. 27	2070	523	60	1780
Car-couplings. Pin-operating device for	J. W. Cloud	468,060	Feb. 2	239	57	58	569
Car-couplings. Spring-box for	P. P. McMahon and G. M. Wilcoxson	470,071	Mar. 1	641	159	58	1223
Car curtain. Street	A. D. Cochran	474,902	May 17	1634	417	59	979
Car curtain. Street	A. D. Cochran	486,433	Nov. 22	2006	532	61	1027
Car-door	G. M. Brill	468,434	Feb. 9	820	207	58	693
Car-door	M. T. Carson and J. D. Gurganus	472,858	Apr. 12	1284	329	59	257
Car-door	T. Enbank	486,562	Nov. 22	2189	576	61	1062
Car-door	S. W. Grosh	485,007	Oct. 25	2342	603	61	510
Car-door	A. B. Pullman	485,588	Nov. 1	664	176	61	710
Car-door	J. Smith	468,703	Feb. 9	1248	317	58	778
Car-door	A. B. Taylor	479,143	July 19	1662	416	60	351
Car-door	A. B. Taylor	479,144	July 19	1664	416	60	351
Car door. Grain	S. W. Grosh	478,748	July 12	1043	256	60	223
Car door. Grain	E. A. Hill	479,070	July 19	1545	386	60	329
Car door. Grain	R. O. Hixson	475,449	May 24	2490	635	59	1161
Car door. Grain	J. Pearson	468,894	Feb. 16	1534	390	58	843
Car door. Grain	W. S. Schroeder	475,422	May 24	2449	624	59	1153
Car door. Grain	J. C. Wands	477,092	June 14	1354	329	59	1721
Car-door. Sliding	C. H. Dunham	475,680	May 24	2845	720	59	1230
Car-door. Street	F. Mansfield	472,737	Apr. 12	1119	287	59	224
Car door. Tram	J. Stephenson	488,722	Dec. 27	2440	695	61	1855
Car-door. Ventilated	J. L. Stagg, C. W. Fenn, and C. T. Schoen	487,163	Nov. 29	3202	820	61	1280
Car-door. Ventilating	C. T. Schoen	469,794	Mar. 1	206	54	58	1141
Car draft and dust guard	E. B. Jones	483,382	Sept. 27	2937	599	60	1838
Car draft-guard	G. F. C. Rosenthal	475,611	May 24	2747	696	59	1212
Car draft-rigging	W. H. Miner	474,996	May 17	1788	452	59	1005

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car draft-rigging. Railway.....	J. A. Hinson	487,269	Dec. 6	44	14	61	1330
Car draw-bar.....	T. Baril.....	471,530	Mar. 29	2911	741	58	1699
Car draw-bar.....	J. L. Blessing	479,048	July 19	1511	377	60	324
Car draw-bar attachment.....	P. Brown.....	486,427	Nov. 22	1995	{ 529 530 }	61	1025
Car draw-bar attachment.....	W. B. Orton.....	487,583	Dec. 6	559	143	61	1432
Car draw-bar guide.....	J. L. Guinn.....	480,464	Aug. 9	1158	290	60	813
Car draw-gear.....	W. Pennock.....	480,827	Aug. 16	1726	431	60	941
Car draw-gear. Railway.....	T. A. Bissell.....	488,326	Dec. 20	1805	453	61	1714
Car-driving mechanism.....	T. A. Edison.....	470,927	Mar. 15	1997	{ 510 511 }	58	1502
Car driving mechanism.....	C. W. Hunt.....	484,911	Oct. 25	2189	564	61	421
Car driving mechanism.....	J. V. Motter.....	479,915	Aug. 2	206	52	60	632
Car. Dump.....	R. S. Cox.....	476,366	June 7	219	54	59	1478
Car. Dump.....	M. W. Iles.....	483,152	Sept. 27	2000	506	60	1766
Car. Dump.....	C. D. Page.....	467,772	Jan. 26	2383	606	58	476
Car-dump.....	J. Odorizzi.....	481,811	Aug. 30	3359	822	60	1282
Car. Dumping.....	S. W. Bradley.....	470,653	Mar. 15	1586	413	58	1423
Car. Dumping.....	C. W. Bridgegum.....	476,780	June 14	838	207	59	1617
Car. Dumping.....	M. W. Iles.....	484,019	Oct. 11	754	190	61	169
Car. Dumping.....	J. L. Koplin.....	470,299	Mar. 8	1028	263	58	1308
Car. Dumping.....	J. Player.....	483,790	Oct. 4	405	101	61	85
Car. Dumping.....	J. J. Souder.....	466,468	Jan. 5	253	64	58	48
Car. Dumping.....	J. J. Souder.....	466,469	Jan. 5	254	64, 65	58	48
Car. Dumping.....	J. J. Souder.....	466,470	Jan. 5	257	65	58	49
Car-dumping apparatus.....	M. M. Neames.....	470,589	Mar. 8	1483	386	58	1393
Car-dumping apparatus.....	T. J. Phillips.....	481,968	Sept. 6	69	18, 19	60	1318
Car-dumping apparatus.....	E. B. Wilson.....	477,396	June 21	1859	458	59	1532
Car dumping device.....	C. F. Wilson.....	472,648	Apr. 12	984	254	59	200
Car. Dumping freight.....	R. M. Johnson.....	474,744	May 10	1377	348	59	914
Car. Electric mine.....	E. A. Sperry.....	478,138	July 5	89	23, 24	60	20
Car. Electric-motor.....	W. H. Patton.....	475,702	May 24	2282	729	59	1237
Car. Electric-motor.....	E. B. Phillips.....	466,832	Jan. 12	840	216	58	170
Car. Electrically-propelled.....	H. E. Dey.....	468,948	Feb. 16	1635	{ 416 417 }	58	862
Car. Elevated-railway.....	W. T. Shaffer.....	468,699	Feb. 9	1242	316	58	777
Car. Exhibition.....	M. Leak.....	472,300	Apr. 5	459	118	59	86
Car-fender.....	S. I. Crafts.....	488,386	Dec. 20	1906	477	61	1734
Car-fender.....	H. A. Gamage and W. N. Schmdt.....	488,353	Dec. 20	1853	463	61	1723
Car-fender.....	P. Wentzel and H. Bletzer.....	487,547	Dec. 6	514	133	61	1422
Car fender or guard.....	W. W. Baxter.....	484,989	Oct. 25	2310	596	61	504
Car fender. Street.....	G. T. Hall.....	488,276	Dec. 20	1721	434	61	1698
Car fender. Street.....	B. Sullivan.....	477,467	June 21	1971	489	59	1253
Car for use upon inclined railways.....	J. Messner.....	467,945	Feb. 2	63	15	58	537
Car frame. Metallic hand.....	E. Courtwright.....	468,511	Feb. 9	919	242	58	718
Car-frames. Carling-socket for.....	W. E. Coffin.....	470,744	Mar. 15	1719	443	58	1449
Car. Freight.....	J. M. Burton.....	472,158	Apr. 5	229	61, 62	59	43
Car. Freight.....	C. B. Hutchins.....	487,743	Dec. 13	832	212	61	1503
Car. Freight and grain.....	J. F. Butz.....	481,928	Sept. 6	11	4	60	1337
Car. Fruit.....	A. T. Perkins.....	474,998	May 17	1790	{ 453 454 }	59	1009
Car gas-lighting tanks from gas-mains. Apparatus for charging.....	R. M. Dixon.....	483,106	Sept. 20	1923	487	60	1740
Car gate. Railway.....	L. Arnold.....	481,540	Aug. 23	2910	714	60	1180
Car grip. Cable.....	D. D. Nolley.....	475,143	May 17	2012	508	59	1052
Car guard. Railway.....	P. Barron.....	483,202	Sept. 27	2087	529	60	1783
Car. Hand.....	E. Chamberlain.....	468,611	Feb. 9	1101	280	58	748
Car. Hand.....	J. R. Parker.....	474,855	May 17	1563	398	59	963
Car. Hand.....	C. Roberts.....	487,376	Dec. 6	223	61	61	1365
Car. Hand.....	C. Roberts.....	487,377	Dec. 6	225	61, 62	61	1365
Car. Hand.....	C. Roberts.....	487,378	Dec. 6	227	62	61	1366
Car. Hand.....	C. Schafer.....	471,143	Mar. 22	2344	690	58	1581
Car-heater.....	W. C. Baker.....	476,973	June 14	1161	{ 280 281 }	59	1681
Car-heater.....	C. S. Dean.....	474,225	May 3	527	129	59	739
Car-heater.....	L. Haas.....	470,120	Mar. 1	713	176	58	1237
Car-heater. Gas.....	S. Stewart.....	480,216	Aug. 2	743	188	60	722
Car heater. Railway.....	W. C. Baker.....	473,721	Apr. 26	2732	687	59	567
Car heater. Street.....	J. Allingham.....	472,778	Apr. 12	1178	302	59	235
Car-heating.....	W. W. Munsell.....	485,209	Nov. 1	84	26	61	589
Car heating and ventilating system.....	J. A. Healy.....	485,036	Oct. 25	2369	614	61	520
Car-heating apparatus.....	W. C. Baker.....	472,689	Apr. 12	1042	269	59	209
Car-heating apparatus.....	J. F. McElroy.....	471,312	Mar. 22	2590	657	58	1628
Car-heating apparatus.....	J. F. McElroy.....	471,313	Mar. 22	2591	657	58	1628
Car-heating apparatus.....	G. A. Prescott.....	474,404	May 10	835	219	59	816
Car-heating apparatus.....	E. F. Roberts.....	483,698	Oct. 4	265	66	61	50
Car-heating apparatus.....	J. H. Sewall.....	477,464	June 21	1968	488	59	1855
Car-heating apparatus.....	J. H. Sewall.....	483,813	Oct. 4	436	{ 107 108 }	61	90
Car-heating apparatus.....	G. Westinghouse, Jr.....	466,590	Jan. 5	444	{ 114 115 }	58	87
Car-heating apparatus. Railway.....	J. Q. C. Searle.....	474,417	May 10	864	226	59	810
Car-heating apparatus. Steam-heater for railway.....	E. A. Leland.....	471,869	Mar. 29	3429	875	58	1795
Car-heating apparatus. Street.....	J. F. McElroy.....	471,316	Mar. 22	2594	658	58	1623
Car-heating apparatus with heating mediums. System of charging.....	J. F. McElroy.....	473,635	Apr. 26	2603	{ 655 656 }	59	511
Car-heating systems. Supply-station for.....	J. F. McElroy.....	480,777	Aug. 16	1644	412	60	925
Car-indicator-operating device. Automatic.....	S. B. Crane.....	471,233	Mar. 22	2474	{ 628 629 }	58	1606
Car journal-box.....	C. T. Schoen.....	482,200	Sept. 6	456	110	60	1424
Car-lighting system. Electric.....	S. Young and M. Moskowitz.....	478,183	July 5	176	46	60	37
Car-lighting system. Electric.....	J. F. McElroy.....	475,514	May 24	2597	{ 660 661 }	59	1182
Car-loader.....	H. C. W. Buchterkirchen.....	486,079	Nov. 15	1428	377	61	809

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Car-loading apparatus	C. H. Campbell and W. Whigham ..	475,293	May 24	2928	576 577 578	59	1114
Car-loading apparatus	R. W. Compton	475,236	May 17	2157	546 547	59	1081
Car-locker	J. E. Dempsey	478,740	July 12	1033	254	60	221
Car. Logging-	J. E. Henry	473,748	Apr. 26	2775	698	59	576
Car. Merchandising-	R. A. Wilder	480,308	Aug. 9	909	229	60	767
Car. Metallic	W. Pennock	466,624	Jan. 5	501	128 129	58	96
Car. Mine-	H. Durand	488,879	Dec. 27	2679	663	61	1904
Car. Motor-	O. Blessing	486,660	Nov. 22	2351	615 616	61	1094
Car. Motor-	C. Lancaster and J. Sturgeon	467,741	Jan. 26	2337	593 594	58	467
Car motor. Electric-	F. O. Blackwell	470,656	Mar. 15	1583	412	58	1422
Car motor. Electric-	C. A. Jackson	487,329	Dec. 6	149	43	61	1350
Car motor. Street-	J. G. Lightford	481,715	Aug. 30	3187	778	60	1248
Car motor. Street-	A. J. Painter	468,824	Feb. 16	1432	364	58	824
Car. Motor tram-	J. M. O'Kelly	477,444	June 21	1934	478 479 480	59	1846
Car motors. Device for transmitting motion for elec- tric street-	W. E. Harrington	487,069	Nov. 29	3047	781 782	61	1249
Car-mover	N. B. Marston and W. M. Kimball ..	480,333	Aug. 9	941	239	60	773
Car-mover	C. W. Pierce	482,878	Sept. 20	1566	391	60	1668
Car-mover	G. W. M. Simms	475,902	May 31	3228	816	59	1317
Car. Ore-	F. A. Huntington	487,572	Dec. 6	516	141	61	1429
Car. Ore-	G. E. Truax	466,717	Jan. 5	654	168	58	124
Car. Parlor sleeping-	D. C. Breed	479,240	July 19	1810	453 454 455	60	379
Car. Passenger-	C. L. Pullman	471,761	Mar. 29	3259	831 832	58	1762
Car. Passenger-	W. A. Winslow	486,313	Nov. 15	1813	478	61	975
Car pilot. Railway-	H. B. Williams	473,277	Apr. 19	1988	499	59	403
Car pilot. Street-	J. W. Abrahams	469,291	Feb. 23	2169	556	58	974
Car-platform gate	H. Cochran	472,737	Apr. 12	1104	284	59	221
Car-platform protector	J. W. Boice	468,760	Feb. 9	1326	335	58	793
Car-propelling mechanism	E. E. Miller	477,260	June 21	1646	402	59	1790
Car rail-cleaning attachment	P. Wardman	476,909	June 14	1058	255	59	1660
Car. Railway-	G. Bayha	475,844	May 31	3133	794	59	1298
Car. Railway-	T. A. Bissell	470,799	Mar. 15	1807	464 465	58	1466
Car. Railway-	H. C. Buhoup	466,975	Jan. 12	1085	274 275	58	214
Car. Railway-	J. M. Burton	470,326	Mar. 8	1086	277 278	58	1316
Car. Railway-	J. M. Burton. (Reissue.)	11,254	July 19	2063	516 517	60	430
Car. Railway-	A. Fordham	487,918	Dec. 13	1123	280	61	1560
Car. Railway-	J. Hammond	474,736	May 10	1367	346	59	912
Car. Railway-	G. M. Hoadley and S. A. Bemis	477,935	June 28	2738	686	59	2021
Car. Railway-	C. M. Hollingsworth	474,660	May 10	1246	318	59	888
Car. Railway-	C. B. Hutchius	484,593	Oct. 18	1638	415 416	61	356
Car. Railway-	J. D. Morrison	475,791	May 31	3027	767	59	1278
Car. Railway-	T. E. Pope	485,562	Nov. 1	623	166	61	700
Car. Railway-	C. J. Seymour	484,119	Oct. 11	879	224	61	195
Car. Railway-	R. A. Wilder	480,355	Aug. 9	975	246	60	779
Car. Railway-construction	C. C. Brown	487,045	Nov. 29	3011	775	61	1242
Car. Railway dumping-	G. Talbot	488,295	Dec. 20	1754	441 442	61	1704
Car ratchet-brake	P. M. Kling	485,548	Nov. 1	603	161	61	696
Car-replacer	W. H. Darling	487,864	Dec. 13	1034	259	61	1544
Car-replacer	J. M. Morris and S. J. Harkness ..	473,587	Apr. 26	2533	639	59	530
Car-replacer	N. S. Scott	471,027	Mar. 15	2153	553	58	1533
Car replacer. Street-	J. Findlay	467,763	Jan. 26	2373	603	58	474
Car-roof	J. C. Wands	483,032	Sept. 20	1817	461	60	1718
Car roofing. Box-	W. S. Morris	487,193	Nov. 29	3245	830	61	1288
Car. Safety-	A. N. Lampert	473,323	Apr. 19	2000	518 519	59	418
Car. Safety-	W. Skyrme	477,075	June 14	1328	322	59	1716
Car safety attachment	R. L. Lynch	488,477	Dec. 20	2051	510	61	1763
Car safety-cage	B. F. Johnson	487,746	Dec. 13	837	213	61	1504
Car safety-catch. Mining-	C. R. Trew	475,639	May 24	2789	707	59	1320
Car safety-guard	J. Simons	485,598	Nov. 1	600	180	61	714
Car sand-box	S. Croxy	488,387	Dec. 20	1907	477	61	1734
Car sanding device. Street-	J. H. and G. L. Vogan	481,535	Aug. 23	2903	712	60	1179
Car-seal	F. W. Brooks	481,388	Aug. 23	2659	652	60	1130
Car-seal	B. J. Startevant	467,387	Jan. 19	1755	448	58	849
Car-seal	A. P. Travis	485,070	Oct. 25	2433	625	61	529
Car-seal press	L. A. Foote	475,211	May 17	2115	535	59	1073
Car-seat	E. L. Bushnell	478,235	Feb. 2	492	121	58	621
Car-seat	E. L. Bushnell and G. W. Dryer ..	476,728	June 7	751	185	59	1586
Car-seat	E. L. Bushnell and G. W. Dryer ..	476,729	June 7	752	186	59	1587
Car-seat	H. S. Hale	475,109	May 17	1966	498	59	1042
Car-seat	J. Krehbiel	474,666	May 10	1257	321	59	890
Car-seat	J. Lemman	487,034	Nov. 29	2997	772	61	1238
Car-seat	C. H. Matthiessen	484,215	Oct. 11	1044	264	61	226
Car-seat. Convertible	W. H. Steacy	486,742	Nov. 22	2482	647	61	1121
Car-seat. Reversible	J. S. Johnston	484,434	Oct. 18	1403	358	61	308
Car-seats. Automatic mileage-recorder for ..	H. S. Squires	480,526	Aug. 9	1245	313	60	831

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Car-shield. Revolving	J. E. Shanafelt	475,157	May 17	2030	512	59	1059
Car-sign	C. S. Reed	483,928	Sept. 20	1643	414	60	1682
Car signal. Street	C. H. Smith	475,474	May 24	2533	645	59	1169
Car slack-adjuster	W. H. Marshall	484,858	Oct. 25	2092	538 539	61	461
Car. Slag-	S. B. Dexter	474,228	May 3	531	130	59	740
Car. Sleeping-	S. M. Charles	468,493	Feb. 9	923	235	58	712
Car. Sleeping-	S. M. Charles	485,151	Oct. 25	2556	657	61	554
Car. Sleeping-	J. E. Myers	476,022	May 31	3405	859	59	1353
Car. Sleeping-	W. Sneekner	477,157	June 14	1444	354	59	1739
Car-spring	N. H. and T. C. Davis	488,754	Dec. 27	2484	617	61	1864
Car-spring	G. Gibbs	488,474	Dec. 20	2041	508	61	1762
Car-spring	W. Marriott	485,553	Nov. 1	609	162 163	61	697
Car-spring	L. Pfingst	485,652	Nov. 8	756	199	61	744
Car-starter	D. Fuller	483,349	Sept. 27	2330	585 586	60	1828
Car-starter	W. Grunow, Jr.	470,753	Mar. 15	1732	446	58	1451
Car-starter	A. B. Schofield	466,912	Jan. 12	989	253	58	197
Car-starter	G. B. Warner and L. J. Allen	479,127	July 19	1637	409	60	346
Car-starter	W. Weaver	488,462	Dec. 20	2023	505	61	1758
Car starter and brake	H. S. Bodley	488,865	Dec. 27	2661	659	61	1900
Car starter and brake	W. L. Davis	469,776	Mar. 1	176	47	58	1135
Car starter and brake	W. Prinzlau	485,353	Nov. 1	317	84	61	636
Car starter and brake	P. Wuefing	486,520	Nov. 22	2124	561	61	1051
Car-step	M. B. Ryan	468,899	Feb. 16	1543	392	58	845
Car-step	F. H. Stanwood	476,323	June 7	149	36	59	1466
Car-step and gate. Combined	C. O. Sobieski	466,310	Feb. 2	627	157	58	645
Car-step. Automatic	J. MacCollum	487,867	Dec. 13	1039	260	61	1544
Car-step. Extensible	W. H. Voss	481,658	Aug. 30	3095	754	60	1230
Car-step extension	W. Dalenberg and C. Verduin	481,009	Aug. 16	2003	501	60	994
Car. Stock-	C. W. Allen	469,829	Mar. 1	265	68, 69	58	1152
Car. Stock-	J. M. Burton	473,998	May 3	177	42	59	672
Car. Stock-	J. D. Dow	468,646	Feb. 9	1152	294	58	758
Car. Stock-	G. Grossman	487,668	Dec. 6	697	178	61	1459
Car. Stock-	C. L. Travis	475,258	May 17	2185	556 557	59	1087
Car. Street-	G. W. Baumhoff and A. H. Hagemeyer.	467,392	Jan. 19	1763	450	58	351
Car. Street-	F. B. Brownell	481,467	Aug. 23	2793	687	60	1156
Car. Street-	F. B. Brownell	481,463	Aug. 23	2794	687	60	1156
Car. Street-	F. B. Brownell. (Reissue)	11,289	Nov. 29	3348	852	61	1306
Car. Street-	J. E. Foster	486,034	Nov. 8	1352	359	61	866
Car. Street-	J. A. Mehling	481,800	Aug. 30	3341	817	60	1279
Car switch attachment	W. E. Meagher and A. Howarth	483,744	Oct. 4	332	84	61	70
Car-switch. Electrically-controlled	B. I. Potter	467,050	Jan. 12	1211	305 306	58	238
Car switch-operating device. Railway-	J. Kelly. (Reissue)	11,269	Sept. 13	1304	319	60	1604
Car top buffer. Freight-	H. H. Sessions	479,025	July 19	1478	367 368	60	316
Car. Tram-	A. Wörner	480,310	Aug. 9	911	230	60	768
Car. Tramway-	D. King	467,009	Jan. 12	1136	288 289	58	224
Car trolley. Electric-	J. W. Beebe	468,779	Feb. 16	1367	345	58	811
Car trolley-stand. Electric-	E. M. Bentley	488,179	Dec. 20	1566	393	61	1668
Car. Ventilated	J. W. Hartin	469,698	Mar. 1	44	14	58	1106
Car ventilating device. Railway-	A. Minnick	483,851	Oct. 4	495	123	61	102
Car-ventilator	H. A. Dirkes	475,389	May 24	2397	612	59	1144
Car-ventilator	C. V. Heath and A. G. Milzer	474,247	May 3	555	136 137	59	745
Car-ventilator	J. Martin	471,649	Mar. 29	3076	782	58	1728
Car ventilator. Railway-	W. S. Rogers	481,196	Aug. 23	2329	574	60	1070
Car. Vestibule-	E. H. Beckley	479,546	July 26	2333	582 583	60	496
Car. Vestibule-	G. Hancock	481,902	Aug. 30	3505	858	60	1310
Car. Vestibule-	J. Krehhiel	482,744	Sept. 20	1361	337	60	1626
Car-vestibule	A. Fordham	482,006	Sept. 6	135	33	60	1361
Car-vestibule	G. Hancock	480,695	Aug. 9	1519	377	60	884
Car-vestibule	J. F. McElroy	474,966	May 17	1736	441	59	969
Car vestibule connection	A. M. Kittredge and J. Kirby, Jr.	474,796	May 10	1464	372	59	932
Car-vestibules. Bellows-fold coupling for	E. L. Perry	473,954	May 3	112	26	59	658
Car-wheel	J. T. Bridges	466,988	Jan. 12	1107	240	58	219
Car-wheel	G. W. Cushing	486,326	Nov. 15	1832	482	61	979
Car-wheel	J. R. Davies	469,681	Mar. 1	17	7	58	1102
Car-wheel	G. H. Graham	477,532	June 21	2079	517	59	1876
Car-wheel	H. Guelis	481,862	Aug. 30	3437	843	60	1297
Car-wheel	W. Hailes	477,539	June 21	2087	519	59	1877
Car-wheel	J. Harris	469,919	Mar. 1	403	101	58	1179
Car-wheel	B. F. Haugh	480,922	Aug. 16	845	465	60	969
Car-wheel	G. Hull	483,064	Sept. 20	1859	471	60	1727
Car-wheel	A. Hymas	479,366	July 19	2019	501	60	421
Car-wheel	H. F. Mann	468,675	Feb. 9	1202	305	58	760
Car-wheel	H. F. Mann	468,676	Feb. 9	1203	306	58	769
Car-wheel	G. W. Miller	475,018	May 17	1823	462	59	1015
Car-wheel	L. B. Smyser	474,421	May 10	870	227	59	816
Car-wheel	W. Ward	472,415	Apr. 5	636	162	59	119
Car wheel and axle	A. and W. A. Johnston	478,512	July 5	693	168	60	138
Car wheel and axle	W. R. Kirk	474,836	May 17	1535	391	59	958
Car wheel and brake	J. A. La Croix	470,202	Mar. 8	860	213	58	1275
Car-wheel. Antifriction	J. D. Farquhar	472,944	Apr. 12	1414	361	59	283
Car-wheel. Chilled cast-iron	L. R. Faught	477,524	June 21	2066	514	59	1873
Car-wheel. Cushioned	B. F. Haugh	467,721	Jan. 26	2309	587	58	461
Car-wheel guard	J. Nagele	470,362	Mar. 8	1147	294	58	1328

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Car-wheels. Method of and apparatus for manufacturing cast-iron	N. Washburn	467,214	Jan. 19	1490	381	58	300
Car-window dust and cinder protector	E. B. Loomis	477,948	June 2	2759	691	59	2025
Car window. Railway	A. E. Shure	486,220	Nov. 15	1659	439	61	943
Cars. Adjustable guard-rail for street	D. Catarious and A. S. Crable	468,454	Feb. 9	850	215	58	699
Cars. Air and steam coupling for railway	J. F. Hill	472,807	Apr. 12	1216	312	59	243
Cars. Air-circulating mechanism for railway	G. R. and W. H. Perry	467,195	Jan. 19	1464	313	58	295
Cars and platforms. System of lighting railway	D. H. Nichols, C. L. and C. A. Cotton	485,647	Nov. 8	750	197	61	742
Cars. Antifriction-bearing for	C. T. Buschner	475,007	May 17	1806	458	59	1011
Cars. Apparatus for heating railway	I. W. Bliss	470,830	Mar. 15	1864	478	58	1476
Cars. Apparatus for indicating the positions of railway	J. H. Hunter and J. S. Lneock	434,205	Oct. 11	1027	261	61	223
Cars. Apparatus for transferring railway	A. D. Clarke	487,717	Dec. 13	786	200	61	1493
Cars. Automatic latch for dump	I. Barker	485,403	Nov. 1	396	106	61	653
Cars. Auxiliary motor for	W. Crook, Sr.	486,031	Nov. 8	1348	358	61	865
Cars. Ball-bearing for railway	J. E. Norwood	478,351	July 5	457	112	60	92
Cars. Bolster attachment for log	E. H. Mumford	467,951	Feb. 2	68	16	58	538
Cars. Brake and heating system for railway	E. D. Bangs and A. L. Waite	472,424	Apr. 5	649	165	59	121
Cars. Buffer and device for shifting freight on	C. Tilden	467,065	Jan. 12	1230	166	58	242
Cars by steam. Device for heating railway	J. E. Howard	488,202	Dec. 20	1601	399	61	1675
Cars. Center-plate for logging	H. A. Todd and A. H. Anderson	472,151	Apr. 5	219	400	59	41
Cars. Chain-coupling for	J. E. Mullaney	473,014	Apr. 19	1543	393	59	320
Cars. Chock-block for logging	H. A. Todd and A. H. Anderson	472,152	Apr. 5	220	394	59	41
Cars. Coal loader and distributor for box	J. A. Ingalls	488,564	Dec. 27	2193	541	61	1866
Cars. Combined wheel and rail brake for	J. Grady	486,337	Nov. 8	1356	361	61	867
Cars. Conduit-trolley for street	A. H. Hieatzman	479,327	July 19	1932	483	60	404
Cars. Corner-stay for	H. Cochran	470,392	Mar. 8	1199	306	58	1336
Cars. Device for heating	H. Newman	471,016	Mar. 15	2140	549	58	1530
Cars. Draw-bar frame for iron	T. L. Chapman	467,152	Jan. 19	1404	358	58	253
Cars. Draw-timber for	J. and W. A. Rover	482,653	Sept. 13	1203	293	60	1583
Cars. Electrical distribution for	S. Young, M. Moskowitz, L. D. Adler, and J. Loewenberg	478,182	July 5	175	45	60	37
Cars. Frictional gearing for street	G. B. Brayton	476,243	June 7	13	3	59	1441
Cars from one line to a crossing line. Transferring cable	J. E. Morris	467,457	Jan. 19	1861	475	58	371
Cars. Gas-engine motor for	D. Best	484,728	Oct. 18	1859	473	61	400
Cars. Gearing for propelling	W. W. Dunlap	485,179	Nov. 1	38	13	61	580
Cars. Gearless motor for electric-railway	S. H. Short	473,365	Apr. 19	2139	536	59	432
Cars. Gearless propelling mechanism for electric-railway	S. H. Short	473,368	Apr. 19	2144	537	59	433
Cars. Holding-strap for	H. A. Hartman	473,255	Apr. 19	1954	490	59	396
Cars. Hot-water heating apparatus for railway	J. F. McElroy	469,864	Mar. 1	320	81	58	1163
Cars. Lever for starting	A. Hubbard	475,770	May 31	2996	760	59	1272
Cars. Means for dumping	W. E. Ludlow	483,360	Sept. 27	2343	549	60	1831
Cars. Means for propelling electric	T. A. Edison	476,986	June 14	1180	285	59	1685
Cars. Motor for propelling	W. L. Davis	472,524	Apr. 12	812	209	59	167
Cars. Motor-gearing for electric	E. B. Phillips	468,526	Feb. 9	976	250	58	723
Cars. Motor mechanism for street	R. W. Thickins	467,693	Jan. 26	2255	573	58	451
Cars of cable-roads. Apparatus for illuminating	C. E. Scribner and E. P. Warner	469,873	Mar. 1	334	85	58	1166
Cars or carriages. Propulsion of street, tramway, or other railway	J. Hughes	466,415	Jan. 5	164	44	58	32
Cars or similar vehicles. System of and apparatus for heating railway	J. A. Shinn	484,343	Oct. 11	1251	319	61	267
Cars. Pipe-coupling and coupling attachment for railway	F. Du Montier	482,304	Sept. 6	627	150	60	1458
Cars. Power-transmitting mechanism for	E. Prouty	469,717	Mar. 1	70	21	58	1112
Cars. Pull-gong for street or other	E. W. Vanduzen	467,486	Jan. 19	1909	489	58	341
Cars. Running-gear for street	S. Robertson	472,001	Mar. 29	3608	921	58	1830
Cars. Safety attachment for cable or electric	A. Raynal	471,750	Mar. 29	3246	897	58	1759
Cars. Safety attachment for street	P. S. Townsend	472,184	Apr. 5	273	71	59	52
Cars. Safety-gate for	F. C. Cash	473,210	Apr. 19	1880	473	59	381
Cars. Safety-keeper for mining	I. Bailey and L. Feger	470,536	Mar. 8	1415	369	58	1379
Cars. Sand and water distributing cylinder for	T. A. Hetherington	467,809	Jan. 26	2143	620	58	487
Cars. Sand-box for	H. H. Hennegun	473,070	Apr. 19	1634	416	59	336
Cars. Sanding device for railway	W. B. Leitch	485,703	Nov. 8	849	228	61	763
Cars. Sanding mechanism for	N. Seibert	473,090	Apr. 19	1662	423	59	341
Cars. Side bearing for	W. S. Burling and H. G. Bird	473,610	Apr. 26	2554	646	59	536
Cars. Skylight for electric	H. Cochrau	484,515	Oct. 18	1529	388	61	333
Cars. Spark-deflector for railway	L. C. Terry	469,609	Feb. 23	2649	680	58	1068
Cars. Steam-pipe coupling for railway	T. Curley	478,991	July 19	1424	352	60	307
Cars. Switching attachment for street	O. W. Brenizer	471,714	Mar. 29	3188	813	58	1749
Cars to and from floating vessels, &c. Means for transferring railway	R. P. Rever	466,516	Jan. 5	335	84	58	65
Cars. Traction device for tram	W. B. Wright	468,860	Feb. 16	1490	380	58	835
Cars. Trap-door for railway	J. W. Snyder and J. C. McMahon	472,003	Mar. 29	3611	923	58	1831
Cars. Trolley for electric	G. E. and C. W. Purple	480,240	Aug. 2	781	197	60	729
Cars. Trolley-wheel for electric	L. A. Simons and G. R. Roof	467,583	Jan. 26	2092	530	58	422
Cars. Under-trussing for railway	F. E. Canda	472,854	Apr. 12	1278	327	59	255
Cars. Ventilating	B. M. Ross	470,602	Mar. 8	1502	392	58	1397

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr't.	Vol.	Page.
Cars, &c. Ventilator for	W. Braidwood	470,540	Mar. 8	1421	370	58	1379
Cars. Vestibule connection for passenger	E. C. Rosa	487,776	Dec. 13	885	224	61	1515
Caramels. Packing-box for	G. E. Sauerston	469,981	Mar. 1	515	128	58	1198
Carbon blocks. Manufacture of	L. Hulin	473,841	Apr. 26	2013	732	59	603
Carbon-brush holder	C. O. Mailloux	467,542	Jan. 26	2025	513	58	409
Carbon-brush holder for dynamo-electric machines and motors.	J. J. Wood	486,656	Nov. 22	2347	{ 613 614	61	1093
Carbon. Electric-light	J. Clegg	487,046	Nov. 29	3014		61	1242
Carbon filaments. Manufacture of	T. A. Edison	484,184	Oct. 11	991	253	61	216
Carbon filaments. Manufacture of	T. A. Edison	484,185	Oct. 11	992	254	61	216
Carbon filaments. Manufacture of	T. A. Edison	485,615	Nov. 8	703	185	61	733
Carbon filaments. Manufacture of	T. A. Edison	485,616	Nov. 8	704		61	733
Carbon-holder.	E. Howard	472,055	Apr. 5	66	17	59	15
Carbon-holder.	E. P. Warner	482,820	Sept. 20	1468	365	60	1648
Carbon pencils. Apparatus for pointing	P. Moses	469,486	Feb. 23	2472	634	58	1033
Carbon points. Apparatus for trimming	P. Moses	476,292	June 7	93	21	59	1456
Carbon product	L. S. Langville	475,062	May 17	1888		59	1027
Carbon-sheet holder	J. S. McDonald	469,748	Mar. 1	126	33	58	1124
Carbon-sheet holder.	J. S. McDonald	487,959	Dec. 13	1182	295	61	1572
Carbons. Securing	E. L. Sharpneck and W. G. Shedd	473,479	Apr. 26	2335	591	59	492
Carbons. Uniting broken pieces of arc-light	N. P. Stevens	488,256	Dec. 20	1691	422	61	1692
Carbonate of guaiacol and creosol.	B. R. Seifert	466,913	Jan. 12	990	253	58	197
Carbonated beverages. Apparatus for making	H. Carse	467,916	Feb. 2	15	5	58	530
Carbureted hydrogen. Apparatus for the manufacture of	J. W. Tallmadge	484,475	Oct. 18	1467	374	61	321
Carbureting air	A. B. Griffen and W. C. Clarke	487,617	Dec. 6	609	157	61	1442
Carbureting air or gas. Apparatus for	E. J. Frost and W. C. Squire	485,185	Nov. 1	48	15	61	582
Carbonating liquids. Art of and apparatus for	C. A. and J. Schneible	484,901	Oct. 25	2166	557	61	477
Carbonizing the vegetable matter in wool. Apparatus for	B. Bellerstein	468,558	Feb. 9	1030	262	58	734
Carbureting apparatus	J. J. Parris	484,721	Oct. 18	1846	469	61	397
Carbureting apparatus	L. J. Phelps	471,773	Mar. 29	3280	{ 837 838	58	1766
Carbureting apparatus. Air	J. E. Mendenhall	489,003	Sept. 20	1766	446	60	1707
Carbureting gas. Method of and apparatus for	H. S. Maxim	485,288	Nov. 1	200	57	61	614
Carburetor	E. B. Badlam	475,972	May 31	3337	842	59	1338
Carburetor	D. Best	485,526	Nov. 1	566	151	61	649
Carburetor	J. Clingman	481,949	Oct. 25	2345	578	61	492
Carburetor	H. L. Cruttenden	473,498	Apr. 26	2365	600	59	497
Carburetor	J. A. Enos	486,442	Nov. 22	2017	535	61	1030
Carburetor	W. and J. Falley	488,881	Dec. 27	2682	664	61	1905
Carburetor	N. Finck	486,224	Nov. 15	1665	440	61	945
Carburetor	J. W. Lambert	474,838	May 17	1539	391	59	958
Carburetor and purifier	G. W. Weaver	476,769	June 7	720	177	59	1580
Carcase spreader	G. T. Plumb	473,127	Apr. 19	1735	438	59	353
Card and Jacquard machine protector	S. Morgan	479,895	Aug. 2	183	45	60	618
Card-attacher	J. Ryan	486,840	Nov. 22	2648	691	61	1156
Card-board tube	L. Nicolai	467,258	Jan. 19	1564	398	58	314
Card-case	R. Senner	470,079	Mar. 1	654	162	58	1236
Card case. Coin-operated playing	M. Prior	468,827	Feb. 16	1435	365	58	825
Card. Christmas	C. Hoymann	481,173	Aug. 23	2297	566	60	1063
Card. Envelope	R. Sinn	478,825	July 12	1179	292	60	249
Card. Identification	B. L. Behrendt	467,460	Jan. 19	1865	476	58	372
Card or picture setting	M. Wirths	479,129	July 19	1639	410	60	346
Card or picture support	P. Lindemeyer	469,436	Feb. 23	2383	611	58	1016
Card or plate holder	M. Wirths	467,284	Jan. 19	1605	409	58	321
Card. Playing	J. W. Hyatt	484,798	Oct. 25	1998	513	61	443
Card shuffling and dealing mechanism	W. H. Ranney	483,364	Sept. 27	2349	590	60	1832
Card-stripping apparatus	E. Gibson	474,318	May 3	684	178	59	769
Cards, &c. Machine for rimming show	T. W. G. Cook	487,609	Dec. 6	598	{ 153 154	61	1440
Carding-engine	G. A. Ayer	488,177	Dec. 20	1564	392	61	1668
Carding-engine	J. F. Bradbury	473,653	Apr. 12	991	256	59	201
Carding-engine	W. P. Canning	484,928	Oct. 25	2218	{ 571 572	61	486
Carding-engine	W. P. Canning	485,680	Nov. 8	807	216	61	755
Carding-engine	B. A. Dobson and E. Appenzeller	469,835	Mar. 1	271	70, 71	58	1153
Carding-engine	B. A. Dobson and W. I. Bromiley	466,846	Jan. 12	869	{ 222 223	58	175
Carding-engine	T. S. Whitworth	468,854	Feb. 16	1478	377	58	833
Carding-engine	T. S. Whitworth	468,855	Feb. 16	1480	{ 377 378	58	833
Carding-engine feeder	J. F. Geb	469,206	Feb. 16	2032	519	58	940
Carding-engine flats. Protector for the ends of the clothing of	W. P. Canning	484,846	Oct. 25	2080	535	61	459
Carding-engine for grinding revolving flats when in situ.	J. Edge	481,228	Aug. 23	2389	{ 589 590	60	1082
Carding-engine screen	J. H. Whittle	488,684	Dec. 27	2386	{ 590 591	61	1844
Carding-engine stopping mechanism	E. Ashworth	480,987	Aug. 16	1974	494	60	989
Carding-engine. Traveling-flat	W. P. Canning	485,681	Nov. 8	810	216	61	755
Carding-engines. Device for supporting and adjusting screens or undercasings for the cylinders or rollers of	W. P. Canning	485,679	Nov. 8	806	215	61	754
Carding-engines. Device for supporting and adjusting the front and back covers of	W. P. Canning	481,222	Aug. 23	2379	586	60	1080
Carding-engines. Feed-table for	S. Driver	468,106	Feb. 2	298	72	58	582
Carding-engines. Grinding mechanism for flats of traveling-flat	W. P. Canning	483,535	Oct. 4	29	7, 8	61	9
Carding-engines. Mechanism for grinding the traveling flats of	B. A. Dobson and W. I. Bromiley	473,187	Apr. 19	1847	465	59	374
Carding-engines. Rubbing-apron for condensing	S. H. Gidley	480,088	Aug. 2	524	133	60	682
Carding-engines. Rubbing-motion for	W. Gill	467,093	Jan. 12	1280	324	58	251

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Carding-machine.....	G. Meyer.....	473,585	Apr. 26	2523	{ 636 637 638 639	50	529
Carding-machine.....	E. O. Zeunert.....	469,381	Feb. 23	2303	{ 592 593	58	1001
Carding machine. Wool.....	D. Lamson.....	468,202	Feb. 2	445	111	58	612
Carding-machines. Burr and shive extractor for.....	W. Sullivan.....	482,395	Sept. 13	804	193	60	1507
Carding machines. Condenser for wool.....	J. E. McWilliam.....	472,740	Apr. 12	1125	289	59	225
Carding-machines, &c. Feed-roll for.....	A. B. Hanscom.....	481,024	Aug. 16	2025	505	60	999
Carding-machines. Grinding mechanism for the flats of traveling-flat.....	W. P. Canning.....	483,534	Oct. 4	26	6, 7	61	8
Carding-machines. Top-flat-adjusting device for.....	E. Gibson.....	474,349	May 3	752	196	59	780
Carding-machines. Waste-end conveyer for.....	B. J. Craggy.....	467,888	Jan. 26	2572	651	58	511
Carpet-beater.....	C. S. Chaffee, A. S. Hoffman, and F. A. Green.....	486,276	Nov. 15	1762	{ 463 464	61	965
Carpet button. Stair.....	A. A. Cardwell.....	473,250	Apr. 5	381	100	59	71
Carpet-cleaning apparatus.....	W. H. La Fontaine.....	468,521	Feb. 9	967	246	58	722
Carpet-cleaning apparatus.....	A. A. Pyle.....	488,323	Dec. 20	1798	451	61	1712
Carpet-cleaning machine.....	W. H. La Fontaine.....	468,522	Feb. 9	967	246	58	722
Carpet fabric. Ingrain.....	G. H. Harvey.....	472,215	Apr. 5	328	85	59	62
Carpet-fastener.....	E. M. Childs.....	477,323	June 21	1746	427	59	1809
Carpet-fastener.....	F. G. Feaster.....	466,903	Jan. 12	975	249	58	194
Carpet-fastener.....	W. J. Janisch.....	477,370	June 21	1820	445	59	1823
Carpet-fastener. Stair.....	T. H. Spurrier.....	478,028	June 28	2882	720	59	2049
Carpet or oil-cloth protector.....	P. J. Shrum and J. T. Howarth.....	471,763	Mar. 29	3263	833	58	1763
Carpet-stretcher.....	J. Albin.....	482,821	Sept. 20	1469	366	60	1649
Carpet-stretcher.....	W. A. Arnold and E. M. Babcock.....	472,204	Apr. 5	312	20	59	50
Carpet-stretcher.....	H. G. Cady.....	485,406	Nov. 1	599	107	61	654
Carpet-stretcher.....	E. E. Case.....	466,749	Jan. 5	700	180	58	133
Carpet-stretcher.....	L. Coffman.....	472,434	Apr. 5	664	170	59	125
Carpet-stretcher.....	O. Dahl.....	470,039	Mar. 1	592	147	58	1214
Carpet-stretcher.....	J. H. Egler.....	468,323	Feb. 9	676	167	58	664
Carpet-stretcher.....	R. Harrison.....	483,057	Sept. 20	1849	469	60	1735
Carpet-stretcher.....	R. and J. Ingal.....	466,418	Jan. 5	172	46	58	34
Carpet-stretcher.....	S. C. Mains.....	474,176	May 3	450	109	59	725
Carpet-stretcher.....	H. Martinson.....	466,829	Jan. 12	837	215	58	169
Carpet-stretcher.....	F. B. McCabe.....	466,467	Jan. 5	251	64	58	48
Carpet-stretcher.....	A. H. Mikesell.....	470,068	Mar. 1	636	158	58	1222
Carpet-stretcher.....	A. H. Moore.....	476,960	June 14	1143	276	59	1678
Carpet stretcher and tacker.....	M. Pearson.....	467,864	Jan. 26	2534	{ 642 643	58	504
Carpet-stretching device.....	J. T. Lemon.....	477,809	June 28	2527	634	59	1980
Carpet-sweeper.....	T. H. Bedell.....	479,206	July 19	1752	439	60	368
Carpet-sweeper.....	H. Cadwalader.....	486,451	Aug. 9	1139	285	60	809
Carpet-sweeper.....	W. J. Drew.....	466,721	Jan. 5	663	170	58	126
Carpet-sweeper.....	W. J. Drew.....	486,371	Nov. 15	1901	{ 502 503	61	992
Carpet-sweeper.....	W. J. Drew.....	487,212	Nov. 29	3271	836	61	1293
Carpet-sweeper.....	M. B. Holden.....	488,562	Dec. 27	2190	541	61	1806
Carpet-sweeper.....	G. W. Kelley.....	469,573	Feb. 23	2604	668	58	1059
Carpet-sweeper.....	J. P. Marsh.....	473,766	Apr. 26	2794	703	59	580
Carpet-sweeper.....	E. E. Peck.....	469,714	Mar. 1	65	18, 19	58	1111
Carpet-sweeper.....	S. H. Raymond.....	471,086	Mar. 15	2241	575	58	1551
Carpet-sweeper.....	S. H. Raymond.....	473,438	Apr. 19	2254	568	59	455
Carpet-sweeper.....	S. H. Raymond.....	476,209	May 31	3731	942	59	1416
Carpet-sweeper.....	S. H. Raymond.....	476,210	May 31	3732	942	59	1416
Carpet-sweeper.....	S. H. Raymond.....	476,211	May 31	3733	943	59	1416
Carpet-sweeper.....	S. H. Raymond.....	476,212	May 31	3734	943	59	1417
Carpet-sweeper.....	S. H. Raymond.....	476,213	May 31	3735	943	59	1417
Carpet-sweeper.....	S. H. Raymond.....	476,214	May 31	3736	{ 943 944	59	1417
Carpet-sweeper.....	S. H. Raymond.....	488,950	Dec. 27	2798	690	61	1929
Carpet-sweeper.....	G. S. Sanford.....	481,826	Aug. 30	3387	{ 830 831 832	60	1287
Carpet-sweeper.....	G. S. Sanford.....	481,827	Aug. 30	3389	{ 831 832	60	1287
Carpet-sweeper.....	G. S. Sanford.....	481,828	Aug. 30	3391	832	60	1288
Carpet-sweeper.....	G. S. Sanford.....	481,829	Aug. 30	3392	{ 832 833	60	1288
Carpet-sweeper.....	C. K. Stinson.....	475,626	May 24	2773	702	59	1217
Carpet-sweeper.....	C. Tangenberg.....	471,515	Mar. 22	2887	735	58	1626
Carpet-sweeper attachment.....	J. F. Chaso.....	483,833	Oct. 4	469	117	61	97
Carriage.....	J. T. Clarkson.....	466,773	Jan. 12	753	195	58	153
Carriage.....	A. N. Parry.....	467,518	Jan. 26	1980	503	52	401
Carriage.....	A. N. Parry.....	474,029	May 3	229	55	59	682
Carriage.....	A. N. Parry.....	476,298	June 7	109	26	59	1459
Carriage.....	A. N. Parry.....	482,189	Sept. 6	442	{ 106 107	60	1422
Carriage.....	W. H. Sparks.....	487,788	Dec. 13	906	229	61	1518
Carriage.....	H. P. Wells.....	480,307	Aug. 9	908	220	60	767
Carriage.....	H. P. Wells and O. Morrill.....	471,157	Mar. 22	2362	604	58	1585
Carriage and cradle. Combined.....	J. Schlich.....	472,314	Apr. 5	432	{ 124 125	59	91
Carriage. Baby.....	M. Herz.....	468,342	Feb. 9	688	170	58	666
Carriage. Baby.....	D. Rees.....	472,714	Apr. 12	1089	279	59	218
Carriage. Baby.....	A. M. Reeves.....	478,172	July 5	160	41	60	34
Carriage-brake.....	P. Brailly.....	487,512	Dec. 6	459	119	61	1411
Carriage brake. Baby.....	D. B. Stevens.....	476,325	June 7	151	37	59	1467
Carriage brake. Child's.....	A. E. Scharrif.....	467,054	Jan. 12	1216	307	58	239
Carriage, chair, or rocker. Convertible.....	N. Silverson.....	485,991	Nov. 8	1284	{ 341 342	61	852
Carriage. Child's.....	F. Bernemann.....	482,779	Sept. 20	1419	351	60	1638

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Carriage. Child's	F. Heller and K. Hirsch	487,050	Nov. 29	3021	776	61	1244
Carriage. Child's	J. Jenkinson	466,687	Jan. 5	594	154	58	115
Carriage. Child's	C. Muehleisen	486,678	Nov. 22	2380	623	61	1100
Carriage. Child's	G. P. Steinbach	466,584	Jan. 5	438	112	58	85
Carriage. Child's	H. A. Worm	467,846	Jan. 26	2504	634	58	499
Carriage. Convertible child's	E. Lotinga	474,641	May 10	1217	311	59	881
Carriage-coupling	N. D. Chapman	478,667	July 12	947	235	60	204
Carriage-curtain fastener	A. Baker	480,067	Aug. 2	493	125	60	676
Carriage-curtain fastener	E. S. Richards	468,080	Feb. 2	258	63	58	574
Carriage-curtain light	F. A. Neider	470,699	Mar. 15	1651	428	58	1435
Carriage. Folding child's	W. Cook	477,514	June 21	2042	{ 508 509 518 519 }	59	1868
Carriage for elevated ways. Transfer	H. B. Tefft	483,183	Sept. 27	2056	{ 518 519 }	60	1777
Carriage-gear coupling	N. A. Newton	478,128	July 5	72	19	60	16
Carriage-gearing	T. Doland	469,735	Mar. 1	104	28	58	1119
Carriage-guide	J. K. Rowan	486,299	Nov. 15	1789	470	61	971
Carriage lock. Baby	G. A. Watkins	482,708	Sept. 13	1296	317	60	1602
Carriage mud-guard	J. Anderssen	480,485	Aug. 9	1188	298	60	819
Carriage sleigh attachment. Baby	W. H. Bendure and S. Tilbery	485,781	Nov. 8	953	256	61	785
Carriage. Steam	A. Phillion	482,649	Sept. 13	1198	{ 291 292 }	60	1582
Carriage-step	E. Post	469,031	Feb. 16	1779	454	58	892
Carriage-top	D. Conboy	469,964	Mar. 1	484	120	58	1192
Carriage-top	S. E. Kierolf	482,254	Sept. 6	546	130	60	1441
Carriage-top	G. B. St. John	480,295	Aug. 9	885	224	60	763
Carriage-top curtain	J. Spencer	467,385	Jan. 19	1753	447	58	349
Carriage-tops. Bow-rest for	S. W. Childs	470,832	Mar. 15	1872	479	58	1478
Carriage. Two-seated	F. N. and O. Vanier	482,858	Sept. 20	1527	379	60	1661
Carriage-wrench	J. A. Corey	481,749	Aug. 30	3256	793	60	1262
Carriages. Lock for the wheels of children's	J. A. Birkholz	484,873	Oct. 25	2117	545	61	467
Carriages. Parasol for baby	A. Featherstone	486,454	Nov. 22	2032	537	61	1032
Carriages. Side-bar coupling for	G. H. Canfield	467,635	Jan. 26	2162	550	58	434
Carriages. Sliding hill or chute for	L. D. B. Shaw	468,553	Feb. 9	1024	261	58	733
Carrier:							
See Bicycle luggage-carrier.	Log-carrier.						
Bundle-carrier.	Luggage-carrier.						
Cash-carrier.	Melon-carrier.						
Cash and package carrier.	Package-carrier.						
Cash and parcel carrier.	Parcel-carrier.						
Cotton-sack carrier.	Pen or pencil carrier.						
Egg-carrier.	Reel-carrier.						
Elevated carrier.	Sewing-machine-shuttle carrier.						
Film or plate carrier.	Sheaf-carrier.						
Fruit-carrier.	Target-trap carrier.						
Grain-carrier.	Thrashing-machine straw-carrier.						
Harvester bundle-carrier.	Trace-carrier.						
Hay-carrier.	Trolley-carrier.						
Hose-pipe carrier.	Velocipede luggage-carrier.						
Ice-carrier.	Velocipede package-carrier.						
Kettle-carrier.	Wick-carrier.						
Carrier	W. C. Hall	469,137	Feb. 16	1915	490	58	919
Carrier	W. E. Selleck	474,975	May 17	1755	445	59	1002
Carrier-track	J. E. Porter	482,411	Sept. 13	825	198	60	1510
Carroussel	G. Baum	468,962	Feb. 16	1656	423	58	867
Cart. Ash	D. M. Holmes	479,760	July 26	2682	666	60	560
Cart. Coal	C. Eibee	474,374	May 10	795	207	59	801
Cart. Dump	M. S. McCraney	468,359	Feb. 9	713	176	58	671
Cart. Dumping	W. H. and H. S. Bowler	481,843	Aug. 30	3411	837	60	1292
Cart. Dumping	A. Ray	469,870	Mar. 1	329	84	58	1165
Cart. Dumping	L. Rodenhansen	477,702	June 28	2363	591	59	1950
Cart. Dumping	C. M. Westover	468,588	Feb. 9	1069	273	58	741
Cart. Four-wheeled dog	W. H. Barlow	487,942	Dec. 13	1158	{ 289 290 }	61	1567
Cart. Garbage	W. Huey	468,316	Feb. 2	637	159	58	648
Cart. Hand	W. Radley and T. W. Beal	480,670	Aug. 9	1480	368	60	877
Cart. Road	A. D. Curry	487,998	Dec. 13	1251	311	61	1586
Cart. Road	J. Farren	475,273	May 17	2211	565	59	1093
Cart. Road	S. B. Irwin	479,944	Aug. 2	263	64	60	632
Cart. Road	C. H. Kallbreier	485,413	Nov. 1	412	110	61	656
Cart. Road	E. A., F. S., and H. G. Keasey	485,763	Nov. 8	935	250	61	781
Cart. Road	J. Kimball	482,579	Sept. 13	1102	267	60	1564
Cart. Road	W. L. Pike	469,090	Feb. 16	1857	475	58	907
Cart. Road	C. Thomas	467,962	Feb. 2	83	20	58	541
Cart. Road	W. C. Travis	470,021	Mar. 1	565	140	58	1208
Cart. Road	J. C. Valentine	479,478	July 26	2235	561	60	477
Cart. Self-loading	C. Q. Hayes	475,687	May 24	2855	722	59	1232
Cartridge	W. C. Bush	475,008	May 17	1807	458	59	1011
Cartridge	T. F. Eustace	488,627	Dec. 27	2292	567	61	1826
Cartridge	J. A. C. de Latouche	487,125	Nov. 29	3143	805	61	1269
Cartridge	J. M. Pollard	478,020	June 28	2867	{ 717 718 }	59	2046
Cartridge	E. Rubin	468,580	Feb. 9	1060	270	58	740
Cartridge. Artillery	E. L. Zalinski	487,400	Dec. 6	279	72	61	1376
Cartridge-crimping machine	M. A. Twitchell	484,868	Oct. 25	2108	543	61	465
Cartridge. Explosive	J. C. Butterfield and T. C. Batchelor.	471,946	Mar. 29	3536		58	1816
Cartridge for firearms	U. Marga	483,656	Oct. 4	204	51	61	42
Cartridge. Gun	V. Ginalskey	487,028	Nov. 29	2988	769	61	1237
Cartridge-holder	D. Lane	470,840	Mar. 15	1881	482	58	1479

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Et.	Vol.	Page.
Cartridge-loader	F. R. Baldwin	479,613	July 26	2430	606	60	514
Cartridge-loader	W. H. Hamner	476,048	May 31	3443	869 870	59	1361
Cartridge-loading apparatus	W. Wagner	481,127	Aug. 16	2200	544 545	60	1031
Cartridge-loading machine	C. S. Hisey	480,015	Aug. 2	401	99 100 101	60	658
Cartridge-loading machine	J. H. Layman	478,614	July 12	847	208	60	183
Cartridge-loading tool	W. N. Beardsley, A. D. Moulton, and L. J. Wurth	481,887	Aug. 30	3479	852	60	1305
Cartridge-magazine for breech-loading small-arms	C. Schnipper	488,456	Dec. 20	2014	503	61	1756
Cartridge-magazine with loading-frame ejector	A. von Wehrstedt	463,394	Feb. 9	765	190 191	58	682
Cartridge-pack holder	J. M. and M. S. Browning	487,660	Dec. 6	685	175	61	1457
Cartridge-pouch	G. B. Dudley	487,556	Dec. 6	525	136	61	1425
Cartridge-priming machines. Attachment for	J. G. Liddell	479,819	Aug. 2	65	15, 16	60	594
Cartridge-priming pin	J. Orcutt	474,607	May 10	1160	295	59	871
Cartridge-reloader	F. B. Chesbrough	479,245	July 19	1822	457	60	382
Cartridge-reloading tool	H. J. Gallup	472,990	Apr. 19	1510	385	59	313
Cartridge-shell	O. F. Seibold	460,971	Aug. 16	1951	488	60	985
Cartridge shells and heads. Tool for finishing edges of	C. P. Gilbert and H. W. Thomas	476,009	May 31	3389	855	59	1349
Cartridge-shells. Machine for loading	W. W. Babcock	473,440	Apr. 26	2258	569 570 571 572 573	59	477
Cartridge-shells. Tool for trimming heads of	C. R. Richards	479,125	July 19	1634	409	60	345
Carving-brace	A. C. Peck	472,742	Apr. 12	1127	289	59	226
Carving-machine	H. H. Adams	488,047	Dec. 13	1343	333	61	1606
Carving-machine	J. E. Brielmaier	470,659	Mar. 15	1587	413	58	1423
Carving-machine	M. Hertel	479,364	July 19	2012	503	60	420
Carving-machine	W. C. Laver and E. U. Taylor	484,102	Oct. 11	863	219	61	191
Carving-machine	R. C. Miller	479,653	July 26	2489	620	60	524
Carving-machine	J. Rohlmann	478,640	July 12	880	217 218	60	190
Carving-machine	J. K. Rishel	481,372	Aug. 23	2626	646	60	1124
Carving-machine	W. S. Seaman	470,450	Mar. 8	1292	331 332 335	58	1354
Carving-machine	F. Snow	467,596	Jan. 26	2111	536 537	58	425
Carving-machine	F. Snow	467,597	Jan. 26	2113	536 537	58	425
Carving-machine attachment	J. Rohlmann	477,229	June 21	1588	389	59	1779
Case: See Album-case. Lock-case. Banana-case. Mailing-case. Bed-case. Medicine-case. Blank-case. Package-case. Blacking-case. Packing-case. Book-case. Packing-machine sack- Bottle-case. case. Braid-case. Paper-case. Brush-case. Pencil-case. Buckle-case. Perfume-case. Burial-case. Piano-case. Card-case. Revolving case. Cheese-case. Ribbon-case. Cigar-case. Ribbon and show case. Clock-case. Sacramental case. Collar and cuff case. Sample-case. Compositor's case. Shaving-case. Eyeglass-case. Shipping-case. Eyeglass and spec- Show-case. tacle case. Stock-case. Eyeglass or specta- Surgical-instrument case. cle case. Syringe-case. Exhibiting-case. Thread and needle case. File-case. Thermometer-case. Filing and supply Ticket-case. case. Toothpick-case. Fruit packing and Traveler's case. shipping case. Type-writer case. Hat-case. Watchcase. Hat packing-case.	P. Trips	482,600	Sept. 13	1133	274	60	1570
Case-cleaner	J. Finck	469,896	Mar. 1	368	93	58	1172
Cash and package carrier	J. Finck	471,325	Mar. 22	2606	661	58	1632
Cash and package carrier apparatus	S. W. Barr	482,822	Sept. 20	1470	366	60	1649
Cash and package carrier apparatus	D. E. Campbell	475,265	May 17	2195	559 560 561	59	1039
Cash and parcel carrier	S. J. Besthoff	486,750	Nov. 22	2493	652	61	1124
Cash and parcel carrier apparatus	C. F. Parker	468,443	Feb. 9	831	210 211 211	58	695
Cash-carrier	J. F. Bartlett	483,681	Oct. 4	237	59	61	50
Cash-carrier	C. C. Burgess and R. T. Garrett	467,396	Jan. 19	1770	451 452	58	352
Cash-carrier	N. and N. E. Dillenbeck	487,048	Nov. 29	3019	775	61	1243
Cash-carrier	F. O. Farwell	479,261	July 19	1843	462	60	386
Cash-carrier	C. Frederick	468,650	Feb. 9	1159	295	58	760
Cash-carrier	E. C. Gipe	479,417	July 26	2113	529	60	453
Cash-carrier	A. B. Gunzendorfer	486,250	Nov. 15	1713	452	61	954

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Cash-carrier.....	C. R. Herrington	472,924	Apr. 12	1385	{ 355 356	59	278
Cash-carrier.....	G. P. Kenney	481,178	Aug. 23	2302	{ 567 567	60	1065
Cash-carrier.....	C. R. Sadd	474,973	May 17	1750	{ 443 443	59	1001
Cash-carrier.....	H. L. Walbridge.....	467,666	Jan. 26	2210	{ 563 564 666	58	443
Cash-carrier apparatus.....	C. W. Livermore.....	479,762	July 26	2684	{ 667 668 668	60	561
Cash-carrier apparatus.....	J. C. Martin	475,879	May 31	3193	{ 808 809	59	1311
Cash-carrier apparatus.....	J. Schiemer.....	484,248	Oct. 11	1099	{ 278 278	61	238
Cash-carrier apparatus.....	M. W. Sherwood	487,905	Dec. 13	1099	{ 275 275	61	1556
Cash-carrier apparatus.....	J. Starr	469,282	Feb. 23	2153	{ 553 553	58	971
Cash-dish	D. M. Perine	473,339	Apr. 19	2096	{ 527 527	59	424
Cash drawer and recorder.....	E. E. A. Laves	469,789	Mar. 1	194	{ 50, 51 51	58	1138
Cash drawer and recorder. Combined.....	W. F. Brown	470,742	Mar. 15	1715	{ 442 442	58	1449
Cash indicator and recorder.....	G. R. Burt.....	485,086	Oct. 25	2457	{ 632 633	61	535
Cash indicator and recorder.....	T. Carney	488,063	Dec. 13	1374	{ 341 342	61	1613
Cash indicator and recorder.....	J. F. Goodridge	467,592	Jan. 26	2106	{ 534 534	58	424
Cash indicator and recorder.....	T. M. Kenna and W. O'Connor	467,740	Jan. 26	2335	{ 593 593	58	467
Cash indicator and recorder.....	M. Leahy	478,798	July 12	1132	{ 279 279	60	239
Cash indicator and recorder.....	W. T. McGraw	482,132	Sept. 6	337	{ 81 163	60	1401
Cash indicator and register	C. Carr	468,329	Feb. 9	661	{ 164 165	58	661
Cash indicator and register	H. Cook	473,694	Apr. 26	2690	{ 677 678	59	560
Cash indicator and register	T. J. Hume	474,558	May 10	1085	{ 277 278	59	857
Cash indicator and register	G. Knapp and C. H. Little.....	481,037	Aug. 16	2047	{ 511 511	60	1004
Cash indicator and register	E. B. Parkhurst and F. Ham	483,010	Sept. 20	1781	{ 450 451	60	1710
Cash indicator and register	J. Sharpe	482,760	Sept. 20	1388	{ 344 345	60	1632
Cash indicator, register, and check-printer	W. H. Gilman	477,840	June 28	2589	{ 649 649	59	1991
Cash indicator, register, and check-printer	J. Jacques.....	480,698	Aug. 9	1521	{ 378 379	60	884
Cash indicator, register, and recorder.....	T. Carney	466,710	Jan. 5	625	{ 162 163 164	58	121
Cash indicator, register, and recorder.....	P. J. Landin	482,014	Sept. 6	145	{ 35, 36 35	60	1364
Cash or ticket receiver	W. F. Beasley	467,146	Jan. 19	1390	{ 355 356	58	281
Cash-receipt-checking apparatus	J. Bath	467,767	Jan. 26	2376	{ 604 604	58	475
Cash-recorder	B. D. Adams	467,711	Jan. 26	2291	{ 581 582	58	458
Cash-recorder	C. H. Coles	472,336	Apr. 5	520	{ 135 136	59	98
Cash-recorder	A. C. Hough	484,501	Oct. 18	1506	{ 383 383	61	329
Cash-recorder	H. F. Marsh	468,464	Feb. 9	865	{ 219 220	58	702
Cash-recorder	W. B. Metcalfe and F. A. Ziegler.....	474,672	May 10	1271	{ 324 324	59	892
Cash-recorder	C. H. Morford	476,890	June 14	1022	{ 248 248	59	1654
Cash-recorder	M. L. Morgan	467,425	Jan. 19	1812	{ 463 463	58	361
Cash recorder and drawer.....	L. M. Mills	487,284	Dec. 6	70	{ 21, 22 21	61	1336
Cash-recorder. Manual	H. Kiehl	484,742	Oct. 18	1887	{ 481 481	61	407
Cash-recorder. Printing	C. H. Coles	471,099	Mar. 22	2265	{ 583 583	58	1567
Cash-register	G. W. E. Abmeyer	467,905	Feb. 2	1	{ 1 1	58	527
Cash-register	H. R. Adams	479,776	Aug. 2	1	{ 1 1	60	583
Cash-register	H. A. Bierley	473,723	Apr. 26	2734	{ 688 688	59	568
Cash-register	H. A. Bierley. (Reissue)	11,256	Aug. 2	782	{ 198 199	60	729
Cash-register	A. I. Blanchard	482,514	Sept. 13	993	{ 240 241	60	1543
Cash-register	I. D. Boyer	471,094	Mar. 22	2255	{ 580 580	58	1565
Cash-register	T. Carney	482,517	Sept. 13	1003	{ 242 243 244	60	1545
Cash-register	C. Carr	486,980	Nov. 29	2915	{ 753 753	61	1224
Cash-register	H. Cook	482,505	Sept. 13	982	{ 238 238	60	1541
Cash-register	T. Ekroth	470,423	Mar. 8	1244	{ 318 319 320	58	1345
Cash-register	E. N. Foote.....	469,012	Feb. 16	1756	{ 447 447	58	887
Cash-register	E. N. Foote and J. J. Range.....	460,194	Feb. 16	2001	{ 510 510	58	936
Cash-register	C. Gibbs	467,092	Jan. 12	1275	{ 323 324	58	250
Cash-register	J. Goodenberger and L. Akins.....	487,922	Dec. 13	1129	{ 282 282	61	1561
Cash-register	H. A. Herr	487,903	Dec. 13	1094	{ 274 274	61	1555
Cash-register	H. H. Koeller.....	480,594	Aug. 9	1350	{ 336 337	60	852
Cash-register	C. Leni	481,361	Aug. 23	2612	{ 642 642	60	1121
Cash-register	C. E. Lord	470,247	Mar. 8	924	{ 229 229	58	1287
Cash-register	W. K. Nichols	480,208	Aug. 2	718	{ 182 183 184	60	718
Cash-register	H. G. O'Neill	480,614	Aug. 9	1387	{ 344 345	60	859
Cash-register	H. G. O'Neill	480,616	Aug. 9	1390	{ 346 346	60	859

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et	Vol.	Page.
Cash-register	J. F. Pfeffer	468,945	Feb. 16	1626	{ 413 414 415	58	861
Cash-register	J. J. Range	479,334	July 19	1946	486	60	407
Cash-register	J. J. Range	479,335	July 19	1947	486	60	407
Cash-register	J. J. Range	479,336	July 19	1949	{ 486 487 487	60	407
Cash-register	E. F. Roberts	489,946	Oct. 4	627	{ 158 159	61	129
Cash-register	E. F. Roberts	484,376	Oct. 11	1301	{ 332 333	61	277
Cash-register	E. F. Roberts	487,683	Dec. 6	724	185	61	1463
Cash-register	T. Rogers	473,887	Apr. 26	2997	{ 756 757	59	619
Cash-register	W. H. Saunders, J. J. Range, and E. N. Foote	479,337	July 19	1951	487	60	408
Cash-register	J. F. Schnarrenberger	476,900	June 14	1034	{ 251 252	59	1657
Cash-register	E. T. Taylor	485,998	Nov. 8	1298	{ 344 345	61	855
Cash-register	J. A. Treat	474,614	May 10	1170	{ 298 299	59	873
Cash-register	O. Tverdal	486,306	Nov. 15	1797	{ 473 474 475	61	972
Cash-register	R. W. Whitney	473,719	Apr. 26	2728	{ 686 687	59	567
Cash-register	B. F. Wright	482,956	Sept. 20	1692	496	60	1692
Cash-register	N. B. Wright	478,532	July 5	730	178	60	145
Cash-register actuating device	G. Boemermann	477,883	June 28	2660	665	59	2004
Cash register and adder	J. E. Claudin and P. Robert	486,030	Nov. 8	1346	358	61	865
Cash register and indicator	E. E. Bartlett	470,463	Mar. 8	1314	{ 338 339	58	1358
Cash register and indicator	T. Carney	473,170	Apr. 19	1802	{ 455 456	59	367
Cash register and indicator	T. Carney	479,701	July 26	2572	{ 641 642	60	540
Cash register and indicator	T. Carney	484,296	Oct. 11	1176	299	61	252
Cash register and indicator	C. Carr	468,330	Feb. 9	666	{ 165 166	58	662
Cash register and indicator	C. Carr	486,979	Nov. 29	2912	752	61	1223
Cash register and indicator	H. Cook	469,544	Feb. 23	2555	657	58	1049
Cash register and indicator	H. Cook	469,545	Feb. 23	2564	{ 657 658	58	1050
Cash register and indicator	H. Cook	483,511	Sept. 27	2557	{ 641 642	60	1873
Cash register and indicator	E. Del Valle	486,825	Nov. 22	2622	{ 664 665	61	1150
Cash register and indicator	W. G. Douglas	473,172	Apr. 19	1818	458	59	369
Cash register and indicator	M. Heintz	479,215	July 19	1773	445	60	372
Cash register and indicator	G. M. Howe	481,495	Aug. 23	2834	{ 696 697	60	1165
Cash register and indicator	T. J. Hume	477,548	June 21	2098	{ 522 523	59	1879
Cash register and indicator	F. S. Hunt	472,123	Apr. 5	179	48	59	33
Cash register and indicator	W. R. Johns	473,555	Apr. 26	2453	{ 621 622 623 624	59	513
Cash register and indicator	J. A. Kienardt	477,598	June 21	2176	539	59	1895
Cash register and indicator	W. G. Latimer	474,953	May 17	1784	451	59	1007
Cash register and indicator	C. S. Lewis	478,164	July 5	141	36, 37	60	31
Cash register and indicator	C. E. Lord	478,156	July 5	192	49, 50	60	40
Cash register and indicator	H. E. Marshall	482,375	Sept. 13	773	186	60	1500
Cash register and indicator	P. H. McEwan	486,119	Nov. 15	1512	400	61	914
Cash register and indicator	R. Mills	475,408	May 24	2422	618	59	1149
Cash register and indicator	E. H. Murdock	480,957	Aug. 16	1924	{ 481 482	60	979
Cash register and indicator	E. H. Murdock	484,917	Oct. 25	2198	{ 566 567	61	482
Cash register and indicator	E. Murphy	488,150	Dec. 10	1503	{ 378 379 380	61	1638
Cash register and indicator	H. M. Neer	476,295	June 7	98	{ 22 23 24 25	59	1457
Cash register and indicator	H. G. O'Neill	480,122	Aug. 2	574	146	60	692
Cash register and indicator	H. G. O'Neill	480,123	Aug. 2	576	{ 146 147	60	692
Cash register and indicator	H. G. O'Neill	480,125	Aug. 2	583	148	60	693
Cash register and indicator	H. G. O'Neill	480,126	Aug. 2	586	149	60	694
Cash register and indicator	H. G. O'Neill	480,612	Aug. 9	1378	{ 342 343	60	857
Cash register and indicator	H. G. O'Neill	480,613	Aug. 9	1383	{ 343 344	60	858
Cash register and indicator	H. G. O'Neill	480,615	Aug. 9	1388	{ 345 346	60	859

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Cash register and indicator	J. F. Pfeffer	468,944	Feb. 16	1619	{ 410 411 412	58	860
Cash register and indicator	E. Rector	468,967	Feb. 16	1666	{ 425 428 429 430	58	869
Cash register and indicator	E. F. Roberts	481,824	Aug. 30	3382	{ 429 430	60	1286
Cash register and indicator	J. Shakespeare	480,521	Aug. 9	1235	{ 310 311	60	829
Cash register and indicator	G. W. Spurr	477,340	June 21	1768	{ 433 434	59	1814
Cash register and indicator	R. P. Thompson	485,240	Nov. 1	129	{ 39 40	61	599
Cash register and indicator	H. G. and C. F. Walter	485,307	Nov. 1	226	{ 64 65	61	619
Cash register and indicator	J. J. Webster	484,887	Oct. 25	2134	{ 549 550 551	61	470
Cash register and indicator	C. W. Weiss	469,003	Feb. 16	1737	{ 442 443	58	883
Cash register and indicator	W. F. and W. M. Wurzburg and A. A. Tloczynski.	486,815	Nov. 22	2603	{ 678 679 683	61	1146
Cash register and indicator and check-machine	W. Aldrich	481,459	Aug. 23	2775	{ 684 685 686 687	60	1153
Cash register and indicator. Check	E. H. Murdock	471,342	Mar. 22	2627	{ 667 668 669	58	1637
Cash register and recorder	A. R. Abbott	474,278	May 3	600	{ 149 150	59	754
Cash register, indicator, and automatic change-maker	J. J. Hove	479,711	July 26	2594	{ 646 647	60	544
Cash register, indicator, and check-printer	G. Boemermann	486,577	Nov. 22	2214	{ 580 581 582	61	1066
Cash register, indicator, and check-printer	R. Lamont	485,951	Nov. 8	1220	{ 322 323	61	838
Cash register, indicator, and check-printer	H. G. O'Neill	480,124	Aug. 2	578	{ 147 148	60	692
Cash register, indicator, and check-printer	H. G. O'Neill	480,617	Aug. 9	1392	{ 347 348	60	860
Cash register, indicator, and recorder	W. F. Beck	481,777	Aug. 30	3304	{ 806 807 808	60	1272
Cash register, indicator, and recorder	C. F. Brown	474,791	May 10	1450	{ 368 369 370	59	929
Cash register, indicator, and recorder	C. F. Brown	481,524	Aug. 23	2874	{ 706 707 708	60	1173
Cash register, indicator, and recorder	T. Carney	484,297	Oct. 11	1178	{ 300 301	61	252
Cash register, indicator, and recorder	H. Cook	482,165	Sept. 6	400	{ 95, 96 97	60	1414
Cash register, indicator, and recorder	J. Pfeifer	479,720	July 26	2612	{ 649 650 651	60	547
Cash register, indicator, recorder, and check-printer	J. Pfeifer	488,903	Dec. 27	2715	{ 672 673	61	1912
Cash-register. Pocket	W. Ambruster	480,057	Aug. 2	481	{ 132 133	60	674
Cash-registers. Complete-stroke mechanism for	T. Carney	482,161	Sept. 6	394	{ 93, 94 95	60	1412
Cash-registers. Stop-clock for	O. C. Reeves	468,483	Feb. 9	906	{ 230 231	58	709
Cash registering and adding machine	C. Paine	483,009	Sept. 20	1774	{ 449 450 451	60	1709
Cash-registering and check-making machine	J. J. Webster and W. H. Saunders	479,341	July 19	1961	{ 489 490	60	409
Cash registering and indicating machine	E. N. Foote	487,215	Nov. 29	3278	{ 817 818	61	1294
Cash registering and indicating machine	E. N. Foote and J. J. Range	479,357	July 19	2000	{ 500 501 502	60	417
Cash-registering machines. Adding attachment for	G. B. Massey	477,563	June 21	2122	{ 527 528	59	1884
Cash-till recorder	W. W. Darbee	472,860	Apr. 12	1286	{ 330 331	59	257
Casing for cavities	C. Vetter	471,629	Mar. 29	3050	{ 776 777	58	1723
Casket-handle	J. McCarthy	469,975	Mar. 1	503	{ 124 125	58	1196
Casket-handle	J. McCarthy	472,195	Apr. 5	290	{ 76 77	59	55
Casket-handle	J. McCarthy	478,168	July 5	156	{ 39 40	60	33
Casket-handle	T. McGovern	471,771	Mar. 29	3276	{ 836 837	58	1766
Casket-handle	J. D. Ripson	481,531	Aug. 23	2897	{ 711 712	60	1178
Casket. Metallic	F. H. Hill	482,557	Sept. 13	1075	{ 261 262	60	1559
Casks or barrels. Tap-hole protector for	W. F. Schopfer	469,872	Mar. 1	333	{ 85 86	58	1166
Casks. Broaching device for	G. Gabb	478,852	July 12	1210	{ 300 301	60	255
Caster	C. A. Allen	470,325	Mar. 8	1046	{ 277 278	58	1316
Caster	M. A. Cutter	474,576	May 10	1118	{ 286 287	59	863
Caster	H. C. Deane	472,254	Apr. 5	389	{ 101 102	59	72
Caster	C. S. Fleming	468,195	Feb. 2	437	{ 109 110	58	610
Caster	W. Gordon	479,980	Aug. 2	324	{ 79 80	60	644
Caster	A. Hardenbergh and W. C. Froehley	473,924	May 3	61	{ 12 13	59	648
Caster	W. W. Hughes	467,873	Jan. 26	2545	{ 645 646	58	507
Caster	C. J. Lange	470,870	Mar. 15	1917	{ 490 491	58	1487
Caster	H. H. McElhiney	485,706	Nov. 8	853	{ 229 230	61	764
Caster	W. J. Smith	488,954	Dec. 27	2807	{ 692 693	61	1931
Caster attachment	R. W. Tanner	470,266	Mar. 8	950	{ 236 237	58	1292
Caster. Furniture	J. H. Moran	475,136	May 17	2003	{ 506 507	59	1030
Caster. Furniture	A. A. Minor	481,963	Sept. 6	61	{ 15 16	60	1346
Caster. Furniture	D. Nickel and E. W. Wainwright	467,952	Feb. 2	69	{ 16 17	58	538
Caster-wheel	R. R. Parrish	477,573	June 21	2134	{ 531 532	59	1987
Casting acid-eggs. Mold for	A. B. Diss	484,305	Oct. 11	1197	{ 304 305	61	256
Casting acid-eggs. Mold for	E. Allen	468,610	Feb. 9	1099	{ 280 281	58	748
Casting and dressing machine. Type	J. G. Pavyer	471,890	Mar. 29	3453	{ 882 883	58	1801
Casting and working metals. Apparatus for use in	W. E. May	481,799	Aug. 30	3339	{ 816 817	60	1278
Casting apparatus. Sash-weight	J. Carter	483,208	Sept. 27	2093	{ 531 532	60	1785
Casting apparatus. Stereotype	J. R. Cummings	472,473	Apr. 5	729	{ 186 187	59	138

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Casting apparatus. Stereotyper's	J. R. Cummings	472,475	Apr. 5	731	187	59	138
Casting armor.....	G. H. Chase and H. L. Gantt	485,784	Nov. 8	957	257	61	786
Casting armor.....	G. H. Chase and H. L. Gantt	485,785	Nov. 8	958	257	61	786
Casting brake-shoes. Pattern for	W. H. Kramer	485,949	Nov. 8	1216	321	61	838
Casting can-openers. Mold for	W. E. Warner	488,590	Dec. 27	2237	553 554	61	1816
Casting cannon. Apparatus for	R. A. Robertson, Jr.	474,860	May 17	1572	401	59	965
Casting car-wheels. Chill for	C. A. Treat	481,442	Aug. 23	2749	676	60	1148
Casting car-wheels. Mold for	G. W. Cushing and J. W. Rampe	486,327	Nov. 15	1833	4+3	61	979
Casting cylindrical bodies. Apparatus for	W. C. Farroum	482,405	Sept. 13	814	196	60	1509
Casting draw-bars. Metallic mold for	J. Munton	482,688	Sept. 13	1262	308 309	60	1595
Casting grids for secondary batteries. Machine for	A. F. Madden	471,527	Mar. 22	2903	739	58	1689
Casting hollow ingots. Machine for	S. E. Light	467,469	Jan. 19	1885	480 481	58	375
Casting iron pigs, ingots, &c.	J. W. Cole	468,292	Feb. 2	593	99	58	639
Casting knitting-machine cylinders. Mold for	J. E. Gearhart	468,171	Feb. 2	400	99	58	602
Casting machine. Type.....	P. T. Dodge	466,666	Jan. 5	564	146	58	109
Casting machine. Type.....	T. K. Hinsbillwood	481,760	Aug. 30	3270	796 797	60	1265
Casting machine. Type.....	H. S. Popp	475,517	May 24	2603	661 662	59	1183
Casting metal around internal cores. Mold for	F. G. Stone	484,124	Oct. 11	888	226	61	197
Casting metals. Apparatus for	J. J. C. and V. E. Smith	477,231	June 21	1592	390	59	1780
Casting. Method of and apparatus for	C. W. Weiss	470,525	Mar. 8	1400	365 366	58	1376
Casting. Mold.....	F. J. Wooster	475,652	May 24	2807	711	59	1223
Casting pig-iron. Apparatus for	H. D. Hibbard	486,714	Nov. 22	2438	635 636	61	1112
Casting pipe. Flask for	W. White	487,810	Dec. 13	944	239	61	1526
Casting printers' rollers. Apparatus for	O. J. Maigne	466,569	Jan. 5	418	107	58	80
Casting sash-weights. Machine for	J. Goldberg	487,263	Dec. 6	37	12	61	1329
Casting steel car-couplings. Mold for	J. Munton	482,687	Sept. 13	1260	307 308	60	1594
Casting stove-linings.....	J. McDermott	482,689	Sept. 13	1263	309	60	1595
Casting. Wheel-hub	M. L. Smith	480,044	Aug. 2	464	117	60	670
Castings. Making malleable-iron	B. Talbot	481,313	Aug. 23	2549	60	1110	
Castings. Method of and apparatus for making metal	W. L. Clark	473,382	Apr. 19	2173	546	59	439
Castings. Polisher for metal	E. J. Case	476,248	June 7	25	5	59	1444
Catalogue. Library.....	A. J. Rudolph	483,313	Sept. 27	2281	573	60	1819
Catamenial appliance	W. H. Masser	480,876	Aug. 16	1793	449	60	955
Catamenial bandage	A. Chapman	475,199	May 17	2097	530	59	1069
Catamenial sack	N. M. Dyer	478,053	June 28	2917	729	59	2055
Catamenial sack	H. F. Ferguson	474,378	May 10	801	209	59	803
Catamenial sack	R. I. Odell and C. S. Howell	476,676	June 7	671	163	59	1570
Catamenial sack	H. Smith	475,820	May 31	3090	782	59	1290
Catamenial sack	J. J. Vernier	467,963	Feb. 2	81	20	58	541
Catamenial sack or bandage	E. H. Carpenter	470,983	Mar. 15	2087	534	58	1521
Catching-tool	R. C. Grooin	473,739	Apr. 26	2766	695	59	574
Catcher's tray-table	F. R. Perryman	468,038	Feb. 2	199	49	58	563
Cattle-dehornor	W. B. Howell	483,557	Oct. 4	61	15	61	14
Cattle dehornor and plant-pruner. Combined	E. B. Stauber	472,146	Apr. 5	213	57	59	40
Cattle-guard	G. W. Cassell	475,233	May 17	2153	545	59	1080
Cattle-guard	G. A. Christ	467,001	Jan. 12	1124	285	58	232
Cattle-guard	G. A. Christ	470,662	Mar. 15	1592	414	58	1424
Cattle-guard	W. B. Dunning	470,556	Mar. 8	1441	375	58	1384
Cattle-guard	O. N. Evans	471,213	Mar. 22	2451	622	58	1602
Cattle-guard	P. Merrill	472,897	Apr. 12	1345	345	59	269
Cattle-guard	F. C. Seymour	469,049	Feb. 16	1801	460	58	896
Cattle-guard. Surface.....	J. S. Berry	483,039	Sept. 20	1825	464	60	1720
Cattle-guard. Surface.....	G. W. Miller	473,327	Apr. 19	2067	520	59	419
Cattle-guard. Surface.....	G. W. Miller	480,733	Aug. 16	1581	395	60	911
Cattle. Suppressing horns in	J. March	478,877	July 12	1236	60	260	
Cattle-tie	J. O. Davis	476,523	June 7	450	107	59	1525
Cattle-washing device	J. G. Smiley	488,778	Dec. 27	2522	627	61	1871
Cauterizing-point holder	C. Sack	474,972	May 17	1749	443	59	1001
Ceiling	A. Kaiser	480,927	Aug. 16	1872	467	60	970
Ceiling-block	J. J. Green	484,911	Oct. 25	2186	563	61	481
Ceiling. Cohesive combined lintel	R. Guastavino, Jr.	481,755	Aug. 30	3265	795	60	1264
Ceiling. Fireproof.....	P. M. Bruner	469,121	Feb. 16	1892	484	58	914
Ceiling. Fireproof.....	G. Hayes	486,982	Nov. 29	2919	753	61	1225
Ceiling-floor. Cohesive.....	R. Guastavino, Jr.	466,536	Jan. 5	363	91	58	69
Ceiling. Metallic.....	E. C. Ewing	469,183	Feb. 16	1981	506	58	932
Ceiling. Metallic.....	E. C. Ewing and J. H. Packer	469,182	Feb. 16	1980	506	58	932
Ceiling. Metallic.....	W. W. and R. H. Old	481,813	Aug. 30	3364	824	60	1282
Ceiling. Metallic.....	J. H. Packer	469,186	Feb. 16	1985	507 508	58	933
Ceiling panel. Sheet-metal	F. G. Caldwell	476,185	May 31	3676	929	59	1406
Ceiling-plate. Metallic	L. L. Sagendorph	488,254	Dec. 20	1689	422	61	1691
Ceilings and walls. Coating for	J. P. Van Balgooy	467,271	Jan. 19	1525	58	318	
Ceilings and walls. Sheet-metal panel for	F. G. Caldwell	467,000	Jan. 12	1123	285	58	221
Celery-digging machine	M. M. Ranney	481,819	Aug. 30	3372	826	60	1284
Cellulose from wood. Preparing	H. A. A. Maste	480,334	Aug. 9	942	60	773	
Cement. Artificial Portland	C. von Forell	486,706	Nov. 22	2432	61	1111	
Cement. Artificial Roman	C. von Forell	486,707	Nov. 22	2432	61	1111	
Cement. Composition of matter for producing Portland	H. J. Livingston	486,165	Nov. 15	1583	61	929	
Cement, &c. Machine for applying	H. D. Stone	478,031	June 28	2887	721	59	2050
Cement. Manufacture of	L. Enricht	486,444	Nov. 22	2019	61	1030	
Cement. Manufacture of	L. Enricht	486,450	Nov. 22	2025	61	1030	
Cement mill and furnace. Combined	H. H. Bourne	480,381	Aug. 9	1021	257	60	788
Cement. Mold for forming castings from	S. P. McKelvey	474,143	May 3	397	96	59	715
Cement pipes. Machine for making	E. Oehle	479,451	July 26	2169	543 544	60	466

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cementing-machine.	H. W. Brett	479,699	July 26	2567	639	60	539
Cementing-machine.	W. Robertson	483,367	Sept. 27	2354	591	60	1832
Cementing wells and cisterns. Device for	W. H. H. Davis	473,828	Apr. 26	2892	725	59	599
Center-board for boats	F. M. Eaton	481,484	Aug. 23	2818	692	60	1162
Center-plate fastening	C. Lindström	480,408	Aug. 9	1059	265	60	794
Center support or hanger	T. W. Snell	468,705	Feb. 9	1253	318	58	779
Centering device	F. L. Canham	480,558	Aug. 9	1293	324	60	841
Centrifugal apparatus	C. L. Cairns	476,979	June 14	1170	283	59	1683
Centrifugal drier	T. Haynes	477,413	June 21	1885	464	59	1837
Centrifugal extractor	W. E. Johnson	486,876	Nov. 29	2711	707	61	1163
Centrifugal machine	C. E. Dulin	466,459	Jan. 5	941	61	58	46
Centrifugal machine	H. W. Lafferty	474,389	May 10	816	213	59	805
Centrifugal machine	J. Laidlaw	473,322	Apr. 19	2058	{ 517 518 }	59	417
Centrifugal machine	B. Van Wie	478,484	July 5	646	158	60	128
Centrifugal machine	R. D. Weaver	475,225	May 17	2133	540	59	1076
Centrifugal separator for nuts, grain, &c	B. H. Vellines	466,730	Jan. 5	677	174	58	129
Cercal drier	P. Borgarelli	469,549	Mar. 1	294	77	58	1158
Cereals and products. Treating	E. V. Donelson	470,140	Mar. 1	739	.....	58	1243
Certificate representing value.	W. W. C. Spencer	470,098	July 19	1589	398	60	338
Chafe-iron.	H. S. Cowles	480,172	Aug. 2	660	178	60	708
Chain-block	J. R. Morgan	483,161	Sept. 27	2018	{ 510 511 }	60	1770
Chain-block	J. R. Morgan	484,038	Oct. 11	779	196	61	174
Chain coupling-link. Drive	C. E. Hart	477,895	June 28	2679	670	59	2008
Chain-cutter	N. A. Chaney	470,103	Mar. 1	688	169	58	1233
Chain. Drive	J. W. Brown	466,735	Jan. 5	682	175	58	130
Chain. Drive	T. Corsecaden	482,723	Sept. 20	1325	334	60	1620
Chain. Drive	W. Dodd and A. T. Martin	478,416	July 5	549	134	60	108
Chain. Drive	H. Guthrie	469,298	Feb. 23	2180	559	58	976
Chain. Drive	R. J. Hamill	467,804	Jan. 26	2437	619	58	486
Chain. Drive	C. E. Hart	473,392	Apr. 19	2194	551	59	443
Chain. Drive	C. E. Hart	476,635	June 7	617	{ 148 149 }	59	1560
Chain. Drive	C. E. Hart	476,637	June 7	620	149	59	1560
Chain. Drive	C. E. Hart and C. A. Taplin	476,201	May 31	3702	935	59	1411
Chain. Drive	W. H. Hart	483,843	Oct. 4	482	120	61	100
Chain. Drive	W. H. and C. E. Hart	488,808	Dec. 27	2570	638	61	1882
Chain. Drive	J. B. Ivey	470,141	Mar. 1	740	184	58	1243
Chain. Drive	C. P. Mairs	480,853	Aug. 16	1763	441	60	948
Chain. Drive	J. A. Stone	470,718	Mar. 15	1679	434	58	1441
Chain. Drive	W. L. Sykes	472,563	Apr. 12	864	222	59	179
Chain. Drive	A. Wörner	486,920	Nov. 29	2823	731	61	106
Chain elevator. Endless.	B. Arnold	473,203	Apr. 19	1869	471	59	378
Chain gate	G. K. Rudert	484,572	Oct. 18	1610	409	61	350
Chain-link	J. W. Garland	472,166	Apr. 5	241	64	59	46
Chain-link	H. E. Kelley	469,449	Feb. 23	2407	617	58	1021
Chain-link	D. M. Williams	482,665	Sept. 13	1222	298	60	1587
Chain-link-coupling device	C. F. Noble	486,587	Nov. 22	2235	586	61	1071
Chain link. Drive	A. J. Reynolds	475,705	May 24	2887	730	59	1238
Chain link or tip. Ornamental	E. B. Bullock	474,792	May 10	1459	371	59	931
Chain links. Manufacture of drive	T. Corsecaden	467,659	Jan. 26	2200	559	58	441
Chain links. Manufacture of drive	G. P. Hart	474,086	May 3	323	77	59	699
Chain-making machine	F. F. Ellis	484,909	Oct. 25	2181	{ 561 562 563 }	61	480
Chain-power	M. E. Smith	467,059	Jan. 12	1221	{ 308 309 }	58	240
Chain. Sheet-metal	H. M. Eldridge	483,347	Sept. 27	2326	585	60	1828
Chain. Suspension	A. Drayton	477,522	June 21	2064	514	59	1872
Chain-wrench	W. H. Brock	483,419	Sept. 27	2433	612	60	1848
Chains. Machine for making sheet-metal.	H. J. Austin and R. T. Lewis, Jr.	481,776	Aug. 30	3301	{ 805 806 426 }	60	1271
Chains. Machine for making wire	R. A. Breul	467,331	Jan. 19	1671	{ 427 428 429 }	58	334
Chair:							
See Adjustable chair.	Perambulating-chair.						
Auditorium-chair.	Pneumatic chair.						
Barber's chair.	Rail-chair.						
Child's chair.	Railway-chair.						
Combination-chair.	Railway-brace chair.						
Convertible chair.	Railway-rail chair.						
Dental chair.	Reclining-chair.						
Dentist's chair.	Rocking-chair.						
Doll's rocking chair.	Steamer, lawn, and in-						
Folding chair.	valid chair.						
Insulating-chair.	Surgeon's chair.						
Nursery-chair.	Surgical chair.						
Opera-chair.	Swinging chair.						
Operating-chair.	Window-chair.						
Chair	L. W. Chapman	483,976	Oct. 4	684	171	61	142
Chair	C. E. Davis	477,106	June 14	1371	334	59	1724
Chair	F. A. Dennett	482,167	Sept. 6	410	97	60	1415
Chair	T. H. and E. Gardner	479,415	July 26	2109	{ 527 528 }	60	452
Chair	J. W. Hamilton	485,325	Nov. 1	266	72	61	626
Chair	P. C. Lewis	482,745	Sept. 20	1363	{ 337 338 }	60	1627
Chair	J. W. McDonough	481,582	Aug. 30	2979	731	60	1209
Chair	A. M. Richards and J. A. Giese	478,130	July 5	74	20	60	17
Chair	A. M. Richards and I. Veeder	478,131	July 5	75	20	60	17
Chair and sofa-bed. Combined	R. Lehmann	473,937	May 3	85	19	59	653

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Chair and sofa. Combined	L. Sandburg	467,756	Jan. 26	2362	599	58	472
Chair-bottom. Spring	S. Konz	486,046	Nov. 8	1369	364	61	869
Chair. Combined easy, rocking, and invalid	H. W. Stern	485,435	Nov. 1	439	{ 117 118 }	61	662
Chair desk attachment	M. C. Hutton	480,386	Aug. 9	1030	258	60	789
Chair fan attachment	A. P. Nichols	484,603	Oct. 18	1656	{ 420 421 }	61	359
Chair for theatrical or other purposes	R. M. Hunter	485,277	Nov. 1	182	54	61	610
Chair-seat-spring support	J. A. Staples	474,536	May 10	1050	269	59	849
Chairs. Book-support for	W. M. Poindexter	467,311	Jan. 19	1643	418	58	329
Chairs, cribs, &c. Fan attachment for	W. H. Swift	468,090	Feb. 2	270	66	58	577
Chairs. Fan attachment for rocking.	H. M. Baker	483,413	Sept. 27	2425	610	00	1847
Chairs. Fan attachment for rocking.	C. Durieux	471,509	Mar. 22	2881	733	58	1684
Chairs. Fan attachment for rocking.	J. W. Oulten	466,363	Jan. 5	82	22	58	18
Chairs. Foot-rest for	J. J. Hogan	470,128	Mar. 1	724	180	58	1240
Chairs. Rocking attachment for.	W. H. Roach	471,080	Mar. 15	2234	574	58	1549
Chairs. Roller attachment for rocking or other	W. Platto	466,573	Jan. 5	423	109	58	82
Chalk-holder	J. W. Klapperich	469,150	Feb. 16	1932	492	58	923
Chalk-line holder	A. Tache	472,593	Apr. 12	904	232	59	186
Chalk-sharpener	F. A. Purcell and J. Morgan	477,310	June 21	1729	423	59	1806
Chamber	O. P. Johnson	487,747	Dec. 13	838	213	61	1505
Chamber or commode pot.	J. Finsterer	470,887	Mar. 15	1943	497	58	1492
Chamber-vessel	E. Wenigmann	474,617	May 10	1181	300	59	875
Chamber-vessel support	G. R. Rudrof	472,826	Apr. 12	1243	319	59	248
Chandelier. Extension.	J. E. Behner	483,712	Sept. 13	1303	318	60	1603
Chandelier. Extension.	F. Overholt	481,814	Aug. 30	3365	825	60	1282
Change-delivering device	C. R. Ferguson	469,779	Mar. 1	182	47	58	1136
Change-maker	W. W. Johnson	467,030	Jan. 12	1170	{ 296 297 }	58	231
Change-maker and check-receiver. Automatic electric	T. Mangan	478,011	June 28	2855	{ 714 715 }	59	2044
Change maker and receiver	G. M. Hill and F. P. Alter	488,007	Dec. 13	1267	{ 315 316 }	61	1590
Change making and delivering device	D. L. Tower	486,201	Nov. 15	1628	431	61	937
Change-receiver	C. Bergeron	479,751	July 26	2667	662	60	557
Change receiver	D. B. Couway	475,673	May 24	2836	718	59	1228
Change-receiver	J. Ortlieb and C. E. Garey	470,592	Mar. 8	1490	387	58	1395
Change receiver and transfer table	W. R. Uchtmann	476,703	June 7	711	175	59	1578
Channeling-machine	H. H. Arnold	484,130	Oct. 11	896	229	61	198
Channeling-machine	J. B. Hadaway	484,363	Oct. 11	1280	{ 326 327 }	61	273
Channeling-machine	Z. Lassar	471,797	Mar. 29	3330	848	53	1775
Charcoal-kilns. Arresting and extinguishing combustion in	A. Vickers	477,875	June 28	2649	662	59	2002
Charm or locket	A. L. Tetaz and L. C. Hadorn	482,208	Sept. 6	470	112	60	1427
Chart	J. D. Price	480,413	Aug. 9	1071	218	60	796
Chart and blackboard. Combined	J. B. and M. C. Powell	484,338	Oct. 11	1246	{ 317 318 }	61	266
Chart. Builder's	F. H. Kindl and C. V. Childs	472,266	Apr. 5	408	105	59	76
Chart. Dress.	J. Blizzard	479,518	July 26	2337	583	60	497
Chart. Dress.	B. Viau	487,801	Dec. 13	934	235	61	1524
Chart for drafting garments	S. G. Crow	480,453	Aug. 9	1142	{ 285 286 }	60	810
Chart. Interchanging word or number	W. M. Gilmore	474,732	May 10	1357	344	59	910
Chasing-locking-bar	J. S. Brawn	482,160	Sept. 6	393	93	60	1412
Chasing-mill	H. C. Higginson	487,146	Nov. 29	3173	813	61	1275
Chatelette. Program and score-card	E. R. Roehm	481,195	Aug. 23	2328	574	60	1070
Check. Baggage	A. A. Glisson	488,334	Dec. 20	1818	455	61	1717
Check-bit	L. C. Swift	475,634	May 24	2782	704	59	1919
Check-controlled lock	J. R. Buckingham	471,464	Mar. 22	2821	719	58	1673
Check, draft, &c. Bank	A. D. Garner	485,925	Nov. 8	1171	308	61	828
Check, draft, or other money order or instrument	W. T. Doremus	472,864	Apr. 12	1292	332	59	258
Check-hook	K. G. Bareis	473,107	Apr. 19	1693	430	59	316
Check-hook	T. H. Gordon	469,418	Feb. 23	2363	606	58	1012
Check-hook	H. E. Kelley	468,024	Feb. 2	182	45	58	559
Check-hook	D. W. Mickey	484,665	Oct. 18	1773	451	61	383
Check-hook	W. T. Schneck	488,700	Dec. 27	2411	598	61	1849
Check-hook	C. A. Squire	474,612	May 10	1168	297	59	872
Check-hooks. Making harness	H. E. Kelley	488,677	Dec. 27	2377	589	61	1843
Check issuing and recording apparatus	T. L. Knight and E. Beckley	486,344	Nov. 15	1857	{ 488 489 490 }	61	984
Check-loop. Overdraw	S. E. Harsh	488,789	Dec. 27	2541	631	61	1875
Check. Meal	F. C. Gellenbeck	482,899	Sept. 20	1609	403	60	1675
Check-receptacle	H. W. Matthias	476,888	June 14	1020	247	59	1653
Check-row wire	G. D. Haworth	469,403	Feb. 23	2339	601	58	1008
Check-rows. Center movement for	F. P. Richards	466,908	Jan. 12	929	{ 251 252 }	58	196
Check. Safety bank	M. A. Drew	471,106	Mar. 22	2220	586	58	1570
Checks and adding the amounts. Machine for issuing purchase.	C. F. Schmelz	467,483	Jan. 19	1905	{ 487 488 }	58	379
Checks and the like from being raised. Protecting bank.	T. S. Spivey	478,294	July 5	367	89	60	74
Checks. Lock-stub for sale	A. N. Southwick	472,235	Apr. 5	357	92	59	67
Checkers. Construction of	H. Davidson	477,248	June 21	1627	397	59	1787
Checking and recording apparatus. Workman's	C. P. Cottrell	481,274	Aug. 23	2175	609	60	1098
Checking device	S. O. Tuerk	476,333	June 7	169	41	59	1469
Checkrein	S. R. Brooks	480,865	Aug. 16	1779	445	60	952
Checkrein	B. B. Van Wagener	488,642	Dec. 27	2313	573	61	1830
Checkrein-holder	G. G. Chauncey	469,934	Mar. 1	428	107	58	1183
Checkrein-hook	C. R. Curtis	480,715	Aug. 16	1557	388	60	906
Checkrein. Overdraw	J. McKenney	471,749	Mar. 29	3246	826	58	1759
Checkrein-spring	I. W. Crippen	483,762	Oct. 4	361	90	61	76
Checkrein worker and hook	O. Kennedy	477,549	June 21	2105	523	59	1881

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Cheese-bandager	C. D. Hadcock	471,756	Mar. 29	3254	829	58	1761
Cheese-case	H. D. Streater	485,359	Nov. 1	326	87	61	638
Cheese-cutter	J. Gibson and J. Cameron	471,716	Mar. 29	3191	814	58	1749
Cheese-cutter	O. W. Smith	468,902	Feb. 16	1547	391	58	846
Cheese. Making.	J. D. Frederiksen	482,897	Sept. 20	1605	-----	60	1674
Cheese-protector. Automatic	D. M. Black	488,598	Dec. 27	2248	557	61	1818
Cheese-safe	F. S. Gifford	469,692	Mar. 1	31	10	58	1104
Cheese-vat	L. Meyer	478,880	July 12	1239	307	60	261
Chenille-cutting machine	W. T. Smith	485,777	Nov. 8	949	255	61	784
Chenille. Manufacturing	D. S. Williams	477,394	June 21	1857	457	59	1831
Chenille. Woven	D. S. Williams	477,395	June 21	1858	457	59	1831
Cherry-picker	G. Morris	476,059	May 31	3468	875	59	1366
Chest:							
See Tea-chest.							
Chest-protector	W. S. Heinemann	469,195	Feb. 16	2002	511	58	936
Child's chair	H. S. Carley	476,034	May 31	3422	864	59	1357
Chill-plate for flasks	F. Marty	478,622	July 12	857	211	60	185
Chill-ring	W. A. Spring	479,958	Aug. 2	289	72	60	637
Chime or bell. Electric	J. H. Hunter	476,463	June 7	366	85	59	1508
Chimney-cap	J. A. Hodel	470,568	Mar. 8	1455	378	58	1387
Chimney-cap	J. Keane	483,384	Sept. 27	2389	600	60	1839
Chimney-cap	W. A. Pearce	482,851	Sept. 20	1517	377	60	1659
Chimney-cap or cowl	A. Stubbs and W. I. F. Harden	469,069	Feb. 16	1828	468	58	962
Chimney cap or ventilator	G. M. McCloskey	482,905	Sept. 20	1616	404	60	1676
Chimney-cleaner	D. Aiken	478,302	July 5	383	92	60	77
Chimney-cowl	W. J. Kayser	486,830	Nov. 22	2633	687	61	1152
Chimney-cowl	T. Keys	471,388	Mar. 22	2708	690	53	1652
Chimney-cowl	J. B. Oldershaw	483,619	Oct. 4	155	38	61	32
Chimney-cowl. Rotary	H. and L. Iwan	488,074	Dec. 13	1394	346	61	1617
Chimney. Heating	S. T. H. Holt	469,700	Mar. 1	46	15	58	1107
Chimney-holder	J. W. Sharpe	483,586	Oct. 4	108	26	61	23
Chimney or flue lining	E. Rathbun	485,479	Nov. 1	505	133	61	675
Chimney-rack	N. H. Brown	487,001	Dec. 6	586	150	61	1438
Chimney-thimble guard	J. T. Gendron	478,422	July 5	559	135	60	109
Chimney-top	G. W. and J. M. Powers	474,689	May 10	1296	332	59	898
Chimney-top	M. M. Raymond	473,853	Apr. 26	2936	739	59	607
Chinolichiuophenol-sulphate and obtaining the same	J. Ziegler	486,363	Nov. 15	1885	-----	61	989
Chisel. Excavating	J. F. Koellhoffer	470,940	Mar. 15	2020	517	58	1507
Chisel for mortising-machines	F. E. Viger	469,360	Feb. 23	2267	582	58	994
Chisel. Mortising	C. L. Wall	482,704	Sept. 13	1290	316	60	1601
Chiseling, drilling, or prospecting machine	W. Gehring	473,549	Apr. 26	2445	619	59	512
Chlorides by electrolysis. Obtaining insoluble	S. C. C. Currie	466,720	Jan. 5	661	170	58	126
Chloridizing muffle-furnace	H. Calhoun and A. M. Beam	483,532	Oct. 4	23	6	61	7
Chocolate, &c. Apparatus for automatically com- pressing	P. Guérin	484,790	Oct. 25	1981	{ 505 506 }	61	440
Chocolate-cutter	C. M. Ashby and H. M. Seybold	488,493	Dec. 20	2074	515	61	1763
Chocolate. Making soluble	S. T. Achor	479,581	July 26	2381	-----	60	504
Chocolate. Soluble	S. T. Achor	479,580	July 26	2380	-----	60	504
Chocolate to cream-drops. Machine for applying	D. M. Holmes	485,326	Nov. 1	268	73	61	626
Chopper:							
See Cotton-chopper. Meat-chopper.							
Chopper	J. E. Auzat	482,838	Sept. 20	1498	372	60	1654
Chopping-knife	F. M. Palmiter	468,893	Feb. 16	1534	390	58	843
Chopping-knife	A. B. Schofield	488,289	Dec. 20	1749	440	61	1703
Chopping-machine	G. W. Mason	481,766	Aug. 30	3288	800	60	1269
Chords. Instrument for drawing	W. H. Brown	488,327	Dec. 20	1807	453	61	1714
Christmas-tree light	H. W. Diek	484,304	Oct. 11	1196	304	61	256
Chromatic pitch-pipe	C. H. Congdon	478,570	July 12	783	191	60	170
Chronometer-escapement	F. Pequignat	474,301	May 3	646	163	59	762
Chuck	D. A. Barnes	485,364	Nov. 1	335	89	61	641
Chuck	W. Porteous	487,292	Dec. 6	84	25	61	1338
Chuck	E. Phillips	468,525	Feb. 9	975	250	58	723
Chuck	W. F. Schmidt	481,426	Aug. 23	2724	669	60	1143
Chuck. Drill	H. C. Sergeant	484,118	Oct. 11	879	223	61	195
Chuck. Hollow-mandrel	F. A. Buck	482,616	Sept. 13	1159	280	60	1574
Chuck. Lathe	C. E. Pease	470,075	Mar. 1	646	160	58	1224
Chuck. Lathe	J. F. Rouston	471,572	Mar. 29	2965	755	58	1709
Chuck. Lathe	J. H. Westcott	470,369	Mar. 8	1158	{ 296 297 298 }	58	1330
Chuck. Lathe	J. H. Westcott	470,370	Mar. 8	1160	{ 297 298 299 }	58	1330
Chuck. Pinion	G. B. Woodruff	483,195	Sept. 27	2072	523	60	1781
Chuck. Tool	R. C. Ellrich	475,055	May 17	1876	475	59	1036
Chuck	G. S. Agee	481,542	Aug. 30	2015	717	60	1197
Churn	E. W. Allen	470,533	Mar. 8	1410	368	58	1377
Churn	H. C. Anderson	469,511	Feb. 23	2507	643	58	1039
Churn	G. W. Bushaw	468,762	Feb. 9	1329	336	58	794
Churn	J. M. Critcher	475,848	May 31	3142	797	59	1300
Churn	W. E. Depp	471,334	Mar. 22	2617	664	58	1635
Churn	H. B. Eggleston	471,109	Mar. 22	2285	587	58	1571
Churn	A. Fay	468,013	Feb. 2	163	39	58	556
Churn	C. E. Gale	406,671	Jan. 5	571	148	58	111
Churn	J. C. George	476,047	May 31	3442	869	58	1360
Churn	J. C. Humphreys	471,337	Mar. 22	2622	665	58	1636
Churn	J. Jague	469,702	Mar. 1	49	15	58	1107
Churn	G. Martinet	469,970	Mar. 1	496	122	58	1194
Churn	R. E. Miles	471,131	Mar. 22	2316	594	58	1577
Churn	S. E. Morgan	488,573	Dec. 27	2205	545	61	1809
Churn	J. A. Papot	485,749	Nov. 8	916	245	61	777
Churn	D. H. Parker	477,063	June 14	1301	316	59	1711
Churn	J. H. Pett	470,210	Mar. 8	872	215	58	1277
Churn	A. Richter	487,870	Dec. 13	1044	261	61	1545
Churn	N. Rolland and H. François	475,346	May 24	2331	{ 597 598 }	59	1132

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Cr.	Vol.	Page.
Churn.....	N. Ruger.....	483,584	Oct. 4	105	26	61	23
Churn.....	A. V. Stewart.....	468,158	Feb. 2	378	93	58	598
Churn.....	J. W. Sullins.....	468,844	Feb. 16	1461	373	58	829
Churn.....	W. W. Tharp.....	466,636	Jan. 5	518	134	58	100
Churn.....	W. Walter.....	475,097	May 17	1946	493	59	1038
Churn and butter-worker. Combined	E. Silen.....	472,830	Apr. 12	1247	319	59	249
Churn-dasher.....	C. Berst.....	473,900	May 3	6	2	59	638
Churn-dasher.....	J. H. Edgerly.....	474,117	May 3	363	87	59	707
Churn-dasher.....	F. L. McCoy.....	479,830	Aug. 2	87	22	60	539
Churn-dasher.....	I. F. Sterling.....	472,081	Apr. 5	106	29	59	22
Churn-motor.....	A. R. Beam.....	466,317	Jan. 5	3	2	58	3
Churn-motor.....	B. J. Campbell.....	467,495	Jan. 26	1928	493	58	392
Churn-motor.....	W. Omer.....	471,886	Mar. 29	3453	881	58	1800
Churn-power.....	W. T. Brown.....	483,134	Sept. 27	1970	499	60	1760
Churn-vent.....	F. E. Huggins.....	481,564	Aug. 30	2951	725	60	1204
Chute. Coal.....	R. M. Hosea.....	482,009	Sept. 6	138	33, 34	60	1362
Chute. Coal.....	G. L. Stuebner.....	483,404	Sept. 27	2412	606	60	1844
Chute counterbalancing mechanism.....	D. T. Denton.....	481,011	Aug. 16	2006	501	60	995
Chute for coal-wagons.....	R. A. McCauley.....	484,751	Oct. 18	1907	486	61	412
Cigar and ash holder.....	E. A. Tibbits and C. W. Sadler.....	473,646	Apr. 26	2620	660	59	546
Cigar and marking the same.....	S. Azcano y Meana.....	466,649	Jan. 5	535	139	58	104
Cigar-bunch cutter.....	J. G. Miller and E. Yeiser.....	483,077	Sept. 20	1877	475	60	1730
Cigar-bunch machine.....	F. C. Miller.....	484,219	Oct. 11	1049	266	61	227
Cigar-bunch machine.....	W. M. Steinle.....	479,472	July 26	2214	556	60	474
Cigar-bunching machine.....	N. H. Borgfeldt.....	472,331	Apr. 5	511	132	59	96
Cigar-bunching machine.....	A. Gordon.....	486,249	Nov. 15	1710	451	61	954
Cigar-bunching machine.....	J. R. Schmitt.....	485,987	Nov. 8	1275	337	61	850
Cigar-bunching machine.....	N. Strotz.....	482,882	Sept. 20	1571	333	60	1669
Cigar-bunching machine.....	F. and E. H. Thompson.....	481,722	Aug. 30	3206	763	60	1252
Cigar-case.....	M. J. Strain.....	474,613	May 10	1169	297	59	872
Cigar-case.....	J. O. Ullin.....	486,004	Nov. 8	1209	348	61	857
Cigar-cases. Moistening attachment for.....	O. R. Rice.....	467,708	Jan. 26	22-5	580	58	457
Cigar-cutter.....	J. H. Bowen.....	467,731	Jan. 26	2192	590	58	464
Cigar-cutter.....	J. H. Bowen.....	474,626	May 10	1193	303	59	877
Cigar-cutter.....	M. L. Dixon.....	477,249	June 21	1628	397	59	1787
Cigar-cutter.....	F. H. Smith.....	485,234	Nov. 1	119	36	61	598
Cigar cutter and lighter.....	F. Senff.....	468,287	Feb. 2	584	146	58	637
Cigar-lighter.....	J. R. S. Birch.....	483,891	Oct. 4	546	138	61	113
Cigar-lighter.....	F. Michl.....	483,464	Sept. 27	2486	626	60	1859
Cigar-lighter. Electric.....	E. T. Gutberlet and W. R. Isard.....	488,889	Dec. 27	2692	666	61	1907
Cigar-lighting and advertising apparatus. Combined.	A. Newhaus.....	468,452	Feb. 9	846	214	58	698
Cigar-machine hopper.....	M. A. Winget.....	466,919	Nov. 29	2822	731	61	1206
Cigar-measure.....	J. C. Fernandez.....	470,999	Mar. 15	2115	543	58	1526
Cigar-mold.....	F. C. Miller.....	476,666	June 7	660	160	59	1567
Cigar-mold.....	M. A. Winget.....	487,108	Nov. 29	3114	799	61	1264
Cigar-perforator.....	D. Castro.....	474,793	May 10	1493	371	59	931
Cigar-press.....	E. T. Zellner.....	480,055	Aug. 2	479	122	60	673
Cigar pressing and bundling machine.....	J. Broda.....	475,290	May 24	2235	575	59	1113
Cigar-rolling machine.....	J. S. Winget.....	461,453	Aug. 23	2763	680	60	1151
Cigar-stamping machine.....	A. D. Cunney.....	474,163	May 3	426	102	59	721
Cigar stamping or branding machine.....	G. D. Woodworth.....	466,480	Jan. 5	271	68, 69	58	52
Cigar-tip cutter.....	W. H. Lilly.....	476,660	June 7	652	158	59	1566
Cigar-tip perforator.....	R. Cohen.....	485,861	Nov. 8	1067	284	61	807
Cigar-wrapper-cutting machine.....	G. W. Tanner.....	474,107	May 3	352	84	59	705
Cigars or cigarettes. Ignition-cap for.....	M. R. Swiss.....	487,232	Nov. 29	3340	850	61	1304
Cigarette-holder.....	S. P. Bryant.....	486,429	Nov. 22	1999	530	61	1026
Cigarette-machine.....	H. Bauer.....	473,108	Apr. 19	1694	430	59	346
Cigarette-machine.....	V. H. Bazerque.....	482,567	Sept. 13	1086	264	60	1561
Cigarette-machine.....	V. H. Bazerque.....	485,146	Oct. 25	2544	653	61	552
Cigarette-machine.....	H. Bohls.....	472,101	Apr. 5	140	38, 39	59	27
Cigarette-machine.....	H. S. Grace.....	483,380	Sept. 27	2382	598	60	1838
Cigarette-machine.....	J. B. Pollard.....	475,341	May 24	2321	599	59	1130
Cigarette-machine.....	S. H. Thompson and E. M. Cooke.....	466,759	Jan. 5	720	595	58	137
Cigarette-machine.....	J. B. Underwood.....	470,269	Mar. 8	955	237	58	1293
Cinch. Sling.....	D. O'Sullivan.....	468,205	Feb. 2	449	111	58	612
Cinder-conductor.....	H. C. Sargent.....	484,164	Oct. 11	961	247	61	210
Circuit-changing apparatus.....	A. D. Page.....	481,281	Aug. 23	2491	613	60	1100
Circuit-closer.....	C. H. Delano.....	473,499	Apr. 26	2306	600	59	498
Circuit-closer. Thermotic.....	W. H. Tapley.....	477,315	June 21	1734	425	59	1807
Circuit-controller.....	H. W. Leland.....	486,212	Nov. 15	1645	435	61	940
Circuit-controller.....	H. P. White.....	466,519	Jan. 5	339	84	58	65
Circuit-controlling device.....	M. Thum.....	473,595	Apr. 26	2544	641	59	532
Circuit-interrupting device.....	A. Wurts.....	470,161	Mar. 1	1777	192	58	1249
Circuit-interrupting device.....	A. Wurts.....	470,772	Mar. 15	1763	453	58	1457
Circuit-interrupting device.....	A. Wurts.....	470,773	Mar. 15	1764	454	58	1457
Circuit-protecting apparatus.....	A. Wurts.....	470,774	Mar. 15	1767	454	58	1458

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Circuit-switch	G. W. Russell, Jr. and D. B. Minor.	483,123	Sept. 20	1950	493	60	1745
Circuit-switch	M. E. Sullivan and J. Doss	485,337	Nov. 1	284	77	61	630
Circuits. Keyboard system for metallic	J. A. Seely	476,494	June 7	412	96	59	1517
Circumference-indicator and tire-gage	P. McCallum	480,607	Aug. 9	1372	341	60	856
Cistern-cleaner	C. R. Jenne	477,760	June 28	2157	614	59	1967
Cistern-cleaner	G. W. McConnell	477,567	June 21	2128	529	59	1885
Cistern-cleaner	F. Overton and J. Faught	476,678	June 7	673	164	59	1571
Cistern-cleaner	E. B. Ravencroft	481,423	Aug. 23	2720	669	60	1142
Cistern-cleaning device	E. C. Davis	485,092	Oct. 25	2470	635	61	537
Cistern or well cleaner	J. Shilling, Jr.	479,228	July 19	1793	449	60	376
Cistern. Self-cleaning	A. D. Strong	472,488	Apr. 5	750	191	59	142
Cisterns, &c. Device for cleaning	W. J. Maltby and A. Belcher	477,908	June 28	2696	675	59	2012
Clam or oyster rake or dredge	H. R. Hilton and J. E. Wilson	484,715	Oct. 18	1836	467	61	396
Clamp:							
<i>See</i> Adjustable clamp. Miter-clamp.							
Basin-clamp. Molder's-flask clamp.							
Beam-clamp. Pipe-clamp.							
Bedclothes-clamp. Plow-handle clamp.							
Brush-fiber clamp. Plumber's clamp.							
Dental clamp. Pulley-clamp.							
Electric-conductor Rail-clamp.							
clamp. Rope-clamp.							
Fence-clamp. Rubber-dam clamp.							
Fishing-rod joint-clamp. Saw-clamp.							
Floor-clamp. Shade-finishing clamp.							
Grape-vine clamp. Tobacco-box clamp.							
Hawser-clamp. Track-clamp.							
Hose-clamp. Trolley-wire clamp.							
Ironing-machine Upper-clamp.							
clamp. Wood-clamp.							
Joiner's clamp.							
Clamp	W. N. B. Alderson and J. W. Allen.	483,825	Oct. 4	458	114	61	94
Clamp	W. H. E. Brande	474,719	May 10	1340	341	59	907
Clamp	W. H. Robinson	471,438	Mar. 22	2780	710	58	1665
Clamp	W. B. Seward	478,822	July 12	1175	291	60	248
Clamp for drawing together wooden joints	T. Doddrell	488,546	Dec. 27	2158	533	61	1799
Clamp for fruit-jar caps, &c.	C. E. Thomas	478,771	July 12	1079	268	60	230
Clapboard-machine	S. L. Ingalls	468,495	Feb. 9	925	236	58	713
Clapper	F. R. De Estenoz	482,570	Sept. 13	1091	264	60	1562
Clarinet	T. Lassig and A. Pfretzschner	488,656	Dec. 27	2337	578	61	1835
Clasp:							
<i>See</i> Album-clasp. Pen and pencil clasp.							
Antifriction-clasp. Pencil-clasp.							
Corset-clasp. Scarf-clasp.							
Glove-cord clasp. Shoe-clasp.							
Necklace-clasp. Suspender-end clasp.							
Clasp	G. E. Adams	486,242	Nov. 15	1693	448	61	950
Clasp	A. Asserati	468,633	Feb. 9	1133	289	58	754
Clasp	L. H. Buell	474,156	May 3	416	100	59	719
Clasp	M. Epple	474,521	May 10	1026	264	59	846
Clasp	A. Fellner	467,371	Jan. 19	1733	443	58	345
Clasp	J. L. Fredlihp	479,938	Aug. 2	253	62	60	631
Clasp	B. Fontan	469,237	Feb. 23	2079	534	58	958
Clasp	E. K. Kelly	473,629	Apr. 26	2598	653	59	542
Clasp	G. W. Kuchler and H. C. Fischer	469,705	Mar. 1	52	16	58	1108
Clasp	J. Lang, D. W. Evans, and J. A. Devore.	488,017	Dec. 13	1282	320	61	1593
Clasp	H. F. Quein	477,154	June 14	1441	353	59	1738
Clasp	J. G. Schmidt	469,271	Feb. 23	2137	549	58	968
Clasp	E. J. Steele	471,537	May 10	1052	269	59	850
Clasp	J. S. Young	474,277	May 3	600	149	59	754
Claw-bar	J. W. Gray	478,855	July 12	1213	301	60	256
Claw-bar	M. W. Smades and J. P. Ellstrom	488,581	Dec. 27	2220	550	61	1812
Clay and products thereof. Treating	A. D. Elbers	485,917	Nov. 8	1161	61	61	826
Clay-conduit machine	J. J. Powers and R. Van Buren	478,462	July 5	616	150	60	122
Clay, &c. Drying and disintegrating	F. D. Cummer	482,223	Sept. 20	1471	366	60	1649
Clay drying and sifting apparatus	E. C. Little	485,636	Nov. 8	736	193 194	61	739
Clay, &c. Machine for molding marbles, &c., from	M. Lang	485,282	Nov. 1	191	55	61	612
Clay, ores, &c. Screen for	E. A. Austin	476,438	June 7	333	75, 76	59	1502
Clay pipe	W. J. Fryer	474,006	May 3	190	45	59	675
Clay. Preparing	P. Arnold	475,915	May 31	3247	820	59	1321
Clay-reducer	W. Burkman	475,483	May 24	2547	648 649	59	1172
Clay-separator	C. A. Wyman	471,322	Mar. 22	2602	660	58	1631
Clay to make ballast. Burning	H. G. and W. Butler	486,761	Nov. 22	2513	656	61	1127
Clay with glass and in articles made accordingly. Plating	A. A. Houghton and R. D. Haines	479,365	July 19	2017	504	60	421
Cleaner:							
<i>See</i> Boiler-cleaner. Grain-drill cleaner.							
Boot-cleaner. Grain or coffee cleaner.							
Broom-corn cleaner. Gun-cleaner.							
Case-cleaner. Harrow-cleaner.							
Chimney-cleaner. Knife-cleaner.							
Cistern-cleaner. Lamp-chimney cleaner.							
Cistern or well cleaner. Peanut-cleaner.							
er. Seed-cleaner.							
Coal-cleaner. Slate-cleaner.							
Cotton-cleaner. Stove-flue cleaner.							
Dish-cleaner. Tobacco-pipe cleaner.							
Flue-cleaner. Track-cleaner.							
Fruit-cleaner. Well or cistern cleaner.							
Grain-cleaner. Window-cleaner.							
Cleaner, sheller, and peeling-machine	C. Franzel	466,402	Jan. 5	142	39	58	29

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Cleaning and scouring compound	C. H. Peterson and O. C. Ruge	475,413	May 24	2434	.....	59	1150
Cleat. Wire	A. P. Seymour	476,827	June 14	919	235	59	1633
Clevis	O. Canuteson	480,364	Aug. 9	993	249	60	782
Clevis	J. M. Enschedé	479,208	July 19	1763	442	60	370
Clevis	M. E. Hunt and F. W. Lerch	483,221	Sept. 27	2110	535	60	1788
Clevis	R. L. Kirby	474,747	May 10	1381	349	59	915
Clevis	R. A. Marshall	472,132	Apr. 5	195	52	59	36
Clevis	G. Saxby	476,899	June 14	1034	251	59	1656
Clevis and gage-wheel. Combined	G. Moore	481,186	Aug. 23	2316	570	60	1067
Clevis. Plow	A. E. Guild	485,931	Nov. 8	1181	311	61	830
Clevis. Plow	J. M. Norris	474,681	May 10	1284	327	59	895
Clip:							
See Binding-clip.	Hame-clip.						
Buckle-clip.	Switch-clip.						
Dash-bar clip.	Tug-clip.						
Clip	R. W. Jones	472,298	Apr. 5	454	117	59	86
Clip for holding papers or for other purposes	S. H. Wright	486,316	Nov. 15	1817	479	61	976
Clip for supporting dresses, &c	E. C. Mix	487,757	Dec. 13	856	217	61	1508
Clippers	F. V. Glinkie	466,407	Jan. 5	148	41	58	30
Cloak-bauger	W. Bardley	469,223	Feb. 23	2060	530	58	953
Cloak-rack	F. Wolf	478,386	July 5	505	122	60	100
Clock	W. D. Davies	474,058	May 3	284	68	59	692
Clock. Alarm	S. N. Behrman	469,644	Feb. 23	2691	693	58	1077
Clock. Alarm	C. D. Brown	478,950	July 12	1347	334	60	282
Clock. Alarm	F. D. Hoehl	467,109	Jan. 12	1318	334	58	259
Clock. Alarm	S. A. de Normanville	468,255	Feb. 2	528	131	58	628
Clock. Alarm	W. E. Porter	484,236	Oct. 11	1079	273	61	234
Clock. Calendar	A. M. Lane	473,424	Apr. 19	2238	562	59	451
Clock. Calendar	W. B. Martindale and E. R. Malm-borg.	472,952	Apr. 12	1433	563	59	286
Clock-case	W. T. Amies	478,546	July 12	755	185	60	165
Clock-case	E. Davies	472,162	Apr. 5	237	63	59	45
Clock-chime	G. L. Cummings	474,371	May 10	791	206	59	800
Clock. Electric	F. A. Ellis	467,748	Jan. 26	2352	596	58	470
Clock. Electric	M. V. B. Ethridge	486,838	Nov. 22	2644	691	61	1155
Clock. Electric	J. D. McAnlis and H. E. Fleming	485,645	Nov. 8	747	196	61	742
Clock. Electric alarm	W. S. Burroughs	468,414	Feb. 9	794	197	58	688
Clock. Electric alarm	G. C. Darche	478,155	July 5	124	32	60	27
Clock. Electric alarm	B. Franklin	477,206	June 21	1543	378	59	1772
Clock. Electric alarm	J. McMillan and G. H. Taylor	482,133	Sept. 6	339	81	60	1402
Clock. Electric alarm	J. Yungbauer	469,802	Mar. 1	223	56	58	1144
Clock. Electric central	N. Prokhoroff	481,916	Aug. 30	3531	864	60	1315
Clock. Electric self-winding	M. Mackellar and G. D. Weaver	479,520	July 26	2298	574	60	469
Clock. Electric self-winding	F. M. Schmidt	475,809	May 31	3070	777	59	1286
Clock. Geographical	A. L. Silvernail	470,309	Mar. 8	1056	268	58	1311
Clock-hand remover	G. E. Hollis	478,009	June 28	2859	714	59	2043
Clock. Memorandum	J. Davidson	468,712	Jan. 5	647	166	58	123
Clock-motor. Electric	A. Reckenzau	473,960	May 3	122	28	59	661
Clock-movement	F. A. Lane	467,354	Jan. 19	1710	437	58	341
Clock-operating device	C. M. Burton and J. C. Gould	472,028	Apr. 5	13	4	59	5
Clock-pendulum	H. J. Dixon	467,161	Jan. 19	1416	362	58	286
Clock-regulator	W. E. Porter	482,985	Sept. 20	1738	439	60	1701
Clock. Repeating	S. Willcock	488,103	Dec. 13	1432	359	61	1625
Clock-synchronizer. Electric.	J. W. and C. F. Du Laney	477,049	June 14	1278	310	59	1706
Clock-synchronizing apparatus	L. Von Orth	466,518	Jan. 5	337	84	58	65
Clock-synchronizing device and system	W. F. Gardner	480,577	Aug. 9	1318	329	60	846
Clocks. Electric striking mechanism for	S. C. Dickinson	471,210	Mar. 22	2439	621	58	1600
Clod-crusher	F. Meier	466,356	Jan. 5	73	19	58	16
Clod-crusher	W. Rapp	472,770	Apr. 12	1166	239	59	233
Clod-crusher and land-roller. Combined	H. F. Dornell	487,722	Dec. 13	795	203	61	1495
Clod crushers or pulverizers. Roller for	C. H. Noblet	483,007	Sept. 20	1772	448	60	1709
Closet:							
See Desiccating-closet. Water-closet.							
Dry closet.							
Closet-seat protector	T. A. Swann	467,062	Jan. 12	1927	310	58	241
Closet-seats. Wood-working machine for shaping	F. F. Wichard	473,276	Apr. 19	1985	498	59	403
Cloth. Board for winding	G. L. Doyère	467,286	Jan. 19	1608	410	58	322
Cloth-cutting machine	H. A. Caldwell	470,233	Mar. 8	903	223	58	1283
Cloth-cutting machine	C. B. Fulton	469,837	Mar. 1	275	72	58	1154
Cloth-cutting machine	M. Grossmann	467,407	Jan. 19	1786	455	58	355
Cloth-cutting machine	P. Howe	472,172	Apr. 5	252	66	59	47
Cloth-cutting machine	L. E. Jones	466,532	Nov. 22	2140	565	61	1054
Cloth-cutting machine	C. Kaufman	487,840	Dec. 13	989	248	61	1535
Cloth-cutting machine	H. G. Rogowski	472,715	Apr. 12	1090	240	59	219
Cloth-cutting machine	J. M. Schollenberger	485,888	Nov. 8	1120	296	61	818
Cloth-cutting machine	A. Warth	469,072	Feb. 16	1832	469	58	902
Cloth-cutting machine	A. Warth	469,073	Feb. 16	1834	469	58	903
Cloth-cutting machine	A. Warth	469,074	Feb. 16	1835	469	58	903
Cloth-cutting machines. Take-up device for	W. H. Kerr	482,128	Sept. 6	334	80	60	1400
Cloth-finishing apparatus	J. Kirk and B. Lee	473,398	Apr. 19	2202	552	59	444
Cloth-folding machine	S. T. Lockwood and S. K. White	482,373	Sept. 13	761	184	60	1499
Cloth-guiding machine	J. E. Windle	472,203	Apr. 5	310	80	59	58
Cloth-holder	G. M. Morris	479,914	Aug. 2	205	51	60	632
Cloth-laying machine	P. Howe	472,173	Apr. 5	253	66, 67	59	47
Cloth, &c. Machine for straightening and winding	A. and R. J. Edwards	478,255	July 5	312	76	60	63

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cloth-napping machine	G. W. Burr and M. Malony	484,700	Oct. 18	1817	462	61	392
Cloth-napping machine	C. T. Daniels and G. O. Wickers	474,334	May 3	721	189	59	776
Cloth-napping machine	E. T. and E. H. Marble	486,115	Nov. 15	1503	{ 396 397 }	61	913
Cloth-napping machine	E. W. Thomas	478,143	July 5	104	26, 27	60	23
Cloth-napping machine	E. W. Thomas	478,144	July 5	105	27	60	23
Cloth-napping machine	C. Woelfel	466,642	Jan. 5	525	{ 136 137 }	58	102
Cloth-piling machine	F. H. Dobeck	481,933	Sept. 6	18	5, 6	60	1338
Cloth-press. Rotary	G. W. Miller	468,815	Feb. 16	1417	360	58	821
Cloth-pressing machine	D. Gessner	469,372	Feb. 23	2287	588	58	998
Cloth-shrinking machine	C. W. Schaefer	486,739	Nov. 22	2477	646	61	1120
Cloth-stretching machine	C. L. Goddard	479,501	July 26	2269	568	60	484
Cloth-stretching machine	C. Laval	469,256	Feb. 23	2105	541	58	962
Cloth-tentering machine	A. Bradbury	470,741	Mar. 15	1712	{ 441 442 }	58	1448
Cloth-winding machine	J. Conn	483,510	Sept. 27	2556	611	60	1873
Cloth-winding machine	J. J. Zähler-Mösl	473,602	Apr. 26	2550	643	59	533
Clothes-draiser	A. H. Ristedt	484,340	Oct. 11	1249	318	61	267
Clothes-drier	H. Adler	483,275	Sept. 27	2226	559	60	1809
Clothes-drier	R. H. Burdge	472,188	Apr. 5	279	73	59	53
Clothes-drier	A. Caron	475,751	May 31	2968	753	59	1267
Clothes-drier	C. E. Dodd	474,950	May 17	1710	435	59	994
Clothes-drier	C. E. Drury	484,517	Oct. 18	1533	389	61	334
Clothes-drier	F. P. Hendricks	484,931	Oct. 25	2223	573	61	487
Clothes-drier	W. J. Kayser	469,018	Feb. 16	1763	{ 449 450 }	58	888
Clothes-drier	C. E. Knoeller	487,533	Dec. 6	494	129	61	1418
Clothes-drier	G. W. Langdon	475,243	May 17	2167	551	59	1083
Clothes-drier	J. L. Mather	481,365	Aug. 23	2617	644	60	1122
Clothes-drier	J. McKinnan	477,439	June 21	1924	475	59	1244
Clothes-drier	G. W. North	482,269	Sept. 6	570	135	60	1446
Clothes-drier	E. Powell	481,189	Aug. 23	2319	571	60	1068
Clothes-drier	L. A. Powers	485,222	Nov. 1	102	31	61	594
Clothes-drier	R. N. Reed and F. Buob	473,781	Apr. 26	2822	709	59	585
Clothes-drier	J. H. Ruede	487,429	Dec. 6	329	84	61	1386
Clothes-drier	G. T. Sampson	476,416	June 7	296	69	59	1496
Clothes-drier	H. Stevenson	477,968	June 23	2781	697	59	2030
Clothes-drier	S. Steuert	469,308	Feb. 23	2193	562	58	973
Clothes-drier	J. B. Wolfe	473,601	Apr. 26	2549	642	59	523
Clothes-drying machine	F. H. and N. Schilz	481,738	Aug. 30	3236	788	60	1257
Clothes-holder	G. W. Skanks	482,531	Sept. 13	1030	249	60	1550
Clothes-line	J. W. Cadwell	483,299	Sept. 27	2263	569	60	1815
Clothes-line	D. F. Covert	475,675	May 24	2838	718	59	1229
Clothes-line and clothes-holder. Wire	W. C. Baker	469,113	Feb. 16	1884	482	58	912
Clothes-line fastener	W. Leuckert	476,471	June 7	374	87	59	1510
Clothes-line holder	M. R. Ethridge	479,136	July 19	1651	{ 412 413 }	60	349
Clothes-line holder	A. F. Labrie	467,178	Jan. 19	1440	367	58	290
Clothes-line prop and clothes-hanger. Combined	C. A. Potts	484,162	Oct. 11	959	246	61	210
Clothes-line reel	G. H. Copeland	475,038	May 17	1850	469	59	1020
Clothes-line reel	J. Hoffmeister	470,674	Mar. 15	1615	419	58	1428
Clothes-line support	R. McNab	481,806	Aug. 30	3349	820	60	1280
Clothes-line supporting-link	A. Brunner	488,868	Dec. 27	2666	660	61	1969
Clothes-line tightener and fastener. Pulley	H. A. Frost	471,251	Mar. 22	2501	634	58	1611
Clothes-lines. Pulley-coupling for	N. W. Donnan	466,458	Jan. 5	239	61	58	46
Clothes-pin	W. J. Blakey	470,975	Mar. 15	2077	531	58	1518
Clothes-pin	J. W. Cook	480,072	Aug. 2	500	127	60	678
Clothes-pin	J. H. Hamilton	485,274	Nov. 1	179	53	61	609
Clothes-pin	G. W. McCoole	486,954	Nov. 29	2877	743	61	1216
Clothes-pin	W. L. Pike	482,383	Sept. 13	787	189	60	1503
Clothes-pin	A. Watt	479,685	July 26	2545	634	60	535
Clothes-pounder	D. D. Cady	480,069	Aug. 2	496	126	60	677
Clothes-pounder	J. G. Davis	474,223	May 3	525	128	59	739
Clothes-pounder	M. M. Olin	475,887	May 31	3269	812	59	1313
Clothes-pounder	A. Rousseau	471,025	Mar. 15	2151	553	58	1532
Clothes-pounder	H. Stover	475,090	May 17	1939	491	59	1037
Clothes-tongs	H. Upton and W. Kennard	478,382	July 5	500	121	60	99
Clothes-wringer	W. Thornton	480,297	Aug. 9	887	225	60	763
Clothes-wringer	C. Wheeler, Jr.	471,924	Mar. 29	3504	595	58	1811
Clothing. Envelopment for	A. G. Speed	485,509	Nov. 1	545	145	61	684
Clover-huller casing	J. N. Kailor and E. L. Williams	473,259	Apr. 19	1960	492	59	397
Clover-huller feeding device	C. Pippenger	482,135	Sept. 6	341	82	60	1402
Clover-huller frame	J. N. Kailor	472,792	Apr. 12	1198	308	59	239
Clover-hullers. Recleaner for	J. N. Kailor	467,978	Feb. 2	108	27	58	545
Clover hullers and separators. Grain-cleaning at- tachment for	R. McLain	485,971	Nov. 8	1252	{ 330 331 }	61	845
Clover-hullers. Rake mechanism for	J. N. Kailor and E. L. Williams	473,701	Apr. 26	2705	681	59	562
Clover-hulling machine	J. N. Kailor	472,218	Apr. 5	333	86	59	62
Clover-hulling-machine blast-board	J. N. Kailor	474,604	May 10	1157	294	59	870
Clover-hulling machines. Feed-table for	J. N. Kailor	474,134	May 3	384	92	59	712
Clutch	J. S. Adams	477,163	June 14	1458	358	59	1742
Clutch	G. Bender	477,985	June 28	2803	{ 702 703 }	59	2035
Clutch	H. Bunker	488,383	Dec. 20	1903	476	61	1733
Clutch	W. E. Canedy	483,533	Oct. 4	25	6	61	8
Clutch	C. L. Carman	483,601	Oct. 4	125	31, 32	61	27
Clutch	D. T. Denton	481,010	Aug. 16	2004	501	60	995
Clutch	G. H. Eaton and E. E. Barber	475,238	May 17	2160	{ 548 549 }	59	1081
Clutch	J. Fitzgerald	484,308	Oct. 11	1202	306	61	257
Clutch	J. Hartness	482,523	Sept. 13	1020	246	60	1548
Clutch	H. W. Hill	476,640	June 7	622	150	59	1560
Clutch	H. W. Hill	476,641	June 7	625	151	59	1561

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr't	Vol.	Page.
Clutch	A. Kipp, Jr	488,821	Dec. 27	2589	642	61	1885
Clutch	A. Myers	481,046	Aug. 16	2062	514	60	1007
Clutch	W. H. McConnell	484,224	Oct. 11	1056	268	61	229
Clutch	J. Neuert	474,183	May 3	459	111	59	726
Clutch	R. Shettler	481,205	Aug. 23	2344	577	60	1073
Clutch	A. L. Slager	480,748	Aug. 16	1601	401	60	916
Clutch	E. Waldron	480,796	Aug. 16	1672	418	60	930
Clutch	J. Walker	474,429	May 10	882	230	59	819
Clutch	F. M. Waters	467,598	Jan. 26	2117	537	58	426
Clutch	S. B. Williams	471,589	Mar. 29	2997	762 763	58	1714
Clutch	L. J. Wing	475,838	May 31	3121	790 791	59	1296
Clutch. Electric	P. W. Willans	473,042	Apr. 19	1594	405	59	329
Clutch. Friction	A. Briggs	487,215	Dec. 6	13	4	61	1323
Clutch. Friction	E. E. Clark	477,244	June 21	1621	396	59	17-5
Clutch. Friction	R. F. Hargraves	467,652	Jan. 26	2191	556	58	440
Clutch. Friction	H. W. Hill	468,616	Feb. 9	1109	282 283	58	749
Clutch. Friction	H. W. Hill and L. J. Hirt	468,615	Feb. 9	1106	282	58	749
Clutch. Friction	A. H. Hinkley	467,686	Jan. 26	2213	571	58	449
Clutch. Friction	L. J. Hirt	487,736	Dec. 13	818	208	61	1500
Clutch. Friction	G. W. Houck	467,723	Jan. 26	2312	587	58	462
Clutch. Friction	W. Kershaw	481,794	Aug. 30	3331	813	60	1277
Clutch. Friction	W. C. Mackinney	466,611	Jan. 5	483	124	58	93
Clutch. Friction	J. F. McLaughlin	468,682	Feb. 9	1210	308	58	770
Clutch. Friction	J. F. McLaughlin	468,683	Feb. 9	1213	308	58	771
Clutch. Friction	F. Miller	468,626	Feb. 9	1123	286	58	752
Clutch. Friction	J. R. Morgan	472,739	Apr. 12	1123	288 289	59	225
Clutch. Friction	B. F. Radford	483,941	Oct. 4	621	157	61	128
Clutch. Friction	F. H. Richards	481,194	Aug. 23	2326	573	60	1070
Clutch. Friction	W. R. Smith	487,515	Dec. 6	511	133	61	1422
Clutch. Friction	P. Weber	482,491	Sept. 13	954	233	60	1534
Clutch. Friction	P. Weber	483,370	Sept. 27	2358	592	60	1834
Clutch. Friction	J. D. Westgate	479,684	July 26	2543	633	60	535
Clutch. Friction	W. A. Wilkinson	482,326	Sept. 6	631	162	60	1460
Clutch mechanism for power-presses	N. C. Stiles	471,777	Mar. 29	3289	839	58	1768
Clutch-operating mechanism	J. Hartness	483,741	Oct. 4	326	82	61	68
Clutch or coupling device. Adjustable	D. W. Freeman	470,848	Mar. 8	1568	408	58	1411
Clutch. Pneumatic	J. Brusie	473,360	Apr. 19	2171	545	59	439
Clutch. Pneumatic	B. Jennings	467,288	Jan. 19	1610	411	58	322
Clutch. Power-transmitting	E. Wims	474,834	May 17	1678	429	59	988
Clutch. Rope	H. L. Bennett and R. B. Adams	478,839	July 12	1197	297	60	252
Clutch. Rope	P. T. Sundberg	487,061	Nov. 29	3035	779	61	1247
Clutch-shifter	J. S. Adams	474,203	May 3	492	118	59	735
Clutch-treadle	A. C. Campbell	478,398	July 5	524	128	60	103
Clutching mechanism. Hydraulic	F. M. Barney	473,444	Apr. 26	2273	574	59	420
Coal and other minerals. Machinery for cutting	L. B. and C. W. Atkinson and W. T. Goolden	476,593	June 7	555	131 132	59	1546
Coal and other minerals. Separating and cleaning	C. Lührig	474,022	May 3	219	52, 53	59	680
Coal and wood cabinet	J. R. Egan	475,303	May 24	2255	581	59	1117
Coal-auger post	M. F. McNelly	468,058	Feb. 2	226	55	58	568
Coal-bucket and stool. Combined	W. E. Weatherly	460,107	Feb. 16	1876	480	58	911
Coal-cleaner	A. K. Hills	474,045	May 3	262	64	59	688
Coal cutter or drill	C. W. and L. B. Atkinson	482,033	Sept. 6	181	43	60	1371
Coal-cutting machine	J. H. McEwen	476,162	May 31	3638	921	59	1400
Coal-cutting machine	I. Wantling and J. T. Johnson	475,833	May 31	3114	789	59	1295
Coal-drill	C. S. Sheppard	473,788	Apr. 26	2832	711	59	587
Coal. Electrically-driven machinery for cutting	L. B. and C. W. Atkinson	481,775	Aug. 30	3299	804 805	60	1271
Coal-hod. Sheet-metal	H. L. Gates	488,758	Dec. 27	2491	619 620	61	1865
Coal-jig	C. O. Stroh	486,907	Nov. 29	2801	726	61	1202
Coal-lifter	A. Roll	483,791	Oct. 4	406	101	61	85
Coal-loading apparatus	P. Best	488,304	Dec. 20	1766	445	61	1706
Coal-loading machine	J. Grierson	479,641	July 26	2472	614 615	60	521
Coal, &c. Machine for automatically moving	W. Keenan	469,478	Feb. 23	2456	629	53	1030
Coal. Machine for handling	J. M. Dodge. (Reissue)	11,258	Aug. 9	1533	381	60	887
Coal or ore bins. Counterbalance for the discharge apparatus for	R. W. Ericson	485,789	Nov. 8	964	258 259	61	787
Coal or ore jigger and washer	S. Stutz	481,438	Aug. 23	2743	675	60	1146
Coal or other bag	H. P. and J. D. Van Olinda	467,452	Jan. 19	156	473	58	370
Coal or other minerals. Machine for working	W. T. Goolden and L. B. Atkinson	488,606	Dec. 27	2257	560	61	1820
Coal or other minerals. Machinery for cutting	C. W. and L. B. Atkinson	476,594	June 7	556	132 133	59	1546
Coal, ore, &c. Feeder for	L. Rosenfeld	482,652	Sept. 13	1202	293	60	1533
Coal-pockets. Screening device for	G. H. Thompson	483,799	Oct. 4	416	103	61	87
Coal-screen	J. J. Coyne	477,516	June 21	2047	509	59	1869
Coal-screen	S. Griffiths	481,754	Aug. 30	3264	794	60	1263
Coal-scuttle and ash-sifter. Combined	F. Tannrath	486,360	Nov. 15	181	495	61	9-8
Coal-scuttle screen	H. S. Andrews	489,431	Sept. 13	860	206	60	1517
Coal-separator	E. F. Long	488,211	Dec. 20	1682	405	61	1679
Coal-slack. Burning	W. A. Koneman	469,659	Mar. 1	311	80	58	1161
Coal-storage conveyer	G. H. Hulett	487,865	Dec. 13	1035	259	61	1544
Coal-washer	S. Stutz	478,479	July 5	639	156	60	127
Coal washing and separating machine	J. Pollock	473,957	May 3	116	27	59	659
Coal-washing machine	J. Gallacher and G. Lang	488,429	Dec. 20	1974	493	61	1747
Coat-adjuster	J. J. and W. H. Giesler	469,134	Feb. 16	1910	489	58	918
Coat and hat hook. Wire	A. W. Parmelee	466,791	Nov. 22	2565	639 639	61	1137
Coat-collars. Apparatus for creasing and shaping	J. H. Hawes	483,560	Dec. 27	2185	540 540	61	1805
Coat-hanger	W. C. Perkins	472,508	Apr. 5	788	201	59	170

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Coat-hook	H. C. Hart	469,564	Feb. 23	2595	665	58	1057
Coat-hook	C. E. Vail	486,187	Nov. 15	1608	427	61	934
Coat loop or hanger	W. H. Kates	470,685	Mar. 15	1626	422	58	1430
Coating metal sheets. Apparatus for	R. Heathfield	478,282	July 5	351	85	60	71
Cob pipes. Compound for filling	A. C. Bauscher	478,553	July 12	764		60	167
Cock	W. S. Loveland	486,533	Nov. 22	2142	565	61	1054
Cock	R. N. Pratt	477,606	June 21	2188	542	59	1897
Cock	R. N. Pratt	477,607	June 21	2189	542	59	1897
Cock and check-valve. Combined stop	C. F. Kiser	470,058	Mar. 1	621	154	58	1320
Cock and coupling. Combined	S. W. Johnson and T. G. Clayton	477,125	June 14	1396	339	59	1729
Cock and coupling for barrels, &c. Combined	T. E. Murray	485,847	Nov. 8	1045	279	61	803
Cock and valve. Tapping	B. J. Bacon	471,413	Mar. 22	2746	701	58	1659
Cock. Ball	G. S. Hunter	487,671	Dec. 6	702	179	61	1460
Cock. Cylinder	J. F. Murphy	467,295	Jan. 19	1620	413	58	324
Cock. Cylinder drain	R. P. Capwell	472,855	Apr. 12	1279	327	59	256
Cock for casks	E. Cremer	478,574	July 12	792	195	60	172
Cock for pneumatic tools. Graduated	D. Drawbaugh	479,061	July 19	1529	381	60	327
Cock. Gage	H. F. Bingham	476,222	May 31	3746	946	59	1419
Cock. Gage	T. R. Butman	479,732	July 26	2637	654	60	551
Cock. Gage	J. F. Holdam	484,316	Oct. 11	1212	308	61	259
Cock-grinding machine.	P. Gerstenkorn	480,258	Aug. 9	816	209	60	749
Cock or analogous valve. Stop	P. Zimmermann, Jr.	475,530	May 24	2625	668	59	1187
Cock or tap	U. André and O. Durand	476,113	May 31	3557	895	59	1383
Cock. Plug	M. G. Wilder	472,093	Apr. 5	118	32	59	24
Cock. Safety gas	J. Clark	473,611	Apr. 26	2565	646	59	536
Cock. Stop	C. F. Logan	478,618	July 12	851	209	60	184
Cock. Waste and stop	G. H. Bailey and T. Grace	479,544	July 26	2330	582	60	495
Cocks, &c. Device for opening and closing	O. Loewe	478,444	July 5	559	143	60	116
Cocks. Safety-lock for gas	F. Lawrence	488,737	Dec. 27	2460	612	61	1850
Cockeye	A. E. S. Howard	471,640	Mar. 29	3063	770	58	1726
Cockle-separator	A. G. Miller	488,443	Dec. 20	1994	498	61	1751
Coffee-huller	W. H. B. Stout	482,909	Sept. 20	1621	405	60	1677
Coffee-mill and storage-receptacle. Combined self-feeding	F. J. Hollis	473,394	Apr. 19	2196	551	59	443
Coffee or tea pot	C. S. Jones	468,604	Feb. 9	1090	278	58	746
Coffee-pot	J. W. Abbott	478,075	July 5	1	1	60	3
Coffee-pot	F. H. Abell	470,798	Mar. 15	1806	464	58	1465
Coffee-pot	R. G. Brown	480,066	Aug. 2	492	125	60	676
Coffee-pot	W. H. Comstock	482,299	Sept. 6	621	148	60	1456
Coffee-pot	J. R. Fulton	483,839	Oct. 4	475	119	61	98
Coffee-pot	C. Heisler	483,554	Oct. 4	57	14	61	14
Coffee-pot	R. F. Randall	481,769	Aug. 30	3292	801	60	1270
Coffee-pot	W. H. Wrigley	476,718	June 7	732	181	59	1583
Coffee-pots, &c. Sediment-gatherer for	J. C. W. Boice	481,547	Aug. 30	2921	718	60	1198
Coffee-roaster	W. Nedwied	466,863	Jan. 12	904	231	58	181
Coffee. Roasting	C. Salomon	474,531	May 10	1040		59	848
Coffee-steepers	G. E. Overman	484,447	Oct. 18	1421	362	61	312
Coffee substitute and preparing same	H. Trillich	488,801	Dec. 27	2562	636	61	1880
Coffer-dam	E. G. Harris	467,806	Jan. 26	2439	619	58	487
Coffin	L. O. Mueller and L. Stader	466,358	Jan. 5	75	19	58	17
Coffin-fastener	F. C. Riddle	476,315	June 7	130	31	59	1463
Coffin fastener and hinge	W. H. Dowling	470,291	Mar. 8	1016	259	58	1306
Coffin-handle	L. H. Williams	479,044	July 19	1507	376	60	323
Coffin-handle	L. E. Woodard	471,047	Mar. 15	2179	560	58	1538
Coffin-protector	T. N. Fisher	483,750	Oct. 4	391	97	61	82
Coffin-shell mold	W. J. Anthistle	480,986	Aug. 16	1974	493	60	929
Cog-wheel	F. Saxon	487,129	Nov. 29	3147	806	61	1269
Coin-actuated machine	J. M. Hunter	480,018	Aug. 2	415	104	60	660
Coin-actuated mechanism	J. Evans	482,119	Sept. 6	322	77	60	1398
Coin and delivering tickets. Device for receiving	J. Williams	487,139	Nov. 29	3159	810	61	1272
Coin-assorting and change-delivery machine	T. J. McArthur	470,812	Mar. 15	1831	470	58	1470
Coin-case	J. S. Walker	485,778	Nov. 8	950	235	61	784
Coin-chute	R. F. Avery	480,360	Aug. 9	981	247	60	780
Coin. Commercial	I. T. Alvord	478,304	July 5	384	93	60	77
Coin-controlled apparatus	G. F. W. Schultze	475,743	May 24	2953	748	59	1249
Coin-controlled machinery	W. H. Dutton	484,908	Oct. 25	2178	560	61	479
Coin-controlled mechanism	H. E. Perry	481,816	Aug. 30	3366	825	60	1283
Coin-controlled mechanism	G. H. Powell and A. B. Chandler	477,871	June 28	2641	660	59	2001
Coin-controlled theatrical show	E. T. Birdsall	487,510	Dec. 6	455	118	61	1411
Coin-delivering apparatus	G. M. Lockwood	475,086	May 17	1933	490	59	1035
Coin-displacer	T. Carney	484,650	Oct. 18	1745	444	61	376
Coin-freed apparatus	J. G. Cumming	469,127	Feb. 16	1899	486	58	916
Coin-freed apparatus	F. W. Jacob	470,758	Mar. 15	1740	448	58	1453
Coin freed or actuated machine	H. A. Bart	471,808	Mar. 29	3346	852	58	1778
Coin-freed seat. Automatic	J. and L. Quittner	473,264	Apr. 19	1970	494	59	399
Coin-handling facilitator	J. O. Boggs	475,660	May 24	2819	714	59	1225
Coin-holder	W. H. Gilman	486,639	Nov. 22	2321	607	61	1089
Coin-holder	H. E. Howe	475,563	May 24	2677	680	59	1197
Coin-holder	G. D. O'Grady and J. R. Collins	480,900	Aug. 16	1929	483	60	980
Coin-holder	R. J. Wallace and L. A. Henrich	487,438	Dec. 6	350	90	61	1391
Coin-holding box	R. H. Forsyth	476,625	June 7	601	144	59	1556
Coin-mailing grip	M. Hazzard	475,397	May 24	2406	614	59	1146
Coin-operated device	M. B. Goodkind	488,196	Dec. 20	1588	397	61	1672
Coin-operated lock	B. S. Dodge	469,294	Feb. 23	2172	557	58	974
Coin-operated machine	A. Larsen	480,431	Aug. 9	1101	275	60	801
Coin or check controlled device	E. I. Wilson	469,393	Feb. 23	2318	597	58	1004

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Coin receiver and register	V. A. Krepps	486,111	Nov. 15	1497	{ 394 395	61	911
Coin receptacle and register	G. K. Cooke	471,536	Mar. 29	2916	743	58	1700
Coin-receptacle. Pocket	F. H. Brown	481,523	Aug. 23	2873	706	60	1173
Coin-table	F. C. Lidke	478,165	July 5	144	37	60	21
Coin-tray	A. Isch	482,639	Sept. 13	1186	287	60	1580
Coin-tray	J. A. Read	485,228	Nov. 1	114	35	61	597
Coin-wraper	F. A. Jaekel	486,716	Nov. 22	2441	636	61	1113
Coke. Apparatus for quenching	T. R. Osbourn	469,867	Mar. 1	325	83	58	1164
Coke. Apparatus for quenching	T. R. Osbourn	469,868	Mar. 1	326	83	58	1164
Coke-loading appliance	A. M. Chambers and T. Smith	479,556	July 26	2349	586	60	499
Coke. Making	F. J. Jones	472,621	Apr. 12	952	{ 246 247	59	194
Coke. Manufacture of	J. J. Fronheiser and C. S. Price	486,100	Nov. 15	1482	.....	61	909
Coke. Manufacturing or burning	J. C. Anderson	485,904	Nov. 8	1139	302	61	822
Coke-oven	W. T. Gates and G. H. Sharp	472,115	Apr. 5	166	45	59	31
Coke-oven	H. Kennedy	469,817	Mar. 1	245	62, 63	58	1149
Coke-oven	T. R. Osbourn	469,866	Mar. 1	323	82, 83	58	1164
Coke-oven	J. Reiter	470,506	Mar. 8	1371	{ 358 359	58	1370
Coke-oven	R. de Soldenhoff	471,033	Mar. 15	2161	{ 555 556	58	1534
Coking-oven	H. Ekelund	471,692	Mar. 29	3147	802	58	1742
Collander for mashing vegetables	P. Patroll	482,982	Sept. 20	1734	438	60	1700
Collar	M. Friedly	477,207	June 21	1545	379	59	1773
Collar	O. C. Little	483,228	Sept. 27	2123	537	60	1791
Collar and cuff cabinet	H. Caspar	478,566	July 12	779	190	60	170
Collar and cuff case. Traveler's combined	L. D. Dozier	470,553	Mar. 8	1436	374	58	1383
Collar and cuff portfolio	L. D. Dozier and E. W. Hawley	470,554	Mar. 8	1438	374	58	1383
Collar and hame fastener. Combined	J. C. Weinman	462,492	Sept. 13	963	234	60	1537
Collar, and shaper-guard. Combined eccentric, counterbalancing	W. T. Webb	474,274	May 3	597	148	59	753
Collar. Animal	J. W. Hull	485,630	Nov. 8	729	190	61	738
Collar. Breast	C. T. Cain	487,604	Dec. 6	590	151	61	1439
Collar. Breast	J. W. Eggleston	472,866	Apr. 12	1297	333	59	259
Collar, cuff, and garment rack	H. Caspar	484,085	Oct. 11	843	213	61	187
Collar-fastener	N. Lage	478,116	July 5	60	16	60	14
Collar fastener. Horse	E. E. Armstrong	474,712	May 10	1324	338	59	904
Collar fastener. Horse	J. Himmelstein	478,603	July 12	834	205	60	181
Collar fastener. Horse	A. Ritter	474,147	May 3	402	98	59	716
Collar fastener. Horse	J. Thiel	474,878	May 17	1597	407	59	971
Collar. Harness	A. T. Rutter	468,898	Feb. 16	1542	392	58	845
Collar holder. Shirt	F. L. Robinson	481,425	Aug. 23	2723	669	60	1143
Collar. Horse	C. F. Allen	475,430	May 24	2461	627	59	1155
Collar. Horse	M. T. Burke	471,600	Mar. 29	3009	766	58	1716
Collar. Horse	H. C. Etzkorn	475,039	May 17	1850	469	59	1020
Collar. Horse	J. Millidge	488,572	Dec. 27	2205	545	61	1809
Collar. Horse	J. B. Mueller	478,452	July 5	599	146	60	118
Collar. Horse	W. Murr	487,956	Dec. 13	1179	294	61	1571
Collar. Horse	C. A. Pettie	475,606	May 24	2738	694	59	1210
Collar. Horse	G. I. Snell and L. Gillette	476,569	June 7	516	122	59	1539
Collar. Horse	A. D. Ulrich	480,000	Aug. 2	372	93	60	652
Collar. Horse	B. J. Zahn	473,050	Apr. 19	1604	{ 408 409	59	331
Collar-pad	G. A. Adams	468,609	Feb. 9	1098	280	58	747
Collar-pad	A. Scott	463,230	Feb. 2	483	119	58	619
Collar pad. Horse	J. F. Glidden	474,524	May 10	1032	265	59	847
Collar pad. Horse	R. O. Randall	483,016	Sept. 20	1795	452	60	1713
Collars and cuffs. Machine for turning	J. H. Young	482,859	Sept. 20	1528	380	60	1661
Collars. Machine for forming	A. W. Cummings	483,139	Sept. 27	1976	501	60	1761
Collars upon blanks. Securing	W. S. Loveland and E. C. Henn	471,129	Mar. 22	3313	594	58	1576
Collecting, conveying and unloading apparatus	I. N. Rowe	466,625	Jan. 5	503	129	58	97
Color-chart	J. White	488,375	Dec. 20	1892	473	61	1731
Color for printing on textile fabrics	A. Hoz	486,873	Nov. 29	2708	.....	61	1182
Color-grinding machine	H. J. Weckauf	477,722	June 28	2393	{ 597 598	59	1955
Colors. Making azo	D. A. Rosenstiehl	483,368	Sept. 27	2355	.....	60	1833
Coloring and burnishing composition	J. F. Thompson	473,679	Apr. 26	2668	.....	59	556
Coloring-matter. Azo	M. Ulrich and J. Bammann	482,106	Sept. 6	301	.....	60	1394
Colter	W. E. Sefton	488,457	Dec. 20	2015	503	61	1756
Colter attachment. Plow	W. G. Lewis	476,396	June 7	270	63	59	1490
Colter attachment. Plow	J. C. F. Schenck	482,387	Sept. 13	792	190	60	1505
Colter attachment. Plow	W. J. Stowe	472,082	Apr. 5	107	29	59	22
Colter. Plow	G. A. Lambert	483,457	Sept. 27	2479	624	60	1858
Colter. Plow	G. C. Westervelt	484,127	Oct. 11	893	228	61	198
Colter. Plow	A. A. Yackee	472,186	Apr. 5	277	72	59	52
Colter-yokes. Separable coupling for	N. J. Johnson	478,796	July 12	1130	278	60	239
Column. Architectural	J. M. Larimer	484,026	Oct. 11	762	{ 192 193	61	171
Column. Building	H. F. Stnhr	476,905	June 14	1051	254	59	1659
Column. Metal	J. H. Gray	488,274	Dec. 20	1719	433	61	1698
Column. Structural	A. Coffin	477,925	June 23	2723	{ 681 682	59	2017
Comb: See Currycomb.							
Comb	E. H. Harpham	483,058	Sept. 20	1850	469	60	1725
Comb	I. W. Heysinger	466,496	Jan. 5	303	77	58	57
Combing fibrous materials. Machine for	G. E. Donisthorpe and T. Burrows	482,960	Sept. 20	1697	{ 427 428 429	60	1693
Combing-machine	H. L. Offormann and G. Ziegler	481,812	Aug. 30	3359	{ 823 824	60	1282
Combing machine. Fiber	D. Barnett and D. Black	474,513	May 10	1012	260	59	843

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Combing-machines. Apparatus for actuating dabb- ing-brushes for	J. Campbell and A. J. Bramma	475,034	May 17	1844	467	59	1019
Combing machines. Dabbing apparatus for wool	J. L. Ballantyne	479,695	July 26	2562	{ 637 638 }	60	538
Combination-chair	W. H. Tuttle	478,662	July 12	908	225	60	195
Combination-lock	G. L. Barney	471,262	Mar. 22	2518	639	58	1614
Combination-lock	G. L. Barney	482,222	Sept. 6	492	118	60	1431
Combination-lock	J. D. Craig	482,518	Dec. 20	2121	525	61	1776
Combination-lock	J. F. Foster	479,412	July 26	2100	526	60	451
Combination-lock	A. S. Hobart	476,642	June 7	627	151	59	1561
Combination-lock	J. E. Knowles	474,017	May 3	210	50	59	678
Combination-lock	A. C. Lawrence	476,751	June 7	785	193	59	1594
Combination-lock	T. W. McGrath	470,438	Mar. 8	1273	326	58	1351
Combination-lock	J. H. and H. Morris	466,420	Jan. 5	175	46, 47	58	34
Combination-lock	E. C. Penfield	468,429	Feb. 9	813	{ 204 205 }	58	691
Combination-lock	J. E. R. Riddick	476,821	June 14	912	223	59	1632
Combination-lock	W. H. Thompson	470,720	Mar. 15	1680	434	58	1441
Combination-lock	W. H. Thompson	478,658	July 12	903	224	60	195
Combination-lock	E. Vanwart	487,138	Nov. 29	3156	809	61	1272
Combination-table	T. J. Fearn	471,815	Mar. 29	3358	{ 854 855 }	58	1781
Combustion. Total	E. A. Erb	478,693	July 12	952	236	60	205
Combustion-machine	H. A. Hannum	470,395	Mar. 8	1202	307	58	1337
Commode	J. W. Clerke	481,255	Aug. 23	2416	602	60	1092
Commode	D. H. Murphy	479,897	Aug. 2	185	45, 46	60	618
Commode	R. T. Reese and D. Williams	484,672	Oct. 18	1782	454	61	385
Commode	G. E. Shaw	473,360	Apr. 19	2132	535	59	431
Commutator	W. H. Elkins	479,793	Aug. 2	28	7	60	587
Commutator	H. P. White	467,215	Jan. 19	1492	382	58	301
Commutator-brush	C. L. Coffin	475,668	May 24	2829	716	59	1928
Commutator-brush	H. Hirsch	471,792	Mar. 29	3322	846	58	1774
Commutator-brush	R. Hirsch and H. Meminger	474,600	May 10	1150		59	869
Commutator-brush	G. Meyer	473,195	Apr. 19	1857	468	59	376
Commutator brush and holder	C. D. Jenney	469,806	Mar. 1	228	57	58	1145
Commutator brush and holder for dynamo electric machines and motors.	F. J. Sprague	466,448	Jan. 5	223	57	58	42
Commutator-brush for electric motors and dynamos.	T. A. Edison	468,950	Feb. 16	1638	417	58	853
Commutator-cleaning device	W. J. Phelps	469,319	Feb. 23	2206	566	58	981
Commutator connection for electric motors or gen- erators.	C. G. Curtis	473,567	Apr. 26	2493	630	59	522
Commutator. Detachable	C. H. Gaylord	477,175	June 14	1482	363	59	1747
Commutator for dynamo-electric machines and motors.	E. Thomson	467,318	Jan. 19	1653	420	58	331
Commutator for electro-magnetic machines	H. F. Parshall	480,739	Aug. 16	1590	398	60	913
Commutator for ring-armatures	G. Pfannkuche	480,780	Aug. 16	1650	413	60	926
Commutators and armature-wires. Connection for	E. P. Warner	487,307	Dec. 6	108	32	61	1343
Commutators for dynamo-electric machines. Brush- holder for	I. H. Bartholomew	466,972	Jan. 12	1077	273	58	213
Compass	P. J. Kaiser	487,330	Dec. 6	151	44	61	1350
Compass. Automatic recording	J. J. Townsend	477,283	June 21	1620	{ 411 412 }	59	1797
Compass. Beam	J. E. Betts	486,553	Nov. 22	2167	572	61	1059
Compass. Mariner's	R. Oliver	478,017	June 28	2862	717	59	2045
Compass. Recording	J. J. Townsend	477,282	June 21	1676	{ 410 411 }	59	1796
Compasses	A. Kolesch	479,329	July 19	1936	484	60	405
Compasses. Beam	H. Haslam	476,380	June 7	241	59	59	1484
Compasses. Beam	W. S. Robinson	487,892	Dec. 13	1070	270	61	1552
Compasses. Blackboard	H. P. Smith	473,244	Apr. 19	1938	487	59	393
Compasses. Electric recording device for	C. L. Jaeger	472,124	Apr. 5	180	48, 49	59	34
Complexion-steamer	I. Cassidy	486,081	Nov. 15	1431	378	61	899
Composing-bar. Adjustable angular and circular	A. H. Arnold	474,649	May 10	1227	314	59	884
Composing-stick	J. K. Bittenbender	484,514	Oct. 18	1528	388	61	333
Composing-stick	M. E. Lyon	468,504	Feb. 9	938	{ 238 239 }	58	716
Composition material	G. S. Mayhew	468,355	Feb. 9	705	175	58	670
Composition of matter	P. H. Holmes	469,142	Feb. 16	1922	492	58	921
Composition of matter	P. H. Holmes	482,176	Sept. 6	423		60	1418
Composition of matter and producing the same	C. C. Carroll	475,382	May 24	2389		59	1143
Composition tub, tank, &c	W. E. Clow	469,416	Feb. 23	2362	606	58	1012
Compositor's case	G. White	476,847	June 14	951	231	59	1640
Compound engine	J. F. Murphy	474,643	May 10	1218	312	59	882
Compound engine	J. Player	481,056	Aug. 16	2078	{ 518 519 520 }	60	1010
Compound engine	S. F. Prince, Jr	480,781	Aug. 16	1652	413	60	926
Compound engine	H. C. Reagan, Jr	488,250	Dec. 20	1681	420	61	1690
Compound engine	H. See	469,455	Feb. 23	2416	619	58	1023
Compound engine	R. C. Smith	485,568	Nov. 1	637	170	61	704
Compound engine	G. S. Strong	477,279	June 21	1670	{ 408 409 802 }	59	1795
Compound engine	G. S. Strong	481,773	Aug. 30	3296	{ 803 804 }	60	1271
Compound engine. Single-cylinder	E. J. Woolf	475,427	May 24	2457	626	59	1155
Compressing apparatus	L. A. Parish	473,472	Apr. 26	2325	{ 588 589 }	59	490
Compressing-engine. Compound	S. St. Clair	480,527	Aug. 9	1247	{ 313 314 380 381 }	60	831
Compressing or blowing engine	J. A. Galvin	484,495	Oct. 18	1498		61	327
Compressor	M. Erickson	466,334	Jan. 5	40	10	58	10
Compressor. Roller	J. L. Myers	476,233	May 31	3766	950	59	1422
Computing-machine	P. J. Landin	482,312	Sept. 6	650	155	60	1463

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Concentrating-table	J. Alves	471,412	Mar. 22	2746	700	58	1659
Concentrator	G. Gates	477,111	June 14	1377	336	59	1726
Concentrator	W. P. Ogden	488,528	Dec. 20	2137	529	61	1779
Concentrator	A. Schulenburg	473,644	Apr. 26	2616	659 660	59	516
Concentrator	J. Tulloch	471,319	Mar. 22	2599	659	58	1631
Concentrator	J. Tulloch	476,500	June 7	419	97	59	1519
Concentrator	J. Tulloch	486,622	Nov. 22	2293	598	61	1082
Concrete-mixer	G. F. and H. N. Gray	477,361	June 21	1806	442	59	1820
Concrete-mixing machine	W. C. Barr	468,290	Feb. 2	589	146 147	58	638
Concrete mixing machine	W. S. Hotchkiss	467,170	Jan. 19	1429	364 365	58	282
Concrete-mixing machine	E. L. Ransome	485,428	Nov. 1	430	115	61	660
Concrete, mortar, &c. Mixing-machine for	J. Skinner	475,618	May 24	2759	699	59	1214
Concrete pipe. Metal-brace-framed	O. A. Stempel	468,269	Feb. 2	556	136	58	631
Concrete post, door-step, table-top, &c.	O. A. Stempel	468,268	Feb. 2	554	136	58	631
Condenser	H. S. Blackmore	486,554	Nov. 22	2168	572	61	1059
Condenser	T. Craney	487,997	Dec. 13	1250	311	61	1586
Condenser	E. Theisen	477,471	June 21	1977	491	59	1855
Condenser	W. H. Worthen	466,550	Jan. 5	383	97	58	74
Condenser and feed-water heater	C. Grohman	485,031	Oct. 25	2383	612	61	519
Condenser and purifier. Steam	R. W. Dugan	485,004	Oct. 25	2334	602	61	509
Condenser for exhaust-steam	R. W. Dugan	467,715	Jan. 26	2300	584	58	460
Condenser. Fresh-water	J. F. Chase	475,036	May 17	1847	468	59	1020
Condenser-head	C. S. Onderdonk	487,036	Nov. 29	2999	772	61	1239
Condenser-head	S. H. Woodbridge	481,518	Aug. 23	2865	704	60	1171
Condenser. Sectional surface	E. Nelson	477,812	June 28	2532	635	59	1901
Condenser. Sectional surface	E. Nelson	477,813	June 28	2537	635 636	59	1901
Condenser. Steam	J. F. Fotters	480,572	Aug. 9	1311	328	60	845
Condenser. Steam	C. Grohman	479,271	July 19	1856	465	60	378
Condenser. Surface	T. J. Rayner	468,048	Feb. 2	214	52	58	566
Condensing apparatus	M. J. Reuber, E. G. Stone, and P. Fuchs.	488,664	Dec. 27	2351	562	61	1838
Condensing apparatus. Steam	W. E. Prall	475,795	May 31	3033	768	59	1279
Condensing apparatus. Steam	E. Pronty	467,246	Jan. 19	1527	389 390	58	307
Conductor. Anti-inductive	B. H. Wesslau	475,648	May 24	2801	709	59	1222
Conductor. Expanding	F. H. Moore	474,563	May 10	1100	281	59	860
Conductors. Cast joint for armored	F. M. Bennett	479,386	July 19	2053	512	60	428
Conduits. Cord-carrier for underground	S. R. Bradley	479,397	July 26	2077	521	60	447
Confectioner's tool	G. S. Collum	482,752	Dec. 27	2482	617	61	1864
Confectionery. Apparatus for the manufacture of tubular articles of	C. E. Gardiner	478,279	July 5	347	84	60	70
Confectionery-machine	T. Robertson	488,404	Dec. 20	1928	483 484	61	1738
Confectionery or other box	H. Buehl	487,085	Nov. 29	3079	791	61	1256
Conformator	A. S. Adler	482,911	Sept. 20	1623	406 407	60	1677
Contact-maker	D. Draper	470,994	Mar. 15	2109	542	58	1525
Converter	W. A. Baldwin	484,770	Oct. 25	1944	496	61	432
Converters. Lining for Bessemer	C. W. Bildt	484,286	Oct. 11	1162		61	250
Convertible chair	J. A. Nesmith	483,810	Oct. 4	431	106 107	61	89
Convertible chair	A. B. Stevens	480,636	Aug. 9	1424	355	60	866
Conveyance. Wheeled	D. Malden	470,841	Mar. 15	1882	482	58	1479
Conveyer	E. B. Cox	481,106	Aug. 16	2172	538	60	1026
Conveyer	J. H. Diel	474,002	May 3	186	44	59	674
Conveyer	C. W. Hunt	468,109	Feb. 2	302	73	58	582
Conveyer	T. L. Marvel	483,232	Sept. 27	2131	539	60	1792
Conveyer	G. W. McCaslin	486,789	Nov. 22	2560	667 668	61	1136
Conveyer	G. W. McCaslin	486,809	Nov. 22	2592	675	61	1143
Conveyer	J. H. Shull and G. S. Dorney	480,939	Aug. 16	1887	472	60	973
Conveyer	G. H. Tench	482,460	Dec. 20	2020	504	61	1757
Conveyer	J. H. L. Tuck	474,786	May 10	1443	366	59	927
Conveyer	P. C. Wilson	481,837	Aug. 30	3401	835	60	1290
Conveyer and screen	R. L. Hassell	479,742	July 26	2654	658	60	555
Conveyer. Blank	F. H. Hardman	477,116	June 14	1384	337	59	1727
Conveyer. Continuous-trough	J. Pollock	483,475	Sept. 27	2499	629	60	1862
Conveyer mechanism	F. A. Lockwood	467,943	Feb. 2	61	14	58	537
Conveyer or elevator. Endless	J. W. Reno	470,918	Mar. 15	1987	508	58	1500
Conveyer. Pneumatic	E. McConnell	477,692	June 28	2348	587	59	1947
Conveyer. Pneumatic	L. Schutte and J. B. Ladd	469,175	Feb. 16	1961	503	58	929
Conveyer. Spring	O. L. Jones	473,318	Apr. 19	2050	515	59	415
Conveyer sprocket device	M. Garland	480,010	Aug. 2	333	97	60	656
Conveyer-trough gate	J. M. Dodge	485,913	Nov. 8	1157	306	61	825
Conveying and hoisting device	E. G. Spillsbury	482,443	Sept. 13	84	212	60	1520
Conveying apparatus	T. S. Miller	474,047	May 3	264	61	59	688
Conveying apparatus	T. S. Miller	474,348	July 5	433	111	60	91
Conveying apparatus	C. M. North	470,948	Mar. 15	2034	520	58	1509
Conveying apparatus	C. M. North	480,039	Aug. 2	436	110	60	664
Conveying apparatus	I. N. Rowe	483,120	Sept. 20	1913	491	60	1744
Conveying mechanism	J. M. Dodge	476,615	June 7	587	140	59	1553
Conveying mechanism	J. M. Dodge	476,616	June 7	588	140 141	59	1553
Cooker	J. H. Gardner	482,898	Sept. 20	1006	403	60	1674
Cooker. Compound	C. McConalogue	472,304	Apr. 5	593	151	59	112
Cooker or boiler. Domestic	H. C. Joerden	478,331	July 5	422	103	60	85
Cooker. Steam	L. D. Fein	466,904	Jan. 12	976	249	58	185
Cooker. Steam	G. H. Grodhaus	470,562	Mar. 8	1448	376	58	1385
Cooker. Steam	I. S. Mower	485,819	Nov. 8	999	268	61	794
Cooker. Steam	F. O. Sundwall and E. Blakeslee	473,096	Apr. 19	1669	424	59	343
Cooker. Steam feed	R. S. Moore	471,488	Mar. 22	2856	726	58	1680

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Cooking apparatus.....	K. Becker.....	471,374	Mar. 22	2681	{ 682 683 684	58	1617
Cooking apparatus. Combined steam and hot-air.....	C. H. Dexter.....	475,678	May 24	2842	719	59	1230
Cooking apparatus. Electric.....	G. D. Burton and E. E. Angell.....	475,190	May 17	2084	527	59	1067
Cooking apparatus. Steam.....	R. C. Andersen.....	474,620	May 10	1185	301	59	875
Cooking by electricity. Apparatus for.....	G. D. Burton and E. E. Angell.....	475,187	May 17	2080	525	59	1066
Cooking or culinary vessel.....	J. P. Eustis.....	476,137	May 31	3594	908	59	1390
Cooking-pan.....	M. L. Hunt.....	466,416	Jan. 5	166	45	58	33
Cooking utensil.....	R. C. Andersen.....	474,619	May 10	1184	301	59	875
Cooking utensil.....	A. R. Isaacs.....	476,746	June 7	779	191	59	1592
Cooking utensil.....	G. W. Merk.....	471,058	Mar. 15	2194	565	58	1541
Cooking utensil.....	A. W. Obermann.....	487,291	Dec. 6	82	25	61	1338
Cooking utensil.....	J. D. Ross and E. Westcott.....	472,002	Mar. 29	3610	922	58	1831
Cooking utensil.....	T. A. Simons.....	478,243	July 5	295	72	60	59
Cooking utensil.....	S. Smith.....	478,376	July 5	494	119	69	97
Cooking-utensil attachment.....	P. Lee.....	473,399	Apr. 19	2202	553	59	445
Cooking utensil. Steam.....	C. F. Burnap.....	475,435	May 24	2467	629	59	1156
Cooking-vessel.....	R. C. Andersen.....	474,622	May 10	1188	302	59	876
Cooking-vessels. Fume drainer for.....	B. F. Fowler.....	481,901	Aug. 30	3504	858	60	1309
Cooler: See Air-cooler. Milk-cooler. Axle-cooler. Refrigerator water-cooler. Beer-cooler. Tumbler-cooler. Liquid-cooler. Water-cooler.							
Cooler.....	C. C. King.....	477,425	June 21	1898	{ 467 468	59	1839
Cooling apparatus.....	S. L. Smith.....	473,793	Apr. 26	2839	713	59	588
Cooling milk, meat, vegetables, &c. Device for.....	J. W. Smart and T. C. Cheatham.....	478,720	July 12	992	246	60	213
Coop.....	J. B. Cooper.....	472,615	Apr. 12	941	{ 242 243	59	192
Coop. Chicken.....	A. H. Kindle.....	479,514	July 26	2290	572	60	488
Coop. Folding.....	J. E. Marquis.....	482,644	Sept. 13	1193	289	60	1581
Coop or crate. Folding.....	G. Bender.....	480,914	Aug. 16	1832	462	60	967
Cop.....	S. W. Wardwell, Jr.....	486,745	Nov. 22	2485	{ 648 649	61	1122
Copies. Apparatus for producing manifold.....	W. M. Gordon.....	477,000	June 14	1201	291	59	1690
Coping.....	C. Axell.....	488,933	Dec. 27	2767	683	61	1923
Coping-machine.....	B. F. Haugh.....	467,720	Jan. 26	2307	586	58	461
Coping-machine.....	B. F. Haugh.....	467,861	Jan. 26	2530	{ 641 642	58	504
Copper and nickel pyrites. Treating.....	J. Strap.....	483,639	Oct. 4	182	.....	61	38
Copper by electricity. Apparatus for and process of refining.....	F. Farrel.....	485,618	Nov. 8	706	185	61	733
Copper from cupriferosus nickel ores. Separating.....	T. S. Hunt and J. Douglas.....	483,924	Oct. 4	601	.....	61	124
Copper matte. Treating.....	P. Manhes.....	470,384	Mar. 8	1183	.....	58	1334
Copper ores. Converter for.....	P. Manhes.....	470,644	Mar. 8	1564	407	58	1409
Copy books. Device for moistening the leaves of press.....	O. K. Truitt.....	485,592	Nov. 1	671	178	61	712
Copy-holder.....	W. O. Crane.....	471,101	Mar. 22	2271	584	58	1568
Copy-holder.....	J. V. McElhenie.....	471,224	Mar. 22	2464	626	58	1604
Copy-holder.....	H. A. Isberg.....	469,251	Feb. 23	2093	539	58	961
Copy-holder.....	W. C. Taylor.....	466,472	Jan. 5	262	66	58	50
Copy-press.....	F. E. Davenport.....	470,105	Mar. 1	690	169	58	1233
Copying and recording apparatus. Autographic.....	A. L. Peirce.....	472,743	Apr. 12	1128	290	59	226
Copying appliance.....	O. W. Anderson.....	483,679	Oct. 4	236	59	61	49
Copying compound. Transfer.....	E. Assmy.....	466,483	Jan. 5	276	.....	58	53
Copying device.....	J. C. Ingram.....	479,280	July 19	1870	468	60	392
Copying device. Manifold.....	L. G. Reynolds.....	467,019	Jan. 12	1153	293	58	227
Copying device. Manifold.....	L. G. Reynolds.....	475,155	May 17	2028	512	59	1055
Copying-machine.....	C. Maine.....	478,119	July 5	63	16, 17	60	15
Copying machine. Writing and print.....	M. Wright.....	477,482	June 21	1995	{ 495 496	59	1858
Copying-pad and binder.....	L. G. Reynolds.....	467,018	Jan. 12	1152	292	58	227
Copying-press.....	D. Healy.....	478,601	July 12	829	205	60	180
Copying-press.....	E. F. Verrill.....	484,748	Oct. 18	1897	484	61	409
Copying press. Letter.....	J. W. McCrone.....	476,061	May 31	3470	875	59	1367
Copying-presses. Blotter-bath for.....	F. F. Osborne.....	472,681	Apr. 12	1031	266	59	207
Copying written or printed documents executed in carbonaceous inks.....	G. H. Ball.....	468,777	Feb. 16	1365	.....	58	811
Cord-machine.....	G. H. Spaulding and F. L. Moore.....	473,369	Apr. 19	2146	{ 537 538	59	434
Cordage-manufacturing apparatus.....	H. M. Brooks.....	483,665	Oct. 4	217	54	61	44
Core-barrel. Collapsible.....	F. Chambers.....	478,921	July 12	1306	325	60	273
Core-box.....	M. A. Mills.....	484,940	Oct. 25	2236	576	61	490
Core-setter.....	J. D. Storie.....	482,394	Sept. 13	803	193	60	1507
Cores for journal-boxes. Machine for forming green-sand.....	W. B. Sterrit.....	470,518	Mar. 8	1390	363	58	1374
Cores. Machine for making green-sand.....	W. B. Sterrit.....	470,517	Mar. 8	1388	363	58	1373
Cores. Skeleton frame for sand.....	W. H. Cass.....	479,783	Aug. 2	14	4	60	585
Corer. Apple.....	W. H. Bontell.....	474,077	May 3	307	74	59	697
Corer, parer, and slicer. Combined.....	A. B. Brunell.....	475,031	May 17	1839	466	59	1018
Coring machine. Fruit.....	J. Adams.....	482,327	Sept. 6	682	{ 162 163	60	1469
Cork and corkscrew. Combined.....	M. Beust.....	476,777	June 14	833	205	59	1616
Cork-extracting device.....	S. D. Webb.....	474,788	May 10	1446	{ 366 367	59	928
Cork-extractor.....	J. M. Barnes.....	481,093	Aug. 16	2152	534	60	1022
Cork-extractor.....	R. B. Gilchrist.....	478,545	July 5	751	183	60	149
Cork-extractor.....	E. Lesser.....	467,232	Jan. 19	1518	388	58	305
Cork-extractor.....	L. C. Mumford.....	474,480	May 10	959	247	59	832
Cork-puller. Automatic.....	J. B. Bailly.....	466,451	Jan. 5	228	58	58	43
Cork. Treating.....	J. T. Smith.....	484,345	Oct. 11	1255	320	61	268
Corks from bottles. Device for removing.....	E. J. Lumley, S. D. Webb, and G. T. Jacobs.....	471,057	Mar. 15	2193	564	58	1541
Corkscrew.....	W. R. Clough.....	474,055	May 3	281	68	59	691

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di'g.	Vol.	Page.
Corn and cob crusher and grinder	F. S. Rich	471,828	Mar. 29	3374	{ 859 860	58	1784
Corn-chaff or cellulose. Machine for cleaning	T. J. Reed	472,548	Apr. 12	845	216	59	174
Corn-conveyer	J. and G. G. Healea	486,466	Nov. 22	2048	542	61	1035
Corn cutter or harvester	J. Kipp, Sr	479,815	Aug. 2	61	14	60	594
Corn cutting and shocking machine	G. D. Haworth	482,355	Sept. 13	738	{ 177 178	60	1494
Corn for domestic use. Machine for preparing green	P. S. Rich	474,762	May 10	1402	355	59	919
Corn-husker	O. E. and O. Beardsley	477,241	Dec. 6	7	2 3	61	1332
Corn-husker	G. A. Byor	488,538	Dec. 27	2151	531	61	1798
Corn-husker	M. Wilson	434,076	Oct. 11	827	{ 209 210	61	184
Corn-husking machine	M. and B. Colton	485,531	Nov. 1	575	154	61	690
Corn-husking machine	S. E., J., and W. W. Morral	484,808	Oct. 25	2009	{ 516 517	61	445
Corn-popper	T. Clark	475,666	May 24	2827	716	59	1927
Corn-popper	A. H. Gleason	471,994	Mar. 29	3600	919	58	1226
Corn-popper	A. B. Olson. (Reissue)	11,290	Nov. 29	3350	853	61	1306
Corn-popper	I. M. Palmer	482,832	Sept. 20	1487	370	60	1652
Corn-popper	G. Staley	468,102	Feb. 2	292	71	58	580
Corn-popper	D. Swenson	470,882	Mar. 15	1937	495	58	1491
Corn-popper	D. Swenson	471,152	Mar. 22	2356	602	58	1584
Corn-popper	D. Swenson	481,877	Aug. 30	3460	849	60	1302
Corn-popper. Portable	A. B. Olson	478,353	July 5	460	112	60	92
Corn-popping apparatus	N. B. Olson	480,779	Aug. 16	1648	413	60	926
Corn. Process of and apparatus for the manufac- ture of alimentary products from	H. Bates, Jr	476,599	June 7	565	134	59	1548
Corn-separating screen	C. and J. Closz	471,072	Mar. 15	2222	570	58	1546
Corn-sheller	G. N. Joss	469,523	Feb. 23	2527	649	58	1043
Corn-sheller	S. Stroup	484,474	Oct. 18	1465	{ 373 374	61	320
Corn-sheller. Separating	M. G. Shindle	472,181	Apr. 5	269	70	59	51
Corn-shellers. Extension-feed for	W. H. Rusb	483,239	Sept. 27	2141	{ 542 543	60	1794
Corn-shock loader	D. H. Good	480,767	Aug. 16	1630	{ 408 409	60	922
Corn-shocker	F. B. and J. T. Kendall	476,389	June 7	258	61	59	1488
Corn-shocker	T. J. Mason	479,124	July 19	1633	408	60	345
Corn-shocker	W. S. Munch	471,132	Mar. 22	2317	595	58	1577
Corn-thinner	J. L. Tandy	473,678	Apr. 26	2667	672	59	555
Corns. Device for removing	R. Viol	485,726	Nov. 8	886	238	61	771
Cornet-iron. Inside	C. E. Hart	471,610	Mar. 29	3020	769	58	1718
Corners, covers, and like parts for books, boxes, &c., of celluloid or kindred material. Making	A. C. Hafely	484,006	Oct. 11	733	184	61	165
Corners, covers, and like parts for books, boxes, and similar articles of celluloid or kindred material. Making	A. C. Hafely	488,630	Dec. 27	2296	568	61	1827
Cornet. Convertible	J. Vivien	478,666	July 12	915	227	60	197
Cornice and eaves-trough brake machine	J. M. Brown and N. G. Boggs	471,599	Mar. 29	3008	{ 765 766	58	1716
Cornice-press	F. M. Leavitt	476,946	June 14	1121	{ 269 270	59	1674
Corpses. Arm-rest for	T. Streeter	473,200	Apr. 19	1866	470	59	378
Corpses. Preserving	G. H. Hamrick	466,524	Jan. 5	345	86	58	67
Corrugating-machine	W. J. Plecker	473,019	Apr. 19	1552	395	59	322
Corrugating-machine	J. White	483,192	Sept. 27	2068	522	60	1780
Corset	W. P. Bigelow	481,294	Aug. 23	2516	618	60	1104
Corset	M. M. Bliss	472,613	Apr. 12	938	242	59	192
Corset	A. Bonchard	471,597	Mar. 29	3006	765	58	1716
Corset	S. Meier	472,931	Apr. 12	1396	358	59	280
Corset	N. E. Miles	475,882	May 31	3203	810	59	1312
Corset	V. H. Oberly	475,337	May 24	2315	593	59	1129
Corset	L. Schiele	479,573	July 26	2373	591	60	503
Corset	L. Schiele	479,574	July 26	2374	592	60	503
Corset	M. W. Sherman	479,312	July 19	1916	479	60	400
Corset	D. H. Warner	469,616	Feb. 23	2658	683	58	1070
Corset and dress-shield. Combined	J. S. Goldsmith	480,426	Aug. 9	1095	{ 273 274	60	800
Corset-boning implement	J. A. House	475,562	May 24	2676	630	59	1197
Corset-clasp	G. J. Pfarr	477,819	June 28	2550	638	59	1984
Corset-fastening	P. M. Burns and N. C. Bartholomew	470,541	Mar. 8	1421	371	58	1380
Corset-fastening	D. C. Cole	466,902	Jan. 12	973	248	52	194
Corset-fastening	C. R. Viehofer	472,087	Apr. 5	113	30	59	23
Corset-shield	E. Pearl	467,049	Jan. 12	1909	305	58	238
Corset-stay	J. F. J. Gunning	466,461	Jan. 5	244	62	58	46
Corset-steel clasp	L. A. Davis	479,492	July 26	2258	566	60	482
Corsets. Abdominal belt for	A. L. Weeks	477,976	June 28	2792	699	59	2032
Cot. Folding	C. M. Wagner	469,759	Mar. 1	144	37 38	58	1128
Cot. Spring and canvas	W. Miller	475,788	May 31	3024	766	59	1277
Cotton. Apparatus for and process of cleaning seed	W. P. Groom	469,560	Feb. 23	2586	662	58	1055
Cotton. Apparatus for elevating and cleaning seed	A. S. Robinson	470,403	Mar. 8	1216	310	58	1339
Cotton-bolls. Ripening	S. and S. W. Weiss	470,771	Mar. 15	1762	58	58	1457
Cotton-chopper	D. Balshaw	472,975	Apr. 19	1478	{ 377 378	59	305
Cotton-chopper	E. N. Bri-kell	486,661	Nov. 22	2354	616	61	1095
Cotton-chopper	H. K. and T. G. Cansler	467,915	Feb. 2	14	4	58	529
Cotton-chopper	J. Y. Dye	487,725	Dec. 13	799	204	61	1496
Cotton-chopper	E. A. Ellis and W. C. S. Wood	478,158	July 5	131	33	60	29
Cotton-chopper	I. E. Gay	476,628	June 7	609	146	59	1558
Cotton-chopper	I. E. Gay	487,831	Dec. 13	974	246	61	1533
Cotton-chopper	J. Kent and C. Hargett	469,027	Feb. 16	1774	452	58	891
Cotton-chopper	W. A. Nevel	487,935	Dec. 13	1147	287	61	1565
Cotton-chopper	J. A. Pinkston	467,623	Jan. 26	2147	546	58	431
Cotton-chopper	W. Smith	483,794	Oct. 4	409	102	61	86
Cotton-chopper	A. Whitley	488,592	Dec. 27	2238	554	61	1816

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. 'g.	Vol.	Page.
Cotton-chopper	C. W. Williams	476,586	June 7	538	128	59	1543
Cotton-chopper	E. A. Wright	479,693	July 26	2558	636	60	537
Cotton chopper and cultivator. Combined	L. H. Abernathy	479,083	July 19	1563	392	60	333
Cotton chopper and planter. Combined	F. H. Parker	484,337	Oct. 11	1244	517	61	266
Cotton cleaner and condenser	W. B. Wherry and W. F. Smith	476,710	June 7	721	177	59	1580
Cotton-cleaning machine	C. Young	482,669	Sept. 13	1228	299	60	1588
Cotton-elevator	W. C. Hodnett and J. D. Waggoner	466,685	Jan. 5	591	153	58	115
Cotton. Feeding mechanism for machinery for opening and preparing	J. C. Potter	482,194	Sept. 6	448	108	60	1423
Cotton. Feeding mechanism for machinery for opening, cleaning, and preparing	J. C. Potter	482,193	Sept. 6	446	108	60	1422
Cotton-gin	S. Z. Hall	483,216	Sept. 27	2104	533	60	1787
Cotton-gin attachment	E. C. Scott	475,987	May 31	3360	847	59	1343
Cotton-gin brush	S. B. Hall	482,478	Sept. 13	993	227	60	1530
Cotton-gin condenser	D. A. Sailor	474,799	May 10	1467	373	59	932
Cotton-gin. Huller	W. G. Beckwith	482,672	Sept. 13	1231	300	60	1588
Cotton-gin roll-box	E. C. Scott	475,988	May 31	3361	847	59	1343
Cotton-gin. Roller	W. Dearborn	471,076	Mar. 15	2228	571 572	58	1547
Cotton-gin. Roller	J. R. Montague and J. A. Pross	485,015	Oct. 25	2356	605 606 607	61	513
Cotton-gin. Saw	A. M. Crooker	475,206	May 17	2108	532 533	59	1072
Cotton-gin. Saw	A. S. Dukes	488,921	Dec. 27	2752	679	61	1919
Cotton-gins. Pneumatic feeder for	J. Cornelison	482,916	Sept. 20	1630	408	60	1679
Cotton-ginning apparatus	S. D. Murray	467,044	Jan. 12	1199	303	58	236
Cotton-handling device	W. E. Moffitt, J. L. Williams, and L. W. Bennett	468,548	Feb. 9	1007	258	58	730
Cotton. Machine for handling, cleaning, and distributing seed.	R. S. Munger	478,883	July 12	1344	308 309	60	261
Cotton opening and cleaning machine.	W. P. Groom	485,272	Nov. 1	175	52	61	609
Cotton opening and preparing machine	J. C. Potter	482,273	Sept. 6	575	136 137	60	1447
Cotton-opening machine	E. W. Kelley	470,937	Mar. 15	2016	516	58	1506
Cotton-picker	C. Ball	483,707	Oct. 4	276	69	61	58
Cotton-pickers, &c. Trunk for use with	R. L. Cunnock	478,990	July 19	1423	352	60	306
Cotton. Pneumatic conveyer for unloading	G. A. Stafford	481,414	Aug. 23	2738	673	60	1145
Cotton-press	P. B. Marsh	478,755	July 12	1051	259	60	224
Cotton-press	J. Price	474,482	May 10	963	248 249	59	833
Cotton-press	J. L. Pridemore	478,070	June 28	2946	735 736	59	2060
Cotton-press	D. A. Sailor	467,783	Jan. 26	2398	609	58	479
Cotton-press	J. E. Van Dyke and H. Stobaugh	488,641	Dec. 27	2311	572	61	1829
Cotton-press. Duplex	R. S. Munger	483,633	Oct. 4	173	43	61	36
Cotton. Process of and apparatus for ginning	W. P. Groom	469,559	Feb. 23	2583	662	58	1054
Cotton receiver. Seed	A. Schulze	478,473	July 5	630	153	60	125
Cotton-sack carrier	J. Warren and W. O. Johnson	471,042	Mar. 15	2172	559	58	1536
Cotton-scraper	M. R. and R. B. Vinson	470,457	Mar. 8	1308	337	58	1357
Cotton to gins. Apparatus for elevating, distributing, and feeding seed.	S. D. Murray	472,607	Apr. 12	928	240	59	190
Cotton to gins. Apparatus for feeding seed.	S. D. Murray	488,446	Dec. 20	1998	499 500	61	1752
Couch. Adjustable	C. Geertz	476,922	June 14	1075	259	59	1665
Couch and cradle. Combined folding	W. B. and C. K. Taliaferro	473,181	Apr. 19	1838	462	59	372
Couch. Convertible	J. M. Morrison	470,251	Mar. 8	929	230	58	1288
Counter	J. Gaetje	478,002	June 28	2846	712	59	2042
Counter and alarm. Automatic	T. C. Dexter	470,290	Mar. 8	1014	259	58	1305
Counter and pencil-holder	F. King	488,736	Dec. 27	2460	611	61	1859
Counterbalancing-collar	W. T. Webb	483,411	Sept. 27	2423	609	60	1846
Counter. Barrel and keg	J. Ostertag, Jr.	486,735	Nov. 22	2470	645	61	1119
Counter foot-railing	G. A. Schellinger	482,591	Sept. 13	1121	271	60	1568
Counter-protector	C. A. Schultz	472,771	Apr. 12	1167	299	59	233
Counter-rail, foot-bracket, and cuspidor. Combined	W. C. Huss	481,568	Aug. 30	2956	726	60	1205
Counter-shaft-supporting-jack	H. J. Garbutt	481,486	Aug. 23	2820	693	60	1162
Counter-stiffener	E. Brazier	485,604	Nov. 8	691	182	61	730
Counters, &c. Combined arm-rest and guard for	W. C. Huss	470,002	Mar. 1	541	134	58	1203
Counters. Foot-rail for	A. H. Herzog	470,348	Mar. 8	1124	288	58	1323
Countersink	L. K. and C. A. Williams	468,857	Feb. 16	1485	379	58	834
Countersinking-machine	C. Brada	485,485	Nov. 1	513	135	61	676
Coupling:							
See Air and steam coupling.	Hose-coupling.						
Air-brake coupling.	Insulating-coupling.						
Air-brake-pipe coupling.	Joint-coupling.						
Car-coupling.	Light-fixture coupling.						
Car and air-brake coupling.	Locomotive draw-bar coupling.						
Car and hose coupling.	Pipe-coupling.						
Eccentric-coupling.	Pipe-rod coupling.						
Electric coupling.	Rod-coupling.						
Electric-wire coupling.	Shaft-coupling.						
Friction-coupling.	Steam-coupling.						
Gas-main safety-coupling.	Stovepipe-coupling.						
Gun-rod coupling.	Sucker-rod coupling.						
	Thill-coupling.						
	Universal coupling.						
	Vehicle-spring coupling.						
	Whiffletree-coupling.						
	Wire coupling.						
Coupling	I. P. Doolittle	484,656	Oct. 18	1756	447	61	379
Coupling	C. W. Hunt	472,707	Apr. 12	1080	277	59	217
Coupling-hook	C. S. Higgins	476,013	May 31	3394	856	59	1350

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Coupling-rods. Art of and machine for manufacturing jaws for	J. T. Hambay	483,740	Oct. 4	324	81, 82	61	68
Cove	G. S. Mayhew	468,354	Feb. 9	704	175	58	669
Cover and adjustable ink-well	R. L. Boyd	479,132	July 19	1643	411	60	347
Cover. Extension	C. F. Shaw	468,833	Feb. 16	1445	368	58	827
Cover-fastener	R. W. Moore	467,949	Feb. 2	67	16	58	534
Cover fastener. Slip	T. Hertwig	474,525	May 10	1033	265	59	847
Cover for Kettles, &c.	J. Doty	485,095	Oct. 25	2474	636	61	538
Cover for kettles, &c.	J. S. Sheets	486,185	Nov. 15	1607	426	61	934
Cover-holder for tea-kettles, &c.	J. Musgrove	478,967	July 12	1379	339	60	287
Cover. Kettle	N. Cosman	479,490	July 26	2255	560	60	481
Cover. Kettle	J. Shilling, Jr.	484,824	Oct. 25	2034	521	61	450
Cover. Stove-kettle	M. I. and A. L. Reese	466,539	Nov. 22	2149	567	61	1035
Cow-bag protector	H. H. Chase	486,766	Nov. 22	2519	657	61	1128
Cow-tie	H. E. Kelley	469,254	Feb. 23	2103	540	58	962
Cracker-cabinet	F. C. Acker	472,020	Apr. 5	1	1	59	3
Cracker-machine	C. S. Fowler	474,168	May 3	434	105	59	722
Cracker-machine	J. W. Ringer	467,710	Jan. 26	2288	580	58	458
Cracker-machine valve mechanism	C. S. Fowler	485,863	Nov. 8	1068	284	61	807
Crackers, &c. Machine for cutting and shaping	E. Jordan	475,280	May 17	2220	569	59	1095
Cradle	J. H. and G. W. Meek	478,450	July 5	597	145	60	118
Cradle and chair. Combined	C. T. Freid	469,131	Feb. 16	1904	488	58	917
Crane	H. Aiken	471,307	Mar. 22	2583	655	58	1627
Crane	S. S. Babbitt	484,870	Oct. 25	2112	544	61	466
Crane	J. H. George	486,283	Nov. 15	1770	465	61	967
Crane	J. Kennedy	484,437	Oct. 18	1407	359	61	309
Crane	H. Sawyer	486,412	Nov. 15	1968	522	61	1006
Crane	W. G. Stringer	475,092	May 17	1941	491	59	1037
Crane	J. Vanes	473,682	Apr. 26	2673	673	59	557
Crane. Derrick	J. B. Anderson	479,730	July 26	2635	653	60	551
Crane. Hoisting	J. O. Richmond	471,898	Mar. 29	3162	885	58	1803
Crane. Hydraulic	H. C. Shaw	479,468	July 26	2205	553	60	472
Crane mechanism. Hydraulic	G. D. Bulmer	477,621	June 21	2231	558	59	1905
Crane or derrick	W. J. Bennetts	470,538	Mar. 8	1418	370	58	1379
Crane. Overhead traveling	J. R. Morgan	478,803	July 12	1139	281	60	241
Crane. Overhead traveling	J. R. Morgan	478,804	July 12	1141	282	60	242
Crane. Overhead traveling	J. R. Morgan	481,964	Sept. 6	62	15, 16	60	1346
Crane. Overhead traveling	J. R. Morgan	486,117	Nov. 15	1508	399	61	913
Crane. Overhead traveling	J. R. Morgan	488,716	Dec. 27	2431	603	61	1853
Crane. Overhead traveling	T. R., Sr., and J. R. Morgan	475,883	May 31	3204	810	59	1312
Crane. Swinging	J. W. Kinsman	488,076	Dec. 13	1396	347	61	1617
Crane. Traveling	W. H. Morgan	477,437	June 21	1922	474	59	1843
Crane-turning mechanism	C. Mercader	487,954	Dec. 13	1176	293	61	1571
Cranes. Brake for drums of overhead traveling	J. R. Morgan	483,467	Sept. 27	2488	626	60	1860
Crank arm and shaft	A. P. Morrow	485,350	Nov. 1	312	83	61	635
Crank-handle	G. W. Pelton	471,328	Mar. 22	2610	662	58	1633
Crank-handle fastening	T. H. Heard and W. K. Birkinshaw	481,262	Aug. 23	2456	605	60	1094
Crank mechanism	G. W. Meigs and E. Leyden	473,942	May 3	93	21, 22	59	655
Crank-pins. Means for securing collars to	S. K. Dickerson and C. D. Kee	479,406	July 26	2093	524	60	450
Crank-securing means	F. H. Bolte	483,342	Sept. 27	2323	584	60	1827
Crate	H. C. Burkhead	483,101	Sept. 20	1916	485	60	1738
Crate	E. A. Jeanes	485,466	Nov. 1	488	129	61	671
Crate	A. H. Ramsey	486,297	Nov. 15	1786	469	61	970
Crate	D. J. Rex	483,871	Oct. 4	521	131	61	108
Crate	F. B. Sites	484,059	Oct. 11	804	203	61	179
Crate. Egg	W. T. Fisher	487,144	Nov. 29	3171	812	61	1274
Crate for shipping baskets	G. W. Worden	473,047	Apr. 19	1601	407	59	330
Crate. Fowl	F. W. Ewert	478,930	July 12	1322	328	60	277
Crate-head	J. L. Empie	479,794	Aug. 2	30	7	60	588
Crate or coop. Shipper's folding	C. F. Baxter	479,545	July 26	2331	582	60	496
Crate. Poultry	H. C. Munger	472,903	Apr. 12	1350	348	59	271
Cravat-holder	H. Lehmann	478,342	July 5	437	107	60	87
Crayon. Combination	W. Q. Prewitt	471,191	Mar. 22	2410	613	58	1594
Crayon-machine	J. S. Cowtery, H. J. Curtis, and E. L. Liedke	476,038	May 31	3428	866	59	1358
Crayon-machine	C. H. Liedke	476,051	May 31	3450	870	59	1362
Crayon-molding machine	A. A. Fuchs	479,212	July 19	1768	443	60	371
Cream-separator. Centrifugal	C. A. Hult	473,005	Apr. 19	1530	390	59	318
Cream-tempering apparatus	J. Boyd	487,708	Dec. 13	765	196	61	1489
Cream-tester. Centrifugal	P. V. P. Berg	486,390	Nov. 15	1930	511	61	999
Creamer. Milk	V. W. Blanchard	475,658	May 24	2817	713	59	1225
Creasing and folding machine	J. Corbett	472,253	Apr. 5	386	101	59	72
Crematory. Garbage	J. C. Kessler	488,169	Dec. 13	1546	388	61	1647
Crematory. Garbage or refuse	A. G. Delanoy	479,405	July 26	2090	524	60	449
Crib and chair. Combined infant's	H. A. Hayden	483,218	Sept. 27	2107	514	60	1788
Crib. Folding	J. Perry	484,975	Oct. 25	2289	591	61	500
Crib. Folding	C. S. Rickard	477,311	June 21	1730	423	59	1206
Crimping-machine	J. C. Lockett	485,204	Nov. 1	77	24, 25	61	588
Crimping-machine	A. Rotté, P. and P. Gauthier	488,252	Dec. 20	1685	421	61	1691
Crimping-machine	W. H. Thomas and G. F. Reynolds	484,510	Oct. 18	1322	386	61	332

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	M nthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Crimping-machine	R. Whitaker	471,925	Mar. 29	3505	895	58	1811
Cross-head	W. Laycock	479,818	Aug. 2	64	15	60	594
Cross-head	J. B. Stanwood	487,895	Dec. 13	10-2	271	61	1553
Cross-tie. Metallic	J. M. Bordner	486,077	Nov. 15	1425	376	61	898
Cruzing-machine	T. A. Cook	480,711	Aug. 16	1551	386	60	904
Crucibles or other vessels. Process of and apparatus for controlling the discharge of molten contents of	A. J. Rogers	469,454	Feb. 23	2414	618	58	1022
Crupper	H. H. Palmer	486,537	Nov. 22	2147	567	61	1055
Crupper-strap fastener	F. L. Armas	475,655	May 24	2813	713	59	1225
Crupper-stuffing machine	B. A. Schuler	485,231	Nov. 1	117	36	61	597
Cruppers. Crimping-machine for	H. Leibe	477,014	June 14	1221	296	59	1694
Crusher:							
See Clod-crusher. Ore and coal crusher.							
Corn and cob crusher. Quartz-crusher.							
Meat-crusher. Rock-crusher.							
Ore-crusher. Stone-crusher.							
Crushing and grinding mill	G. S. Knapp	472,367	Apr. 5	563	145	59	106
Crushing-mill	F. A. Huntington	468,544	Feb. 9	1002	257	58	729
Crushing-mill	C. E. Philes	475,284	May 17	2227	571	59	1096
Crushing-mill	F. A. Wiswell	473,280	Apr. 19	1995	500	59	404
Crushing-roll	D. Brennan, Jr	488,867	Dec. 27	2664	660	61	1901
Crutch	R. M. Lamp	467,468	Jan. 19	1883	480	58	375
Crutch	R. M. Lamp	483,118	Sept. 20	1940	491	60	1743
Crutch	J. McGrain	467,675	Jan. 26	2226	566	58	446
Crutch-foot	H. Lanergan	483,931	Oct. 4	609	154	61	126
Crutch or cane tip	W. L. Scoville	483,174	Sept. 27	2039	515	60	1774
Crystallizing and setting box	F. W. Arvine	486,015	Nov. 8	1326	352	61	861
Cuff-fastener. Link	C. F. Jenks	476,540	June 7	473	112	59	1531
Cuff-holder	W. W. Anderson	474,803	May 17	1474	375	59	947
Cuff-holder	M. G. Cook	470,182	Mar. 8	828	204	58	1269
Cuff-holder	J. J. Culley	466,774	Jan. 12	754	196	58	153
Cuff-holder	N. B. Eccleston	472,343	Apr. 5	532	138	59	99
Cuff-holder	F. B. Gardner	478,101	July 5	37	12	60	10
Cuff-holder	W. Hay	487,527	Dec. 6	485	127	61	1461
Cuff-holder	H. W. Jones	482,311	Sept. 6	649	155	60	1462
Cuff-holder	L. S. Sampson	484,246	Oct. 11	1096	277	61	237
Cuff-holder	W. C. Shaw	474,648	May 10	1226	314	59	884
Cuff-holder	H. E. Snook. (Reissue)	11,253	July 12	1397	345	60	290
Cuff-link	A. T. Mason	469,885	Mar. 1	352	89	58	1169
Culinary apparatus	W. E. Lewis	473,400	Apr. 19	2203	553	59	445
Culinary apparatus	M. Marshfield	484,599	Oct. 18	1650	419	61	958
Culinary article	M. J. Denison	472,527	Apr. 12	823	209	59	170
Culinary boiler	J. L. Hawkins	467,180	Jan. 19	1902	486	58	379
Culinary utensil	J. Cloud	486,157	Nov. 15	1572	417	61	327
Culinary vessel	J. Snyder and F. Lockwood	485,993	Nov. 8	1292	343	61	854
Culinary vessel	H. F. Thurston	481,316	Aug. 23	2552	626	60	1110
Culinary vessel	S. Williams	470,090	Mar. 1	670	165	58	1229
Cultivating land. Implement for	T. C. Darby and J. E. Steevenson	466,663	Jan. 5	559	144	58	108
Cultivating machine	M. Amador	467,221	Jan. 19	1502	384	58	303
Cultivator	R. P. Ashurst	475,843	May 31	3132	794	59	1298
Cultivator	H. D. Babcock	473,491	Apr. 26	2355	597	59	496
Cultivator	J. Birch	487,978	Dec. 13	1206	301	61	1577
Cultivator	C. E. Bool	471,841	Mar. 29	3394	866	58	1788
Cultivator	G. W. Brown and O. A. Johnson	476,976	June 14	1164	282	59	1682
Cultivator	D. H. Bull	470,979	Mar. 15	2083	533	58	1520
Cultivator	W. T. and J. D. Calton	468,907	Feb. 16	1357	396	58	848
Cultivator	C. W. Clark	469,659	Feb. 23	2722	699	58	1084
Cultivator	A. Cowart	488,270	Dec. 20	1713	431	61	1696
Cultivator	G. W. Crawford	470,234	Mar. 8	908	224	58	1284
Cultivator	G. B. Davison	467,660	Jan. 26	2201	5-0	58	441
Cultivator	J. W. Denney and T. M. Hilsabeck	467,400	Jan. 19	1776	453	58	353
Cultivator	A. Ellis	478,790	July 12	1118	276	60	237
Cultivator	J. A. Everitt	467,226	Jan. 19	1510	386	58	304
Cultivator	J. W. Fawkes, Sr	474,377	May 10	798	208	59	802
Cultivator	L. S. Flatau	468,764	Feb. 9	1333	337	58	796
Cultivator	G. W. Forbes	468,986	Feb. 16	1708	435	58	877
Cultivator	J. Gedeohn	482,919	Sept. 20	1634	410	60	1680
Cultivator	S. S. Gerrish	485,271	Nov. 1	173	51, 52	61	608
Cultivator	E. E. Hatfield	471,218	Mar. 22	2455	624	58	1603
Cultivator	D. Hicks	467,374	Jan. 19	1739	444	58	346
Cultivator	C. H. Hilbert	469,140	Feb. 16	1919	491	58	920
Cultivator	J. H. Hunter	470,574	Mar. 8	1461	380	58	1388
Cultivator	J. M. Hurley and J. R. Westing	467,415	Jan. 19	1797	458	58	358
Cultivator	E. H. Jenkins	472,361	Apr. 5	552	143	59	104
Cultivator	C. Johnson and O. Olson	479,281	July 19	1871	468	60	392
Cultivator	J. Kirby	469,807	Mar. 1	229	58	58	1145
Cultivator	S. Landauer	476,659	June 7	651	158	59	1566
Cultivator	R. H. Little	472,734	Apr. 12	1115	286	59	223
Cultivator	J. G. Mallory and E. J. Youngs	482,746	Sept. 20	1366	338	60	1627
Cultivator	J. A. Martin	483,075	Sept. 20	1875	475	60	1730
Cultivator	W. S. Miller	485,108	Oct. 25	2488	639	61	541
Cultivator	G. Moore	478,624	July 12	858	211	60	186
Cultivator	W. C. Moore	485,705	Nov. 8	852	229	61	764
Cultivator	F. P. Morgan	487,933	Dec. 13	1146	286	61	1565
Cultivator	L. J. M. Nehf and G. W. Mitchell	469,588	Feb. 23	2627	673	58	1063
Cultivator	J. F. Nelson	477,995	Feb. 2	136	33	58	550
Cultivator	T. H. Noxon	474,114	May 3	399	96, 97	59	715
Cultivator	D. F. Oliver	470,502	Mar. 8	1367	357	58	1369

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cultivator	E. D. Owen	480,128	Aug. 2	588	150	60	694
Cultivator	W. H. Perkins and W. L. Cronenberg.	484,815	Oct. 25	2022	518	61	44c
Cultivator	J. W. Phillips	467,829	Jan. 26	2471	628	58	494
Cultivator	L. E. Ponton	472,813	Apr. 12	1226	314	59	245
Cultivator	A. F. Rinehart	467,382	Jan. 19	1749	446	58	348
Cultivator	J. D. Simmons	476,834	June 14	930	227	59	1635
Cultivator	W. Sobey	474,309	May 3	671	173	59	766
Cultivator	W. Sobey	481,208	Aug. 23	2351	579	60	1074
Cultivator	S. Swanson	468,271	Feb. 2	560	137	58	682
Cultivator	J. T. Thompson	466,383	Jan. 5	117	38	58	25
Cultivator	A. Tindall	480,529	Aug. 9	1250	314	60	832
Cultivator	E. Wages and S. H. Armstrong	483,031	Sept. 20	1816	461	60	1718
Cultivator	G. Wells	467,570	Jan. 26	2075	524	58	418
Cultivator	J. H. Wendel	487,807	Dec. 13	941	238	61	1525
Cultivator	A. E. Wilder	472,416	Apr. 5	636	163	59	119
Cultivator	W. E. Williams	469,109	Feb. 16	1879	481	58	912
Cultivator	F. R. Winter	469,311	Feb. 23	2195	562	58	979
Cultivator	B. F. Young, J. L. and P. S. Vogel	470,030	Mar. 1	578	144	58	1211
Cultivator adjusting device	H. H. Durr and H. D. Babcock	479,754	July 26	2671	663	60	558
Cultivator and harrow. Combined	J. S. Hickman	467,100	Jan. 12	1292	328	58	254
Cultivator and harrow. Combined	W. H. McCullers	467,863	Jan. 26	2533	642	58	504
Cultivator and planter. Combined	R. Hasson	486,712	Nov. 22	2436	634	61	1112
Cultivator and pulverizer	C. C. Reynolds	484,239	Oct. 11	1084	275	61	235
Cultivator and weed-cutter. Combined	C. C. and W. C. Spaulding	488,779	Dec. 27	2523	627	61	1872
Cultivator and weeder. Sulky	Z. Breed	473,229	Apr. 19	2009	505	59	407
Cultivator attachment	Z. A. Beecher	485,165	Nov. 1	11	3	61	575
Cultivator attachment	A. Dyer	482,729	Sept. 20	1331	326	60	1621
Cultivator attachment	A. S. Gilkey	481,667	Aug. 30	3108	758	60	1233
Cultivator. Beet	A. Lindgren	486,614	Nov. 22	2282	595	61	1079
Cultivator. Cotton	T. W. Brown	468,300	Feb. 2	610	153	58	641
Cultivator. Cotton	J. H. and H. E. Williams	475,101	May 17	1950	494	59	1039
Cultivator. Disk	A. G. Hill	473,257	Apr. 19	1957	491	59	397
Cultivator-fender support	G. W. Huddleston	468,418	Feb. 9	801	200	58	689
Cultivator. Field	G. Cordes	471,209	Mar. 22	2438	621	58	1600
Cultivator for listed corn	L. P. Schrader	482,321	Sept. 6	669	159	60	1466
Cultivator. Garden	A. J. Bruner	467,149	Jan. 19	1401	358	58	283
Cultivator. Garden	A. J. Bruner	487,113	Nov. 29	3132	801	61	1265
Cultivator. Hand	R. O. Osborn	482,693	Sept. 13	1272	312	60	1597
Cultivator. Hand	T. T. Rodes	478,468	July 5	624	152	60	123
Cultivator, harrow, horse-hoe, and vine-puller. Combined	A. Pease	476,299	June 7	109	26	59	1459
Cultivator-hoe. Hand	G. S. Dennis	485,372	Nov. 1	347	93	61	643
Cultivator. Listed corn	J. H. Donner	487,612	Dec. 6	600	154	61	1441
Cultivator. Listed corn	A. Woolstoncroft	488,345	Dec. 30	1840	460	61	1790
Cultivator or plow	J. L. Kert	477,552	June 21	2108	524	59	1851
Cultivator. Orchard	J. E. Daly and A. A. Neil	482,081	Sept. 6	261	63	60	1387
Cultivator. Orchard	J. Schuman	474,763	May 10	1403	356	59	919
Cultivator replanting attachment	J. H. Rowlett	473,964	May 3	129	29	59	662
Cultivator replanting attachment	R. C. Summers and W. Bolinger	479,998	Aug. 2	369	92	60	951
Cultivator. Riding	B. F. Butler	477,194	June 14	1510	370	59	1753
Cultivator. Rotary	S. Gasser	479,800	Aug. 2	39	10	60	589
Cultivator. Rotary	W. H. Waggoner	467,068	Jan. 12	1233	312	58	242
Cultivator-shovel	C. A. Anderson	472,970	Apr. 19	1463	375	59	305
Cultivator-shovel	S. M. Graumlich	484,789	Oct. 25	1981	505	61	440
Cultivator. Straddle-row	R. C. Buckley	486,027	Nov. 8	1341	356	61	864
Cultivator-tooth	M. J. Cheney and H. Berch	482,226	Sept. 6	498	119	60	1432
Cultivator-tooth	J. S. Worcester	481,129	Aug. 13	2207	546	60	1033
Cultivator. Tree	W. W. Leach	475,124	May 17	1986	503	59	1047
Cultivator trip device	J. G. Hall	487,218	Nov. 29	3288	838	61	1295
Cultivator. Weed-cutting	W. R. Burbridge	484,405	Oct. 18	1351	345	61	299
Cultivator. Wheel	D. E. Barton	484,513	Oct. 18	1526	387	61	332
Cultivator. Wheel	F. Bateman	472,781	Apr. 12	1183	303	59	236
Cultivator. Wheel	T. J. Fitzsimons	488,584	Dec. 27	2686	665	61	1906
Cultivator. Wheel	A. Lindgren	469,154	Feb. 16	1937	496	58	924
Cultivator. Wheel	A. E. Morey	479,913	Aug. 2	203	51	60	622
Cultivator. Wheel	R. P. Morton	466,421	Jan. 5	179	47	58	34
Cultivator. Wheel	E. A. Ovenshire	487,882	Dec. 13	1063	267	61	1549
Cultivator. Wheel	F. W. Vaughan	476,707	June 7	718	177	59	1579
Cultivators. Beam for	F. P. McFeely	467,296	Jan. 19	1621	413	58	324
Cultivators. Spring-tooth attachment for	D. E. Herrington	481,946	Sept. 6	40	9	60	1342
Cup:							
See Anemometer-cup.	Paint and varnish cup.						
Heating-cup.	Sponge-cup.						
Lubricator-cup.	Umbrella drip-cup.						
Oil-cup.							
Cups, mugs, &c. Drinking attachment for	J. S. Howard	478,861	July 12	1220	303	60	257
Cupping-glass with electrical attachment	F. Thomas	474,977	May 17	1757	445	59	1002
Cupola-furnace	C. Sahler	468,306	Feb. 2	623	155	58	644
Curb-bit	L. J. Jimenez	472,297	Apr. 5	453	117	59	85
Curb-bit. Ornamental	J. W. James	478,868	July 12	1227	304	60	258
Curbing block. Street	S. A. Webb	477,721	June 28	2391	597	59	1955
Curd-cutter	A. C. Whiting	487,811	Dec. 13	947	239	61	1527
Curling-iron	M. Campbell. (Reissne)	11,237	Apr. 26	3018	760	59	623
Curling-iron	F. H. Deknatel	481,348	Aug. 23	2599	638	60	1118
Curling-iron	W. and R. A. Lonsdale	484,743	Oct. 18	1889	481	61	408
Curling-iron	R. Nicol, Jr.	469,375	Feb. 23	2205	591	58	1000
Curling-iron. Electric	A. F. Godefroy	469,135	Feb. 16	1911	489	58	918
Curling-iron. Electrical	A. D. Gardner	484,532	Oct. 18	1554	394	61	338

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Curling-iron. Electrically-heated.	A. H. Watson and F. E. Antonini	475,169	May 17	2050	516	59	1059
Curling-iron holder.	G. F. McIntosh	478,123	July 5	67	18	60	15
Curling-iron shield.	T. Iremonger, Jr.	482,360	Sept. 13	746	179	60	1496
Curling or crimping iron.	F. S. Sleeper	482,501	Sept. 13	978	237	60	1540
Curling-tongs.	E. Fontaine	472,446	Apr. 5	685	175	59	129
Curling-tongs.	G. L. Thompson	482,702	Sept. 13	1287	315	60	1600
Curling-tongs heater.	A. W. Kent	478,437	July 5	579	140	60	114
Curling-tool.	B. Westervelt	468,445	Feb. 9	837	211	58	696
Current-alternator.	H. L. Tyler	476,843	June 14	944	230	59	1639
Current-director.	J. F. McElroy	486,643	Nov. 22	2326	609	61	1090
Current generator. Alternating.	T. A. Edison	470,928	Mar. 15	1999	511	58	1503
Current generator. Pulsating.	H. N. Marvin.	479,951	Aug. 2	275	67	60	634
Current generators. Regulation of alternating.	G. Pfannkuche	485,054	Oct. 25	2410	620	61	524
Current-motor.	F. Dinwiddie	478,316	July 5	400	96, 97	60	80
Current-motor.	L. C. Neal	471,564	Mar. 29	2954	753	58	1707
Current motor. Alternating.	O. T. Blathy	482,974	Sept. 20	1721	434	60	1697
Current motor. Alternating.	C. S. Bradley	488,306	Dec. 20	1768	446	61	1707
Current motor. Alternating.	L. Gutmann	467,537	Jan. 26	2016	510 511	58	408
Current motor. Alternating.	T. H. Hicks	479,187	July 19	1734	435	60	364
Current motor. Alternating.	W. Stanley, Jr., and J. F. Kelly	479,675	July 26	2528	630	60	532
Current motor. Alternating.	W. Stanley, Jr., and J. F. Kelly	479,676	July 26	2530	630	60	532
Current motor. Alternating.	W. Stanley, Jr., and J. F. Kelly	479,727	July 26	2630	653	60	550
Current motor. Alternating.	W. Stanley, Jr., and J. F. Kelly	483,816	Oct. 4	442	110	61	81
Current motor. Alternating.	E. Thomson	471,155	Mar. 22	2360	603	58	1584
Current motor. Alternating.	M. J. Wightman	476,346	June 7	185	44	59	1472
Current-regulator.	J. F. McElroy	486,644	Nov. 22	2328	609	61	1090
Current transformer. Continuous.	E. Thomson	485,669	Nov. 8	793	211 212	61	751
Current-wheel.	H. C. Gardner	485,624	Nov. 8	779	188	61	736
Currents. System of distribution for polyphase alternating.	C. S. Bradley	488,307	Dec. 20	1711	446	61	1707
Currycomb.	G. S. Burnett and T. Sweeney	472,521	Apr. 12	807	208	59	166
Currycomb.	A. C. Decker	476,189	May 31	3681	930	59	1407
Currycomb.	A. C. Decker	484,848	Oct. 25	2082	535	61	459
Currycomb.	A. C. Decker	484,849	Oct. 25	2083	536	61	459
Currycomb.	A. Fager	486,827	Nov. 22	2629	686	61	1152
Currycomb.	J. Hunter	488,923	Dec. 27	2755	680	61	1920
Currycomb.	T. H. Ireland.	480,196	Aug. 2	697	176	60	714
Currycomb.	G. W. Neuls	487,580	Dec. 6	556	143	61	1432
Currycomb.	A. C. Rulofson	472,550	Apr. 12	818	217	59	175
Currycomb.	C. J. and W. Schweim	488,291	Dec. 20	1751	440	61	1703
Currying and brushing machine.	S. A. Johansson	474,325	May 3	701	181	59	772
Curtain.	N. J. Felix	471,215	Mar. 22	2453	623	58	1602
Curtain.	C. D. Vinton	471,321	Mar. 22	2601	660	58	1631
Curtain attachment.	J. C. Moore, B. and C. L. Wroughton	469,164	Feb. 16	1951	499	58	926
Curtain-fixture.	C. M. Banks	481,684	Aug. 30	3135	765	60	1238
Curtain-fixture.	F. H. Bassett	482,716	Sept. 20	1316	321	60	1618
Curtain-fixture.	W. Donlin	471,962	Mar. 29	3560	909	58	1821
Curtain-fixture.	M. D. Gaines	485,270	Nov. 1	172	51	61	608
Curtain-fixture.	A. M. Haswell	471,114	Mar. 22	2293	589	58	1572
Curtain-fixture.	W. A. Saul	487,970	Dec. 13	1194	298	61	1574
Curtain-fixture.	C. W. Smith	477,232	June 21	1595	391	59	1780
Curtain-fixture.	S. H. Snavely	481,978	Sept. 6	85	22	60	1351
Curtain-fixture.	G. E. Swan	467,692	Jan. 26	2254	573	58	451
Curtain-fixture.	H. M. Sweeney	472,832	Apr. 12	1250	320	59	249
Curtain-hanger.	J. W. Leslie	476,469	June 7	372	86	59	1509
Curtain-mover.	I. M. Askren	469,803	Mar. 1	224	57	58	1145
Curtain-ring.	J. S. and G. Clayton	468,105	Feb. 2	297	72	58	581
Curtain-rod.	H. A. Fowler and J. H. Lingley	466,940	Jan. 12	1028	262	58	204
Curtain-rod.	H. A. Fowler, J. H. Lingley, and C. W. Dodge.	468,987	Feb. 16	1710	435	58	878
Curtain-rod.	S. R. Scottron	481,720	Aug. 30	3204	782	60	1252
Curtain-rods. Combined socket and bracket for.	C. W. Lawrence	484,098	Oct. 11	765	193	61	171
Curtain roller. Window.	B. F. Wilkinson	473,990	May 3	165	39	59	670
Curtain-stick and guide.	G. L. Bailey and W. W. Cole	468,861	Feb. 16	1491	380	58	835
Curtain-stretcher and clothes-horse. Combined.	E. N. Kenworthy	484,660	Oct. 18	1765	449	61	382
Curtain supporter and fittings.	G. Smith	473,131	Apr. 19	1739	439	59	354
Cushion.							
See Bed-slat cushion.							
Cuspidor.	H. B. Millard	473,634	Apr. 26	2602	655	59	543
Cuspidor.	C. R. Price	486,892	Nov. 29	2753	715	61	1191
Cut-off and flue-tightener.	G. Wiedeko	485,442	Nov. 1	449	120	61	664
Cut-off for water-troughs. Automatic.	W. S. Reagan	477,226	June 21	1585	388	59	1779
Cut-off for watering-troughs.	C. F. Herman	473,749	Apr. 26	2776	698	59	576
Cut-off governor. Automatic.	H. Chadbourne	467,080	Jan. 12	1259	318	58	247
Cut-off. Rain-water.	W. C. Maxfield	481,635	Aug. 30	3059	747	60	1224
Cut-off. Water.	G. Henkel	470,489	Mar. 8	1353	352	58	1366
Cut-off. Water-spout.	P. W. Armstrong	469,989	Mar. 1	523	130	58	1200
Cut-out.	J. B. Murphy	468,101	Feb. 2	287	70	58	580
Cut-out. Automatic.	C. E. Sanford	484,865	Oct. 25	2102	541 542	61	464
Cut-out. Ceiling-rosette.	J. Pass and A. P. Seymour	481,624	Aug. 30	3043	743	60	1220
Cut-out. Safety.	R. Furgang	480,009	Aug. 2	392	97	60	656
Cut-out. Safety.	M. Kerstein	470,382	Mar. 8	1180	302 303	58	1333
Cut-out. Safety.	M. Thum	472,084	Apr. 5	110	30	59	22
Cut-out switch.	W. B. Cleveland	478,689	July 12	949	235	60	204
Cut-out. Thermal.	A. P. Seymour	481,246	Aug. 23	2423	598	60	1088
Cutlery-die.	T. Shaw	479,668	July 26	2519	627	60	530
Cutlery. Die and machine for rolling.	I. Hirsch	475,315	May 24	2269	584	59	1120
Cutlery. Hardening.	G. E. Smith	487,337	Dec. 6	161	46	61	1352
Cutlery-hardening apparatus.	G. E. Smith	477,785	June 28	2491	624	59	1974
Cutlery. Manufacturing.	I. Hirsch	475,314	May 24	2268	59	1120	

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Cutlery rolling-machine	I. Hirsch	480,325	Aug. 9	932	236	60	771
Cutter:							
See Ant-hill cutter.	Hog-nose cutter.						
Apple-cutter.	Kraut-cutter.						
Axle-cutter.	Meat-cutter.						
Bale-tie cutter.	Meat and vegetable cut-						
Band-cutter.	ter.						
Biscuit-cutter.	Miter-cutter.						
Boiler-tube cutter.	Paper-cutter.						
Bolt-cutter.	Peach-cutter.						
Bone-cutter.	Pipe-cutter.						
Brick and tile cutter.	Planing-cutter.						
Broom-shoulder cut-	Plug-cutter.						
ter.	Potato-cutter.						
Buttonhole-cutter.	Root-cutter.						
Butter-cutter.	Rotary cutter.						
Buttercup-cutter.	Rotary stock-cutter.						
Cake-cutter.	Sod-cutter.						
Cam-cutter.	Spoke-tenon cutter.						
Chain-cutter.	Stalk-cutter.						
Cheese-cutter.	Straw-cutter.						
Cigar-bunch cutter.	Straw or ensilage cutter.						
Cigar-tip cutter.	Straw or feed cutter.						
Coal-cutter.	Strawberry-vine cutter.						
Corn-cutter.	Thread-cutter.						
Curd-cutter.	Tile or brick cutter.						
Dovetail-cutter.	Tobacco-cutter.						
Feed-cutter.	Tube-cutter.						
Fodder-cutter.	Vegetable-cutter.						
Fruit-cutter.	Veneer-cutter.						
Fruit or vegetable	Vine-cutter.						
cutter.	Wall-paper cutter.						
Gear-cutter.	Washer-cutter.						
Glass-tube cutter.	Weed-cutter.						
Cutter	T. Hughes	467,414	Jan. 19	1796	458	58	357
Cutter and cutter-holder	E. W. Cooke	469,625	Feb. 23	2669	686	58	1073
Cutter-bar	W. S. Sutton	468,563	Feb. 9	1064	272	58	740
Cutter-bar	G. A. Vandament	481,318	Aug. 23	2555	627	60	1111
Cutter-bar-operating device.	D. Kent	468,624	Feb. 9	1122	286	58	752
Cutter for gaskets, &c	J. H. Shields	487,894	Dec. 13	1081	270	61	1553
Cutter-head	B. F. Barnes	470,462	Mar. 8	1313	338	58	1358
Cutter-head	C. L. Goehring	480,463	Aug. 9	1157	290	60	813
Cutter-head	E. S. Juddkins	487,015	Nov. 29	2969	765	61	1233
Cutter-head	S. J. Shimer	476,563	June 7	563	{119 120}	59	1537
Cutter-head and knife	C. Grotz	481,861	Aug. 30	3436	843	60	1297
Cutter-head knife	S. J. Shimer	486,901	Nov. 29	2792	724	61	1200
Cutter-head. Rosette-turning	R. B. Moore	484,221	Oct. 11	1052	267	61	228
Cutter-head. Rotary	J. T. Rhodes	480,137	Aug. 2	605	{153 154}	60	698
Cutter-head. Rotary	F. H. Van Houten	487,436	Dec. 6	346	89	61	1390
Cutter or drill applicable to coal, &c	H. Renold, W. T. Goolden, L. B. At- kinson, and S. C. G. Gold.	481,656	Aug. 30	3092	754	60	1230
Cutting and gripping tool.	C. Timm and A. Johnson	471,445	Mar. 22	2794	713	58	1668
Cutting and scouring device. Combined.	E. K. Patten	479,332	July 19	1939	485	60	405
Cutting circular pieces from lumber or other mate- rials. Machine for	J. S. Piper	475,247	May 17	2172	553	59	1084
Cutting fustians or other weft-pile fabrics. Machine for	J. J. Mann and J. H. Smith	485,958	Nov. 8	1234	326	61	841
Cutting-head	W. B. Huther	486,874	Nov. 29	2709	706	61	1183
Cutting-knife	W. E. Taft	478,381	July 5	499	121	60	98
Cutting-machine. Rotary-blade	F. Kircher	480,387	Aug. 9	1032	259	60	790
Cutting off machine	J. A. Gilmore	480,461	Aug. 9	1153	289	60	812
Cutting right-angled structural shapes. Machine for.	R. W. Grace	479,066	July 19	1536	{383 384}	60	328
Cutting square holes. Device for	G. C. Gillespie	477,528	June 21	2073	516	59	1874
Cutting the pile of fustian or other pile fabrics. Ma- chine for	J. J. Mann	486,050	Nov. 8	1378	366	61	870
Cyanides. Making	G. T. Beilby	484,579	Oct. 18	1621	{411 412}	61	352
Cycle-brake	R. M. Woodhead and P. Angois	474,051	May 3	272	66	59	690
Cycle. One-wheeled	J. D. Mattison	475,130	May 17	1994	505	59	1048
Cycle-saddle	J. B. Brooks	484,289	Oct. 11	1165	236	61	250
Cycle-saddle	J. B. Brooks	484,290	Oct. 11	1166	297	61	250
Cycle-saddle	C. W. Saladee	475,613	May 24	2752	698	59	1213
Cycle-saddle post	C. E. Hadley	485,865	Nov. 8	1072	285	61	808
Cycle-stand	W. M. Justice	488,395	Dec. 20	1917	420	61	1736
Cycle-vehicle	C. W. Saladee	486,056	Nov. 8	1388	368	61	872
Cycle-vehicle saddle	C. W. Saladee	486,197	Nov. 15	1621	430	61	936
Cycle-wheel	N. E. Bennett	473,995	May 3	172	41	59	671
Cycle-wheel	R. C. Fay	484,952	Oct. 25	2248	579	61	493
Cycle-wheel	J. Vetterlein	476,433	June 7	323	74	59	1590
Cycle-wheel	C. E. W. Woodward	477,397	June 21	1861	458	59	1832
Cycle-wheel	C. E. W. Woodward	483,373	Sept. 27	2367	593	60	1886
Cyclometer	T. A. Teate	468,371	Feb. 9	727	180	58	674
Cyclometer	F. C. Weston	481,608	Aug. 30	3021	738	60	1216
Cyclometer for velocipedes. Electric	J. Butcher	478,026	July 5	18	6	60	6
Cylinder and cylinder-cap	R. A. Owen	486,680	Nov. 22	2383	623	61	1101
Cylinder-casing	E. W. Mackenzie-Hughes	473,469	Apr. 26	2323	587	59	490
Cylinder engine. Multiple	E. B. Benham	487,084	Nov. 29	3072	{788 789 791}	61	1254
Cylinder-lock	H. Morton	469,946	Mar. 1	453	113	58	1187

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Cylinder-lock	J. B. Price	477,021	June 14	1229	298	59	1696
Cylinder-lock	J. B. Price	481,421	Aug. 23	2714	668	60	1141
Cylinder-lock	R. Sargent	487,969	Dec. 13	1193	298	61	1574
Cylinder-lock	E. C. Smith	474,348	May 3	747	{ 194 195 }	59	780
Cylinder-lock	C. D. Williams	477,036	June 14	1255	304	59	1701
Cylinder locks and keys	H. G. Voight	480,299	Aug. 9	889	{ 225 226 }	60	764
Cylinder mold. Closed.	F. X. Black	481,295	Aug. 23	2517	619	60	1104
Cylinders of strips of sheet material and the process thereof. Machine for making hollow	J. MacFarlane	483,742	Oct. 4	328	83	61	69
Dado-head	J. W. Oliver	476,677	June 7	672	163	59	1570
Dado or molding bit	E. Gollins	487,921	Dec. 13	1128	282	61	1561
Dam	O. Van Oostrum	476,706	June 7	717	176	59	1579
Dam or levee	C. E. Wright	479,543	July 26	2328	581	60	495
Dam, weir, or retaining-wall	J. D. Derry	474,988	May 17	1777	449	59	1006
Dampening-machine	F. H. Weems	488,102	Dec. 13	1431	358	61	1624
Damper	C. A. Conch	486,855	Nov. 29	2679	701	61	1177
Damper	L. M. Devore	475,079	May 17	1910	485	59	1032
Damper	W. A. Kemp	468,285	Feb. 2	582	145	58	637
Damper	W. A. and A. E. Kemp	468,284	Feb. 2	581	145	58	636
Damper	J. Mayo	475,131	May 17	1995	505	59	1049
Damper	W. H. Packham	485,053	Oct. 25	2410	620	61	524
Damper. Automatic.	J. M. Bradbury and A. B. Griswold	472,102	Apr. 5	144	39	59	27
Damper. Automatic	C. D. Howard	480,263	Aug. 9	832	212	60	753
Damper-controller	J. V. Stout	466,450	Jan. 5	226	58	58	43
Damper-controller. Automatic.	F. E. Chatard	467,153	Jan. 19	1405	359	58	284
Damper. Fireplace chimney-flue	F. McConnell	475,995	May 31	3358	846	59	1342
Damper for furnaces, &c. Automatic	D. W. Glendinning	497,521	Dec. 6	473	124	61	1414
Damper. Furnace.	D. McCowatt	486,733	Nov. 22	2467	644	61	1118
Damper-operating mechanism. Time-	O. Briggs, Jr	478,562	July 12	775	189	60	169
Damper-regulator	L. Bellamy	484,529	Oct. 18	1550	{ 393 394 }	61	337
Damper-regulator	C. C. Koster	486,345	Nov. 15	1862	490	61	924
Damper-regulator	J. E. Spencer	479,854	Aug. 2	118	29	60	805
Damper-regulator. Automatic	C. D. Howard	488,895	Dec. 27	2700	669	61	1909
Damper-regulator. Automatic steam-	G. Newton	478,127	July 5	71	19	60	16
Damper-regulator. Furnace.	L. F. Smith	477,275	June 21	1665	407	59	1794
Damper-regulator. Pipe-	L. F. Smith	477,276	June 21	1667	407	59	1794
Damper-regulator. Stove-	J. H. Wood	486,314	Nov. 15	1815	478	61	976
Damper. Self-acting wind-proof	A. J. Gintner	479,801	Aug. 2	42	10	60	590
Damper. Stove-	E. D. Nellis	470,439	Mar. 8	1274	326	58	1351
Damper. Stovepipe-	L. M. Devore	478,414	July 5	517	133	60	108
Damper. Stovepipe-	E. A. Hoefer	471,718	Mar. 29	3192	814	58	1750
Damper. Stovepipe-	A. S. Newby	476,674	June 7	669	163	59	1569
Damper. Water-cooled.	S. B. Dexter	474,227	May 3	530	129	59	740
Dandy-roll	C. B. Richardson and W. H. Pool	473,180	Apr. 19	1836	462	59	372
Dandy-roll	A. J. Tucker	476,968	June 14	1155	{ 278 279 }	59	1680
Dandy-rolls. Wire-gauze for	J. Pohle	469,716	Mar. 1	69	20	58	1112
Darning apparatus	A. Hardy	471,480	Mar. 22	2847	724	58	1678
Darning implement	A. Böcher	475,659	May 24	2818	714	59	1225
Darning-last	S. H. Garwood	482,351	Sept. 13	731	176	60	1493
Dash-bar clip	A. Searls	475,811	May 31	3075	778	59	1237
Dash-board	C. W. Gooding and B. Crossan	472,450	Apr. 5	692	176	59	131
Dash-pot	W. A. Harris	469,697	Mar. 1	42	14	58	1106
Dash-pot. Steam	A. J. Bates	473,994	May 3	170	40	59	671
Dash. Vehicle.	W. L. Hawes	474,634	May 10	1202	306	59	879
Dash. Vehicle.	A. Lobdell	468,569	Feb. 9	1044	265	58	737
Data. Instrument for facilitating the use of tabulated	L. D. Boyer	480,245	Aug. 9	790	201	60	743
Davit. Boat.	H. E. Bowring	475,923	May 31	3257	822	59	1323
Davit-hook	S. B. Butler	483,421	Sept. 27	2435	613	60	1449
Dead-light	A. McDougall	469,913	Mar. 1	395	99	58	1177
Decanting bottles. Apparatus for	F. Moog	485,050	Oct. 25	2407	619	61	524
Decapping and recapping tool	J. H. Barlow	486,659	Nov. 22	2451	614	61	1094
Deck-cleaning machine	S. Lowberg	478,443	July 5	587	143	60	116
Decoration. System of interior art	J. Abramson	466,995	Jan. 12	1116	{ 282 283 }	58	220
Decorative films. Device for applying	W. H. Coe	474,629	May 10	1196	304	59	878
Decorative films. Packing	W. H. Coe	472,252	Apr. 5	385	101	59	72
Decorticating fiber-bearing plants. Machine for	J. von Oven and C. F. Panknin	475,794	May 31	3032	768	59	1279
Decorticating fibrous plants. Machine for	C. Lanaux and M. E. Rendon	468,249	Feb. 2	511	126	58	625
Decorticating grain	J. Sloan	484,258	Oct. 11	1115	282	61	241
Decorticating jute, ramie, and other fibrous plants. Machine for	F. B. Fremerey	472,988	Apr. 19	1506	{ 383 384 385 }	59	313
Decorticating-machine	R. A. Baumgartner	471,372	Mar. 22	2680	{ 681 682 }	58	1647
Decorticating ramie, &c. Machine for	P. P. Faure	473,110	Apr. 19	1708	432	59	348
Decorticating ramie, &c. Machine for	W. T. Forbes	480,084	Aug. 2	519	132	60	681
Decorticating rhea, &c. Machine for	J. Longmore and W. L. Watson	472,606	Apr. 12	926	239	59	190
Decoy	F. A. and G. Thorn	477,084	June 14	1342	325	59	1719
Decoy-duck	J. T. Henderson and C. M. Lund	470,564	Mar. 8	1449	377	58	1385
Dehornor	J. M. Hills	480,932	Aug. 16	1879	409	60	972
Dehornor	W. H. Newton	472,139	Apr. 5	202	54	59	38
Dehorning implement.	A. C. Brosius	480,246	Aug. 9	791	202	60	743
Dehorning implement.	W. A. Campbell	468,236	Feb. 2	494	121	58	621
Dehorning implement.	E. M. Sammel	474,696	May 10	1305	333	59	900
Delivery systems. Daily sheet and record-book for	J. C. Sproat	473,973	May 3	140	32	59	664
Dentist articulator	E. W. H. Holme	480,095	Aug. 2	532	135	60	684
Dental bracket.	J. Payne	474,968	May 17	1742	442	59	1000
Dental burring-tool	J. Hood and S. H. Reynolds	466,464	Jan. 5	247	62	63	47
	R. G. Stanbrough	481,740	Aug. 30	3241	789	60	1259

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Dental cabinet	C. A. Herr	480,261	Aug. 9	830	212	60	752
Dental cervix-clamp	J. W. Ivory	474,131	May 3	381	91	59	712
Dental chair	W. H. Gilbert	478,589	July 12	811	200	60	176
Dental chair	A. P. Gould	478,590	July 12	812	200	60	176
Dental chair	S. T. Henkle	485,383	Nov. 1	361	97	61	647
Dental chair	L. Stuck	484,747	Oct. 18	1895	483	61	409
Dental chair	B. M. Wilkerson	478,672	July 12	923	229	60	198
Dental chair. Portable	F. H. and C. H. Field	482,520	Sept. 13	1011	245	60	1547
Dental clamp	J. S. Deardorff	481,479	Aug. 23	2811	691	60	1160
Dental crowns. Forming	J. G. Hollingsworth	488,008	Dec. 13	1269	316	61	1590
Dental disk-carrier	M. S. Nichols	480,121	Aug. 2	573	145	60	691
Dental disk-holder	S. F. Gilmore	470,670	Mar. 15	1610	418	58	1428
Dental disk-holder	E. E. Park	471,887	Mar. 29	3455	881	58	1801
Dental drill	D. Genese	467,799	Jan. 26	2425	616	58	484
Dental drill	L. Maillard	482,558	Sept. 13	1077	261	60	1559
Dental drill	C. Raube	477,225	June 21	1585	388	59	1779
Dental engine	F. A. Damon	478,992	July 19	1425	353	60	307
Dental engine	F. A. Damon	481,164	Aug. 23	2286	563	60	1061
Dental engine	R. M. Hunter	476,944	June 14	1117	269	59	1673
Dental engine	A. C. Miller and G. F. Wells	471,877	Mar. 29	3442	878	58	1798
Dental engine	C. P. Schultz	471,146	Mar. 22	2347	601	58	1582
Dental engine	C. W. Thomas	430,678	Aug. 9	1494	372	60	879
Dental engine	W. W. Williamson	472,776	Apr. 12	1175	301	59	235
Dental-engine attachment	H. E. Spencer	477,076	June 14	1330	322	59	1716
Dental-engine handpiece	J. F. Hammond	466,462	Jan. 5	245	62	58	46
Dental-engine handpiece	W. M. Speakman	476,496	June 7	414	96	59	1518
Dental-engine shafts and handpieces. Coupling for	J. T. Pedersen	472,683	Apr. 12	1034	267	59	208
Dental filling	W. D. Porter	482,634	Dec. 27	2303	570	61	1828
Dental flask	W. E. Stiles	476,088	May 31	3510	885	59	1375
Dental-flask clamp	M. R. B. Creevy	478,312	July 5	395	95	60	79
Dental-flask holder	E. A. Bryant	476,125	May 31	3572	898	59	1386
Dental forceps	C. E. Blake, Sr	478,217	July 5	231	58	60	47
Dental heater	W. S. How	469,584	Mar. 1	350	89	58	1169
Dental instrument	J. C. Blair	484,287	Oct. 11	1163	296	61	250
Dental instrument	C. W. Jones	485,010	Oct. 25	2316	604	61	511
Dental jaw-brace	A. E. Worthen	480,357	Aug. 9	977	246	60	779
Dental mallet	W. E. Wells	472,686	Apr. 12	1038	268	59	209
Dental matrix-retainer	J. W. Ivory	474,132	May 3	382	92	59	712
Dental moistening-pad	G. W. Melotte	480,471	Aug. 9	1167	294	60	815
Dental mouth-mirror	R. F. Philips	470,211	Mar. 8	873	216	58	1277
Dental pliers	W. S. How	468,746	Feb. 9	1307	332	58	790
Dental plugger	M. L. Bosworth	477,619	June 21	2232	558	59	1905
Dental plugger	E. Ebi	470,184	Mar. 8	830	205	58	1269
Dental plugger	G. W. Geitz	468,653	Feb. 9	1164	297	58	761
Dental plugger	C. P. Gray	466,961	Jan. 12	1060	269	58	210
Dental plugger	A. J. Harris	477,411	June 21	1882	463	59	1836
Dental plugger	H. R. Kline	487,243	Dec. 13	998	251	61	1537
Dental process	J. Payne	474,967	May 17	1738	441	59	999
Dental purposes. Adjustable electrode for	W. P. Horton, Jr	467,738	Jan. 26	2333	592	58	466
Dental reflector and tongue-guard	W. E. Andrews	477,791	June 28	2502	627	59	1975
Dental regulator	J. A. Ellard	487,726	Dec. 13	800	204	61	1496
Dental separator	B. Simons	487,973	Dec. 13	1201	300	61	1576
Dental spacer	N. Kuns	486,112	Nov. 15	1500	395	61	912
Dental syringe	J. M. Drennan	479,407	July 26	2094	525	60	450
Dental tool	A. M. Harrison	474,011	May 3	292	47	59	677
Dental tool	C. P. Lennox	478,343	July 5	438	108	60	87
Dental tool	E. C. Moore	478,881	July 12	1241	307	60	261
Dental tool	R. G. Stanbrough	468,923	Feb. 16	1586	402	58	853
Dental tool	D. F. Sweet and J. B. Parker	472,004	Mar. 29	3612	923	58	1831
Dental-tool sterilizer	W. G. Flanders	482,552	Sept. 13	1069	259	60	1557
Dental vulcanizer	J. Johnson	478,871	July 12	1230	305	60	259
Dental vulcanizer	G. B. Snow	487,647	Dec. 6	660	170	61	1452
Dentists and surgeons. Mouth-holding apparatus for	H. M. Casebeer	485,609	Nov. 8	697	183	61	731
Dentist's chair	W. A. Johnston and A. W. Browne	483,207	Oct. 4	426	105	61	88
Denture. Artificial	E. A. Bryant	468,761	Feb. 9	1327	336	58	794
Denture. Artificial	J. J. Stedman	474,104	May 3	348	83	59	704
Deodorizing device	E. O. Ely	475,547	May 24	2651	674	59	1192
Depurator	J. Nixon	476,548	June 7	485	115	59	1533
Derailing-switch	A. A. Strom	474,976	May 17	1756	445	59	1002
Derrick	D. Crowley	469,497	Feb. 23	2426	637	58	1035
Derrick	G. L. Laughton	477,129	June 14	1406	341	59	1731
Derrick	A. Myers	474,142	May 3	396	96	59	715
Derrick	C. S. Palm	475,221	May 17	2127	538	59	1075
Derrick	J. E. Serrell	487,453	Dec. 6	373	97	61	1394
Derrick	W. W. White	485,756	Nov. 8	923	247	61	779
Derrick-drum	A. C. French	483,052	Sept. 20	1843	468	60	1724
Derrick-fork	G. L. Laughton	483,765	Oct. 4	364	91	61	76
Derrick. Portable	G. W. Patnoe	482,528	Sept. 13	1026	248	60	1550
Desiccating-closet	J. A. Wills	469,764	Mar. 1	150	39	58	1129
Desk	M. J. Hafgar	478,594	July 12	818	202	60	178
Desk	F. P. Pooley	483,664	Oct. 4	511	129	61	106
Desk and seat. School	G. W. Nushawg	467,537	Jan. 26	2060	520	58	415
Desk-cover	C. A. Bennett	483,129	Sept. 27	1959	496	60	1758
Desk. Hotel	J. D. D. Mortimer	476,807	June 14	887	218	59	1627
Desk. Office	L. A. Chase	477,509	June 21	2034	504	59	1866
Desk. Roll-top	J. R. Jones	486,474	Nov. 22	2063	546	61	1038
Desk. School	C. S. Barnes	482,465	Sept. 13	910	222	60	1525
Desk. School	G. A. Masters	473,074	Apr. 19	1639	417	59	337
Desk. School	R. Parker and S. W. Le Neve	480,620	Aug. 9	1399	349	60	861
Desk. School	C. Schnster	469,378	Feb. 23	2299	501	58	1001
Desk. Sectional	W. A. Eaton	484,357	Oct. 11	1272	324	61	271

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Desk tool-table.....	G. Larsson.....	477,762	June 28	2460	615	59	1968
Desk. Writing.....	O. Kissling.....	478,336	July 5	427	104	60	86
Desk. Writing.....	A. E. Shannon.....	475,813	May 31	3077	778	59	1288
Desks and seats. Adjustable supporting-standard for school.....	F. A. Chandler.....	486,822	Nov. 22	2618	682	61	1149
Desks and seats to the floor. Device for securing.....	G. A. Hammond.....	484,657	Oct. 18	1758	447	61	379
Desks, seats, &c., to floors. Device for detachably securing.....	F. E. Goodnow.....	483,841	Oct. 4	479	119	61	99
Detector: See Pickpocket and coat-thief detector.							
Detergent.....	W. B. Brittingham.....	477,403	June 21	1870	.....	59	1834
Detergent paste.....	J. Judge.....	478,870	July 12	1929	.....	60	259
Developing-dish.....	O. Francke.....	471,542	Mar. 29	2927	745	58	1702
Dial-transmitter.....	F. Pearce.....	482,877	Sept. 20	1561	{ 390 391	60	1667
Diamido-diphenylmethan bases. Making.....	E. Vongerichten.....	471,659	Mar. 29	3089	.....	58	1731
Diamonds and other stones for cutting purposes. Means for setting.....	F. Kegel.....	475,778	May 31	3010	763	59	1275
Diamonds, &c., in holders or implements of metal. Setting rough.....	M. Clausnitzer.....	486,084	Nov. 15	1435	379	61	900
Diaphragm meter.....	J. B. Knickerbocker.....	488,504	Dec. 20	2093	520	61	1772
Dice-box.....	F. W. Mader.....	470,498	Mar. 8	1362	{ 354 355	58	1367
Dice-box. Puzzle.....	H. Goujon.....	481,398	Aug. 23	2679	657	60	1133
Dice-caster.....	J. J. Parker.....	485,709	Nov. 8	855	250	61	765
Dice-thrower. Coin-controlled.....	C. C. Clawson.....	488,328	Dec. 20	1608	453	61	1715
Die: See Adjustable die. Screw-cutting die. Cutlery-die. Screw-swaging die. Leather-cutting die. Screw-threading die. Rotary die. Type-die.							
Die.....	H. C. Dickinson.....	479,354	July 19	1995	499	60	416
Die-plate.....	L. C. Wetzel.....	481,450	Aug. 23	2759	679	60	1150
Die-press.....	J. D. Colomy and W. H. Albee.....	472,337	Apr. 5	523	136	59	98
Die-sharpening machine.....	M. L. Bush.....	473,249	Apr. 19	1943	498	59	394
Die-stock.....	C. H. Besly.....	474,805	May 17	1478	{ 376 377	59	948
Die-stock and reamer. Combination.....	W. Vanderman.....	467,067	Jan. 12	1232	312	58	242
Differential block.....	H. W. Rusgrove.....	485,115	Oct. 25	2496	641	61	543
Diffusion apparatus.....	E. F. and H. P. Dyer.....	480,812	Aug. 16	1701	424	60	935
Diffusion apparatus.....	S. Faron.....	480,571	Aug. 9	1310	328	60	845
Diffusion apparatus.....	E. Gachwind.....	471,995	Mar. 29	3601	920	58	1829
Diffusion-battery.....	G. A. Messick.....	475,587	May 24	2708	687	59	1204
Digester.....	H. Brüngger.....	483,823	Oct. 4	463	{ 115 116	61	95
Digester.....	B. F. Radford.....	483,942	Oct. 4	622	157	61	128
Digesters. Lining.....	H. Brüngger.....	483,826	Oct. 4	459	{ 114 115	61	95
Digesters. Lining.....	H. Brüngger.....	483,827	Oct. 4	461	115	61	95
Digesting apparatus.....	A. Selkirk.....	486,130	Nov. 15	1533	{ 404 405	61	918
Digesting apparatus.....	A. Selkirk.....	487,783	Dec. 13	896	227	61	1517
Digesting apparatus.....	A. Selkirk.....	487,784	Dec. 13	900	{ 227 228	61	1517
Digger: See Post-hole digger. Potato-digger.							
Dipper. Fruit.....	E. E. Thomas.....	482,283	Sept. 6	593	141	60	1450
Directory. Indexed.....	G. O. Hall.....	467,131	Jan. 12	1359	{ 346 347	58	267
Disconnecter. Automatic.....	A. L. Johnston.....	469,253	Feb. 23	2102	540	58	962
Dish-cleaner.....	F. D. Harding.....	485,690	Nov. 8	821	219	61	757
Dish-cleaner.....	S. W. Harman and J. B. Polk.....	477,860	June 28	2620	{ 656 657	59	1997
Dish-cleaner.....	L. Hegler.....	477,415	June 21	1886	464	59	1837
Dish-washer.....	E. W. Allen.....	470,532	Mar. 8	1409	368	58	1377
Dish-washer.....	M. A. Crosby.....	479,703	July 26	2578	642	60	540
Dish-washer.....	W. C. Nelson.....	467,620	Jan. 26	2145	{ 544 545	58	431
Dish-washer.....	M. Stone.....	467,444	Jan. 19	1844	471	58	367
Dish washer.....	E. A. H. Wood and M. W. Gordon.....	467,798	Jan. 26	2423	616	58	484
Dish-washing machine.....	A. W. Heinly.....	481,027	Aug. 16	2029	506	60	1000
Dish-washing machine.....	H. F. Low.....	482,313	Sept. 6	653	156	60	1463
Dish-washing machine.....	S. A. Walter.....	466,877	Jan. 12	935	239	58	187
Dish-washing machine.....	S. A. Walter.....	482,706	Sept. 13	1292	{ 316 317	60	1601
Disinfectant.....	H. Jackson.....	476,276	June 7	71	.....	59	1451
Disinfectant.....	B. R. Seifert.....	482,102	Sept. 6	295	.....	60	1393
Disinfectants. Making.....	B. R. Seifert.....	482,101	Sept. 6	293	.....	60	1393
Disinfectants. Manufacture of.....	H. Heidenhain.....	479,710	July 26	2593	.....	60	544
Disinfecting and deodorizing cover for commodes, water-closets, &c.....	J. Kinney.....	482,966	Sept. 20	1708	431	60	1695
Disinfecting apparatus.....	F. André.....	470,966	Mar. 15	2058	527	58	1515
Disinfecting apparatus.....	N. M. Dyer.....	471,603	Mar. 29	3013	767	58	1717
Disinfecting apparatus.....	A. C. Havon.....	467,167	Jan. 19	1424	363	58	287
Disinfecting apparatus.....	C. B. Hyslip.....	478,697	July 12	957	238	60	260
Disinfecting apparatus.....	E. and S. Tausig.....	487,588	Dec. 6	567	145	61	1434
Disinfecting device.....	A. P. Beck.....	475,431	May 24	2462	627	59	1156
Disinfecting device.....	J. W. Bowerbank.....	487,979	Dec. 13	1207	302	61	1577
Disinfecting device.....	N. M. Dyer.....	471,602	Mar. 29	3012	767	58	1717
Disinfecting device.....	S. H. Forbes.....	474,597	May 10	1146	291	59	868
Disinfecting device.....	A. S. Force.....	467,575	Jan. 26	2082	527	58	419
Disintegrating fibrous substances. Process of and apparatus for.....	J. B. Carter and J. H. Berst.....	487,912	Dec. 13	1110	278	61	1558
Disintegrating jute, &c. Machine for.....	P. H. Wait.....	485,246	Nov. 1	141	42	61	602

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Disintegrating-machine	J. M. Holmes	469,141	Feb. 16	1920	491	58	920
Disintegrating machine. Fiber-	J. B. Carter and J. H. Berst	487,913	Dec. 13	1113	492	61	1558
Disintegrating, mixing, and other purposes. Apparatus for	J. A. Young	472,421	Apr. 5	642	278	59	120
Disintegrating-roller	W. H. Larman	485,283	Nov. 1	192	164	61	612
Disintegrating-roller	R. C. Penfield	480,937	Aug. 16	1885	471	60	973
Disintegrating vegetable substances	H. J. Bird	482,537	Sept. 13	1040	226	60	1552
Disintegrating vegetable substances	A. Selkirk	487,782	Dec. 13	891	227	61	1516
Disintegrating vegetable substances. Apparatus for	J. MacCormack and H. L. Van Zile	466,982	Jan. 12	1097	278	58	217
Disintegrator and amalgamator. Placer	G. L. Cudner	473,451	Apr. 26	2285	577	59	483
Disk furrower	S. Haines and W. B. Mathis	486,776	Nov. 22	2541	663	61	1132
Display-box	W. Watt	467,964	Feb. 2	85	20	58	541
Display-card for jewelry	H. Wolcott	488,932	Dec. 27	2767	683	61	1923
Display device	H. S. Prentiss	477,382	June 21	1839	452	59	1827
Display-frames. Adjustable joint for	W. H. Edsall	473,919	May 3	55	10	59	646
Display-package	G. P. Knapp	476,765	June 7	805	198	59	1598
Display-rack	E. Altman	476,029	May 31	3116	863	59	1355
Display-rack	J. H. Best	487,110	Nov. 29	3117	800	61	1265
Display-rack	A. L. Engle	469,686	Mar. 1	25	9	58	1103
Display-rack	J. F. Menefee	467,628	Jan. 26	2152	547	58	432
Display-rack	P. Meyer	475,787	May 31	3024	766	59	1277
Display-rack	J. W. Morrison	470,206	Mar. 8	865	214	58	1276
Display-rack	C. Puddifoot	473,709	Apr. 26	2715	683	59	564
Display-stand	S. T. Dickens	476,133	May 31	3587	905	59	1389
Display-stand	S. Newman	485,975	Nov. 8	1257	332	61	847
Displaying goods. Rack for	E. A. Foster	481,942	Sept. 6	34	8	60	1341
Distillation and apparatus used therefor	A. W. Ellis	473,659	Apr. 26	2637	665	59	550
Distillation of hydrocarbon or other oils	C. M. Pielsticker	477,153	June 14	1438	352	59	1738
Distillation of mineral oils. Apparatus for destructive	J. Laing	471,291	Mar. 22	2559	353	58	1623
Distillation of mineral oil. Destructive	J. Laing	488,767	Dec. 27	2503	623	61	1868
Distilling and rectifying apparatus	J. Schafhans	476,930	June 14	1091	263	59	1668
Distilling apparatus	A. Feldmann	480,842	Aug. 16	1741	435	60	943
Distilling apparatus	N. Hunting	468,913	Feb. 10	1566	397	58	850
Distilling apparatus	H. Propfe	478,265	July 5	327	79	60	66
Distilling apparatus. Mash-	W. Paalzow	467,430	Jan. 19	1824	466	58	363
Distilling apparatus. Water-	W. Rochlitz	473,164	Apr. 19	1791	452	59	365
Distilling carbonaceous material	B. Brazelle	472,614	Apr. 12	939	242	59	192
Ditching-machine	J. Cornelius	478,408	July 5	538	131	60	106
Ditching-machine	L. A. Désy	470,107	Mar. 1	692	170	58	1234
Ditching-machine	O. Hughes	467,810	Jan. 26	2445	621	58	488
Ditching-machine	D. W. Scott	473,023	Apr. 19	1560	397	59	324
Ditching-machine	S. Starr	471,834	Mar. 29	3381	862	58	1786
Ditching-machine	J. J. Wishard	473,279	Apr. 19	1991	499	59	404
Divers. Microtelephonic apparatus for	R. Wreden	478,493	July 5	658	161	60	131
Diving dress and helmet	A. E. Stove	484,885	Oct. 25	2132	548	61	469
Dividers	J. W. Beaman	472,977	Apr. 19	1481	378	59	309
Dividers	W. A. Bernard	479,112	July 19	1616	404	60	342
Dock. Dry	M. T. Endicott	470,750	Mar. 15	1727	445	58	1450
Dock. Dry	W. W. Rich	483,697	Oct. 4	263	64, 65	61	55
Dock. Dry	O. von Nerta	472,566	Apr. 12	868	223	59	179
Dock. Hydraulic lifting	R. Moran	481,411	Aug. 23	2698	663	60	1137
Dock. Permanent dry	W. E. Simpson	471,805	Mar. 29	3343	851	58	1778
Docket, record, or similar book	E. C. Fry	473,219	Apr. 19	1899	479	59	385
Doll	J. and P. Fleischmann	477,892	June 28	2676	669	59	2007
Doll-joint	E. Verpillier	487,861	Dec. 13	1030	258	61	1543
Doll-support	A. B. Willcox	479,481	July 26	2242	562	60	478
Dolls. Composition for and method of making heads and limbs of	S. D. Hoffmann	480,094	Aug. 2	532	.....	60	684
Doll's rocking-chair	H. W. Farley	468,612	Feb. 9	1103	281	58	748
Domestic press	G. W. Pelton	473,407	Apr. 19	2214	556	59	447
Door	W. T. Gregg	473,625	Apr. 26	2591	652	59	540
Door-alarm. Electric	M. W. Bessey	481,711	Aug. 30	3177	776	60	1247
Door bolt. Prison-	F. O. Weary and G. W. Kramer	478,146	July 5	109	28	60	24
Door-catch	J. G. Martz	470,203	Mar. 8	861	213	58	1275
Door-check	C. Bew	475,105	May 17	1957	496	59	1041
Door-check	W. J. Conner	482,227	Sept. 6	498	119	60	1432
Door-check	B. Deffenbaugh	475,388	May 24	2396	612	59	1144
Door-check	H. R. Frisbie	469,968	Mar. 1	494	122	58	1194
Door-check	W. Gilfillan	470,188	Mar. 8	837	206	58	1270
Door-check	C. F. Grandeman	467,165	Jan. 19	1421	363	58	287
Door-check	J. J. Holwell	472,880	Apr. 12	1317	338	59	263
Door-check	J. Keene	479,813	Aug. 2	58	14	60	593
Door-check	T. S. Miller	470,433	Mar. 8	1266	324	58	1349
Door-check	T. D. Morris	469,525	Mar. 1	258	66	58	1151
Door-check	L. Samuel	473,785	Apr. 26	2825	710	59	586
Door-check	J. H. Shaw	478,371	July 5	485	117	60	96
Door-check	J. H. Shaw	478,372	July 5	487	117	60	96
Door-check	Z. Swope	476,328	June 7	154	38	59	1467
Door-check	C. H. Timms	480,222	Aug. 2	750	189	60	724
Door-check	S. J. Vance	467,447	Jan. 19	1847	472	58	368
Door-check	F. E. Welch	475,368	May 24	2361	605	59	1138
Door-check	C. T. Wells	476,910	June 14	1060	256	59	1661
Door check and bolt	M. H. Gross	467,618	Jan. 26	2142	544	58	430

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Door check and closer. Pneumatic	J. S. Shrawder	476,932	June 14	1094	{ 264 265	59	1669
Door check and spring. Combined	W. Gilfillan	488,651	Dec. 27	2330	{ 576 577	61	1834
Door-check. Pneumatic	C. O. Case	475,930	May 31	3267	824	59	1324
Door-check. Pneumatic	G. W. Wright	478,388	July 5	507	123	60	100
Door-closer	H. Bunker	483,989	Oct. 11	706	178	61	160
Door-closer	E. W. Daily	483,140	Sept. 27	1976	501	60	1761
Door-closer	A. D. Lodge	481,798	Aug. 30	3337	815	60	1278
Door-closer	E. M. Wyant	482,836	Sept. 20	1494	371	60	1654
Door-closer. Automatic	J. B. Storer	478,246	July 5	300	73	60	60
Door-closer. Gravitating	H. Schneewind	483,169	Sept. 27	2032	513	60	1773
Door closing or checking apparatus.	H. Schubert and R. Werth	467,997	Feb. 2	133	33	58	550
Door. Double	G. A. Anderson	475,531	May 24	2626	668	59	1187
Door. Electrically-controlled trap	F. C. Callahan	471,947	Mar. 29	3537	963	58	1816
Door-fastener	P. Farwell	473,548	Apr. 26	2444	619	59	512
Door-fastener	A. Kennedy	470,857	Mar. 15	1899	486	58	1483
Door-fastener	S. N. Lawing	473,668	Apr. 26	2651	668	59	553
Door-fastener	W. W. Tanner and T. W. Burch	482,817	Sept. 20	1465	364	60	1648
Door-frames, book-cases, or other articles. Machine for cutting rosettes in corner casing-blocks for	J. Mason	466,963	Jan. 12	1064	270	58	211
Door-guard	A. W. Eckerson	472,110	Apr. 5	160	43	59	30
Door-guard	G. W. Glazier	474,633	May 10	1201	306	59	879
Door-hanger	A. G. Dahmer	477,739	June 28	2421	605	59	1961
Door-hanger	F. C. Hammond	469,043	Feb. 16	1794	458	58	895
Door-hanger	C. D. Lawrence	484,157	Oct. 11	951	244	61	208
Door-hanger	T. C. Prouty and C. W. Turner	476,068	May 31	3479	877	59	1369
Door-hanger	S. Shreffler, Jr.	482,530	Sept. 13	1029	249	60	1550
Door-hanger track	J. G. and W. J. Lane and J. Demel	471,867	Mar. 29	3426	875	58	1794
Door. Hatch	J. J. McBride	467,185	Jan. 19	1450	370	58	292
Door. Hatch	J. J. McBride	467,186	Jan. 19	1451	370	58	292
Door-indicator	C. S. Gerlach	472,787	Apr. 12	1191	305	59	238
Door-jamb	M. Classen	484,551	Oct. 18	1583	402	61	345
Door-jamb setter	J. Ritterbeck	481,245	Aug. 23	2421	{ 597 598	60	1087
Door-lock	C. F. Garland	480,236	Aug. 2	769	194	60	728
Door lock and fixture. Sliding	W. E. Eastman	476,373	June 7	234	57	59	1482
Door lock. Sliding	W. H. Montz	470,434	Mar. 8	1267	{ 324 325	58	1350
Door lock. Sliding	A. B. Pullman	483,326	Sept. 27	2301	579	60	1823
Door-mat	H. J. Gilcher	486,178	Nov. 15	1599	424	61	931
Door-mat	G. W. Howell	477,545	June 21	2094	521	59	1879
Door-opener	C. H. Grebenstein	467,684	Jan. 26	2240	570	58	448
Door-opener. Electric	L. Bates	480,546	Aug. 9	1277	320	60	838
Door-operating device	R. Hallenstein	483,916	Oct. 4	591	149	61	122
Door operator and supporter	J. A. Hess	485,934	Nov. 8	1183	{ 311 312	61	830
Door or window screen	M. J. Tenney	471,579	Mar. 29	2975	758	58	1711
Door or window screen. Electric	W. S. Hull	480,100	Aug. 2	540	137	60	685
Door parcel-box. House	G. Benicke	480,704	Aug. 16	1541	384	60	902
Door-rack	J. L. Pease	475,948	May 31	3300	833	59	1331
Door. Rolling or sliding	C. H. Golling and F. D. Lea	470,191	Mar. 8	843	207	58	1271
Door. Screen	W. F. Lipp and E. J. Preston	477,562	June 21	2121	527	59	1854
Door-securer	C. F. Cardwell	468,218	Feb. 2	465	115	58	616
Door-securer	W. W. Ewing	473,305	Apr. 19	2030	510	59	412
Door-securer	A. E. Finegan	467,589	Jan. 26	2101	532	58	423
Door-securer	A. Lochman	477,426	June 21	1839	468	59	1839
Door-securer	J. H. Matthews	485,205	Nov. 1	79	25	61	588
Door-securer	J. R. Royer	485,661	Nov. 8	783	208	61	749
Door-spring	J. A. Cooper	481,475	Aug. 23	2801	689	60	1158
Door-spring	C. Koon	486,975	Nov. 29	2906	750	61	1222
Door-spring	A. A. Page	478,354	July 5	464	113	60	93
Door-spring	A. A. Page	478,355	July 5	465	113	60	93
Door-spring	A. W. Paine	477,571	June 21	2132	530	59	1856
Door-spring	J. H. Shaw	478,370	July 5	484	116	60	96
Door-spring	W. H. Sidenstricker	474,268	May 3	588	146	59	751
Door-spring	H. B. Straut	475,356	May 24	1243	600	59	1134
Door-spring	G. W. Wright	478,387	July 5	506	123	60	100
Door spring and check	J. Wolf	484,838	Oct. 25	2067	{ 531 532	61	457
Door spring and check. Combined	W. Gilfillan	473,456	Apr. 26	2297	{ 580 581	59	485
Door-stop	A. Hanck	475,686	May 24	2855	721	59	1232
Door track. Barn	J. H. Lawrence	480,501	Aug. 9	1212	303	60	824
Door track. Sliding	L. T. Wilcox	472,662	Apr. 12	1000	259	59	203
Doors. Device for automatically closing and opening sliding	J. A. Gattfield	486,926	Nov. 8	1172	309	61	828
Doors. Manufacture of screen	C. J. Shirreff	481,067	Aug. 16	2112	525	60	1015
Doors. Mechanism for opening and closing jail	P. J., Sr., and P. J. Pauly, Jr.	482,316	Sept. 6	658	157	60	1464
Doors. Mechanism for opening, closing, and locking jail	P. J., Sr., and P. J. Pauly, Jr.	480,476	Aug. 9	1175	{ 295 296	60	817
Doors. Mechanism for operating and locking jail	C. H. Sparks	483,178	Sept. 27	2043	516	60	1775
Doors. Sheave for sliding	W. Eger	467,735	Jan. 26	2329	591	58	465
Doors. Supporting device for sliding	W. H. Montz	467,822	Jan. 26	2463	625	58	491
Doubling and twisting machines. Rolle for	J. N. Leonard	483,809	Oct. 4	430	106	61	89
Doubling and winding device for domestic use	E. Allison	467,906	Feb. 2	1	1	58	527
Dough-cutting machines. Salt-sprinkler for	J. L. Causey	466,844	Jan. 12	867	{ 221 222	58	175
Dough-divider. Revolving	E. A. C. Petersen	475,607	May 24	2739	695	59	1210
Dough-press for form-making. Continuous	J. H. Mitchell	472,765	Apr. 12	1160	297	59	232
Dough-raiser	M. E. Mapp	467,820	Jan. 26	2460	{ 624 625	58	491
Dough-raiser and fruit-drier	W. S. Kline and J. C. Parks	488,014	Dec. 13	1276	317	61	1592
Dough-sheeting machine. Duplex	J. H. Mitchell	466,854	Jan. 12	885	227	58	177

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Dovetail-cutter.....	A. G. Mead.....	479,075	July 19	1551	387	60	331
Dovetailing-machine.....	H. J. Cordesman and E. Cheshire.....	478,544	July 5	750	183	60	149
Dovetailing-machine.....	C. Cristadoro.....	480,251	Aug. 9	803	206	60	747
Dowel.....	H. S. Marsh.....	475,407	May 24	2421	618	59	1148
Draft attachment. Spring.....	H. Barber.....	481,384	Aug. 23	2653	650 651	60	1129
Draft attachment. Spring.....	R. Boettler.....	482,504	Sept. 13	922	238	60	1541
Draft attachment. Spring.....	J. F. Tiner.....	479,681	July 26	2541	633	60	534
Draft attachment. Vehicle.....	H. Barber.....	482,973	Sept. 20	1718	434	60	1697
Draft-equalizer.....	F. L. Anderson.....	473,895	May 3	1	1	59	637
Draft-equalizer.....	P. Bouck.....	473,902	May 3	9	3	59	638
Draft-equalizer.....	E. T. Carter.....	468,237	Feb. 2	495	121	58	622
Draft-equalizer.....	P. Evans.....	483,911	Oct. 4	584	147	61	121
Draft-equalizer.....	T. J. Fredericks.....	479,028	July 19	1574	394	60	335
Draft-equalizer.....	J. W. Gamble.....	472,448	Apr. 5	690	176	59	130
Draft-equalizer.....	J. L. Hoover.....	480,262	Aug. 9	831	212	60	753
Draft-equalizer.....	A. Hunt.....	481,357	Aug. 23	2609	641	60	1121
Draft-equalizer.....	T. Keller.....	484,371	Oct. 11	1292	330	61	275
Draft-equalizer.....	J. Lamuth.....	482,370	Sept. 13	758	183	60	1498
Draft-equalizer.....	W. B. Lawrence and F. W. Reisinger.....	466,694	Jan. 5	603	156	58	116
Draft-equalizer.....	A. McKee.....	480,339	Aug. 9	947	240	60	774
Draft-equalizer.....	T. J. Miland.....	483,938	Oct. 4	617	156	61	127
Draft-equalizer.....	L. B. Miller.....	475,133	May 17	1998	506	59	1049
Draft-equalizer.....	F. A. Polka.....	477,064	June 14	1302	316	59	1711
Draft-equalizer.....	P. J. Rabb.....	471,396	Mar. 22	2718	693	58	1654
Draft-equalizer.....	P. J. Rabb.....	486,265	Nov. 15	1741	459	61	961
Draft-equalizer.....	E. Roadifer.....	480,517	Aug. 9	1222	308	60	828
Draft-equalizer.....	C. S. Ruef.....	485,188	Oct. 25	2533	650	61	550
Draft-equalizer.....	F. M. Shaffer, J. and S. T. Salada.....	467,865	Jan. 26	2536	643	58	505
Draft-equalizer.....	H. O. Sorkness.....	470,716	Mar. 15	1677	433	58	1441
Draft-equalizer.....	P. A. Thrasher.....	468,978	Feb. 16	1695	432	58	875
Draft-equalizer.....	J. S. Thompson.....	479,034	July 19	1493	371	60	320
Draft-equalizer.....	S. H. Tingsman.....	485,144	Oct. 25	2542	652	61	551
Draft-equalizer.....	E. Wages and S. H. Armstrong.....	471,297	Mar. 22	2570	652	58	1625
Draft-equalizer.....	G. Wing.....	480,837	Aug. 16	1735	434	60	943
Draft-equalizer.....	S. W. Woods.....	474,493	May 10	978	252	59	836
Draft-regulator. Automatic.....	I. F. and F. C. Beers.....	469,462	Feb. 22	2427	622	58	1025
Draft-regulator. Automatic.....	C. D. Howard.....	469,185	Feb. 16	1084	507	58	933
Draft-spring.....	J. C. Johnson and W. Smith.....	474,910	May 17	1642	419	59	981
Draftsman's micrometer-scale.....	E. Jones.....	470,490	Mar. 8	1355	352	58	1366
Drainage system.....	J. and P. H. Nicholson.....	483,236	Sept. 27	2138	541	60	1793
Drainage-trap.....	T. E. Avery.....	474,205	May 3	493	119	59	733
Drainage-trap.....	E. E. Gold.....	481,727	Aug. 30	3214	784 785	60	1253
Drainer.....	F. A. Strater.....	471,578	Mar. 29	2974	758	58	1711
Drainer and cooler. Combined bar.....	W. C. Huss.....	477,758	June 28	2455	614	59	1967
Drainer for draft apparatus.....	H. Strater.....	477,917	June 28	2711	679	59	2015
Drainer-plate.....	H. Strater.....	481,981	Sept. 6	90	23	60	1352
Dramatic effects. Apparatus for producing illusory.....	J. W. Knell (now N. Burgess).....	471,126	Mar. 22	2310	591	58	1576
Dramatic effects. Apparatus for producing illusory.....	J. W. Knell (now N. Burgess).....	471,127	Mar. 22	2311	593	58	1576
Drapery-fixture. Cornice.....	M. E. Clark and F. S. Shaw.....	479,787	Aug. 2	20	5	60	526
Drapery or garment hook. Safety.....	J. Berkey.....	487,171	Nov. 29	3214	823	61	1223
Drapery pin and hook.....	R. T. Lewis, Jr., and G. A. Driggs.....	467,139	Jan. 12	1378	353	58	271
Draw-bar.....	J. B. Safford and F. W. Parsons.....	474,862	May 17	1576	402	59	966
Draw-bar and spring.....	J. A. Hinson.....	466,683	Jan. 5	588	152 153	58	114
Draw-bar and spring.....	J. A. Hinson.....	466,684	Jan. 5	590	153	58	114
Draw-bar carrier and face-plate.....	C. T. Schoen.....	487,779	Dec. 13	888	225	61	1515
Draw-bar carrier-iron.....	W. D. Minton and A. S. Douglas.....	483,465	Sept. 27	2487	626	60	1859
Draw-rage.....	A. Cero.....	486,156	Nov. 15	1571	416	61	926
Draw-shave.....	G. M. Conover.....	468,239	Feb. 2	496	122	58	622
Drawer.....	C. W. Nevel.....	478,014	June 28	2560	716	59	2044
Drawer-fastener.....	E. Feige.....	486,455	Nov. 22	2033	537	61	1032
Drawer for holding index-cards.....	H. E. Davidson.....	470,884	Mar. 15	1940	496	58	1492
Drawer. Furniture.....	C. O. Allen.....	476,770	June 14	818	201	59	1613
Drawer guide. Furniture.....	J. B. Zumdick.....	475,230	May 17	2143	543	59	1078
Drawer-pull.....	R. Eichstaedt.....	481,853	Aug. 30	3426	841	60	1295
Drawer-pull.....	S. Whittier.....	467,487	Jan. 19	1913	489	58	381
Drawer stop and guide.....	H. E. Spaunhorst.....	480,861	Aug. 16	1773	444	60	950
Drawers.....	E. Walker.....	471,919	Mar. 29	3498	894	58	1810
Drawing apparatus.....	A. H. Johnson.....	482,127	Sept. 6	332	79	60	1400
Drawing apparatus. Perspective.....	E. Meyers.....	466,698	Jan. 5	607	157	58	117
Drawing-board.....	J. D. McCabe.....	467,825	Jan. 26	2467	627	58	492
Drawing-board.....	R. G. Shiley.....	475,350	May 24	2336	599	59	1133
Drawing-frame.....	J. A. Murphy.....	468,726	Feb. 9	1279	325	58	784
Drawing-frame clearer-roll.....	O. Brophy.....	487,693	Dec. 6	740	189	61	1467
Drawing-frame stop-motion.....	C. A. Taft.....	485,997	Nov. 8	1297	344	61	855
Drawing-frames, &c. Automatic stop mechanism for.....	J. W. Gaunt.....	472,043	Apr. 5	53	12	59	13
Drawing geometrical curves. Instrument for.....	C. L. Davis.....	486,699	Nov. 22	2420	630	61	1108
Drawing-instrument for scrolls.....	C. J. Lundstrom.....	467,580	Jan. 26	2088	529	58	421
Drawing maps and plots of ground. Apparatus for.....	A. Bodding.....	484,905	Oct. 25	2171	558 559	61	478
Drawing-roll.....	P. H. Holmes.....	480,195	Aug. 2	696	176	60	714
Drawing table or desk. Adjustable.....	W. Cochrane.....	468,929	Feb. 16	1598	405	58	855
Dredge.....	J. H. Kuoni.....	468,201	Feb. 2	444	110	58	611
Dredge.....	A. K. Stone.....	471,404	Mar. 22	2732	697	58	1657
Dredge. Hydraulic.....	C. H. Booth.....	479,466	July 26	2250	564 565	60	480
Dredger. Dipper.....	J. Van Patten.....	473,535	Apr. 26	2428	615	59	509
Dredges. Dipper for.....	J. Van Patten.....	469,728	Mar. 1	94	25	58	1117
Dredging and transporting spoil. Apparatus for.....	A. B. Bowers.....	484,763	Oct. 18	1921	490	61	414
Dredging apparatus.....	F. A. Lockwood.....	472,735	Apr. 12	1116	286	59	224
Dredging implement.....	J. Hatch.....	485,193	Nov. 1	61	19	61	585

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Dredging-machine	G. Durvee	471,108	Mar. 22	2283	586	58	1570
Dredging-machine	J. M. Miller	479,375	July 19	2031	507	60	423
Dredging-machine	C. H. Souther	477,837	June 28	2558	{ 641 642 }	59	1985
Dredging-machines. Rotary excavator for hydraulic.	W. P. Humphreys	467,607	Jan. 26	2128	540	58	428
Dress	M. K. Staab	484,257	Oct. 11	1114	282	61	241
Dress-elevator	J. G. Wintjen	485,780	Nov. 8	952	256	61	785
Dress-facing and protector	A. M. Young	474,074	May 3	303	73	59	696
Dress-form	H. Baer	480,703	Aug. 16	1540	383	60	902
Dress-form	E. L. Mayer	483,618	Oct. 4	153	38	61	32
Dress-form	W. Vogler	479,232	July 19	1798	450	60	377
Dress-guard and driving-wheel support	J. Bolton	484,399	Oct. 18	1342	342	61	297
Dress-pad	E. Goldman	481,788	Aug. 30	3320	811	60	1275
Dress-pad	S. E. Stanley	487,164	Nov. 29	3203	821	61	1280
Dress-shield	E. N. Gaillard	480,574	Aug. 9	1314	328	60	845
Dress-shield	E. E. Pray	467,898	Jan. 26	2588	656	58	515
Dress-shield or protector	B. Scarles	475,803	May 31	3050	772	59	1282
Dress-stay	I. Bray	480,994	Aug. 16	1983	496	60	991
Dress-stay	J. S. Crotty	483,335	Oct. 4	471	117	61	97
Dress-waist form	H. A. Brown	478,308	July 5	389	94	60	78
Dresser and table. Combined	B. Wilms	480,799	Aug. 16	1676	419	60	931
Drier:							
See Brick-drier. Lumber-drier.							
Centrifugal drier. Paper-machine drier.							
Cereal-drier. Phosphate-rock drier.							
Clothes-drier. Sand-drier.							
Garbage-drier. Tea and fruit drier.							
Grain-drier. Wool-drier.							
Drier	B. C. Batcheller	486,806	Nov. 22	2584	674	61	1142
Drier	E. De Lany and J. Dooley, Jr	485,911	Nov. 8	1152	305	61	824
Drier	S. A. Menzemer	480,112	Aug. 2	557	140	60	688
Drier	J. G. Sanderson	474,305	May 3	654	167	59	764
Drier for fabrics. Portable cylindrical	A. Borchardt	487,600	Dec. 6	585	{ 149 150 }	61	1437
Drill:							
See Coal-drill. Prospecting-drill.							
Dental drill. Ratchet-drill.							
Electric drill. Rock-drill.							
Grain-drill. Rock-core drill.							
Hydraulic drill. Seed-drill.							
Drill	D. Baker	488,050	Dec. 13	1352	335	61	1607
Drill	W. C. Barber	467,459	Jan. 19	1864	475	58	371
Drill	A. G. Turner	480,978	Aug. 16	1964	491	60	987
Drill	A. G. Turner	480,979	Aug. 16	1965	491	60	987
Drill and eccentric chuck	H. W. Buckland	488,382	Dec. 20	1901	476	61	1732
Drill-operating device	G. H. Summers, A. J. Kings, and L. Q. Hardesty.	473,201	Apr. 19	1867	470	59	378
Drill-operating device	G. H. Summers, A. J. Kings, and L. Q. Hardesty.	473,202	Apr. 19	1868	470	59	378
Drill-stock	C. H. Platt	475,949	May 31	3301	833	59	1331
Drill system. Electric	H. N. Marvin	467,509	Jan. 26	1964	500	58	398
Drill system. Electric	H. N. Marvin	467,510	Jan. 26	1966	500	58	398
Drills. Clearance-cutting machinery for twist	O. Parpart	488,218	Dec. 20	1635	407	61	1081
Drills. Sleeve for taper	C. T. Pratt	473,639	Apr. 26	2609	657	59	544
Drilling apparatus	M. C. Bullock and S. W. Douglass	473,907	May 3	16	4	59	640
Drilling apparatus	J. T. Cowley	486,856	Nov. 29	2620	701	61	1177
Drilling apparatus. Portable	H. S. and C. E. Glenn	472,619	Apr. 12	948	245	59	194
Drilling apparatus. Water-swivel for	S. W. Douglass	473,918	May 3	50	9	59	645
Drilling for minerals	G. R. Jarvis	475,319	May 24	2277	566	59	1122
Drilling-machine	W. F. Barnes	466,916	Jan. 12	993	254	58	198
Drilling-machine	J. F. Cadell	468,328	Feb. 9	659	163	58	661
Drilling-machine	J. Kindred	480,907	Aug. 16	1845	459	60	965
Drilling-machine	A. F. Spaulding	466,806	Jan. 12	806	208	58	163
Drilling-machine	O. Sternoff-Beyer	479,086	July 19	1570	394	60	334
Drilling-machine	H. H. Wilderman	484,270	Oct. 11	1141	290	61	246
Drilling-machine. Coal and rock	M. Hardsoeg	484,425	Oct. 18	1381	353	61	304
Drilling-machine. Duplex	W. A. McCool	488,658	Dec. 27	2339	579	61	1835
Drilling-machine. Multiple	C. H. Scott	469,600	Feb. 23	2639	677	58	1066
Drilling-machine. Portable	J. R. Saylor	480,040	Aug. 2	452	115	60	668
Drilling-machine. Radial	W. D. McNaull	472,546	Apr. 12	842	215	59	173
Drilling-machines, &c. Head-operating mechanism for the tool-spindles of	C. H. Baush	466,553	Jan. 5	387	98, 99	58	75
Drilling mechanism	E. B. Cox and S. Salmon	483,903	Oct. 4	571	{ 143 144 }	61	118
Drilling-tool	W. D. Jones	467,670	Jan. 26	22	0	58	445
Drilling-tool and sand-bailer. Combined	L. N. Ireland	478,605	July 12	236	206	60	181
Drink-mixer	R. D. Schroeder	473,643	Apr. 26	2615	{ 658 659 }	59	545
Drinks. Apparatus for dispensing	W. M. Fowler	468,481	Feb. 9	899	{ 228 229 }	58	708
Drinks. Apparatus for dispensing	W. M. Fowler	477,797	June 28	2512	630	59	1977
Drinking-fountain for fowls	F. G. Botsford	479,549	July 26	2340	584	60	497
Drinking trough	G. S. Singer	484,057	Oct. 11	802	203	61	179
Drive-gate	B. F. Price	473,958	May 3	118	27	59	660
Drive-gate	J. M. Thomas	479,319	July 19	1924	481	60	402
Driving attachment or power-transmitter	F. Müller	468,357	Feb. 9	710	{ 175 176 }	58	671
Driving mechanism	C. O. Palmer	472,178	Apr. 5	263	69, 70	59	50
Drop-press. Steam	J. H. Mason	488,128	Dec. 13	1472	371	61	1633
Dropper:							
See Fertilizer-dropper.							
Drum	J. Knittel	478,611	July 12	842	207	60	183
Drum	A. G. Soistmann and J. W. Pepper	478,378	July 5	495	120	60	98
Drum for stoves. Detachable heating	W. J. Loth	478,874	July 12	1233	306	60	260

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Drum. Hand.....	E. H. Droop.....	479,636	July 26	2464	613	60	520
Drum. Heating.....	P. H. Grimm and F. J. Williard.....	476,794	June 14	865	213	59	1622
Drum. Heating.....	J. H. Held and W. H. Gruenhagen.....	474,656	May 10	1237	316	59	886
Drum. Heating.....	S. M. Kamp.....	483,116	Sept. 20	193-	490	60	1743
Drum. Heating.....	J. Seither.....	482,276	Sept. 6	5-0	133	60	1448
Drum-snare. Device for adjusting.....	E. Boulanger.....	480,064	Aug. 2	459	124	60	675
Drum. Stovepipe.....	M. P. Farnham.....	467,370	Jan. 19	1731	443	58	345
Drums. Waterproof woven snare-string for.....	E. Boulanger.....	480,063	Aug. 2	488	124	60	675
Dry-board.....	C. A. Brown.....	468,188	Feb. 2	429	106	58	608
Dry closet.....	W. D. Dickson.....	483,997	Oct. 11	715	1-0	61	161
Dry closet.....	W. D. Over.....	476,166	May 31	3643	922	59	1401
Dry closet.....	J. S. Rush.....	481,155	Aug. 16	2263	558 } 559 }	60	1043
Dry closet.....	C. B. Tompkins.....	482,987	Sept. 20	1742	440	60	1702
Drying apparatus.....	H. W. Rappleye.....	484,821	Oct. 25	2028	520	61	449
Drying apparatus.....	W. D. Sunderlin.....	481,212	Aug. 23	2357	581	60	1075
Drying apparatus.....	R. White.....	472,323	Apr. 5	494	128 } 129 }	59	93
Drying coffee, &c. Apparatus for.....	S. L. Hnizer.....	483,923	Oct. 4	599	152	61	124
Drying-kiln.....	C. J. Dion.....	480,253	Aug. 9	906	207	60	747
Drying-kiln.....	J. S. Parmeuter.....	469,268	Feb. 23	2126	547	58	966
Drying-kiln.....	S. W. Peregrino.....	467,953	Feb. 2	70	17	58	539
Drying-kiln.....	H. S. Servoss.....	469,067	Feb. 16	1826	467	58	901
Drying-line support.....	J. and J. A. Paglianghi and F. De Canio.....	479,898	Aug. 2	186	46	60	618
Drying-machine.....	J. K. Proctor.....	473,263	Apr. 19	1968	494	59	399
Drying-machine. Rotary.....	R. E. Fischer.....	474,005	May 3	189	44, 45	59	675
Drying spent grain and the like. Apparatus for.....	F. E. Otto.....	475,602	May 24	2731	692	59	1208
Drying textile fiber. Machine for.....	W. Hartley, Jr.....	474,087	May 3	325	77, 78	59	700
Dulcimer.....	I. D. Bagdasarjian.....	479,323	July 19	1928	482	60	403
Dumb-bell.....	C. W. Ayton.....	484,352	Oct. 11	1265	323	61	270
Dumb-waiter safety-catch.....	H. K. Smith.....	485,569	Nov. 1	639	170	61	704
Dumb-waiter signal.....	F. J. Zahner.....	467,073	Jan. 12	1248	316	58	245
Dumping apparatus.....	P. Imig.....	475,565	May 24	2680	680	59	1197
Dumping apparatus.....	J. R. Wilson.....	475,049	May 17	1866	473 } 474 }	59	1024
Dumping apparatus. Self-acting.....	J. C. Smith and C. Lardner.....	482,390	Sept. 13	796	191	60	1505
Dumping-mold.....	R. G. Collins.....	466,888	Jan. 12	953	243	58	190
Duplicating apparatus.....	H. T. C. Wise.....	479,968	Aug. 2	310	76	60	641
Duplicating flat pad.....	P. B. Begg.....	467,393	Jan. 19	1764	450	58	351
Duplicating-register.....	J. Kirby, Jr.....	469,665	Feb. 23	2730	702 } 703 }	58	1086
Dust and ash receptacle.....	F. J. Steinwald.....	473,561	Apr. 26	2475	625 } 626 }	59	519
Dust-beater.....	J. J. Slattery.....	480,389	Aug. 9	1033	259	60	780
Dust-collector.....	A. C. Brantingham.....	469,646	Feb. 23	2695	093	58	1078
Dust-collector.....	A. C. Brantingham.....	470,035	Mar. 1	584	145	58	1212
Dust-collector.....	W. A. Cockrell.....	468,964	Feb. 16	1658	424	58	867
Dust-collector.....	H. L. Day.....	476,524	June 7	451	107	59	1526
Dust-collector.....	J. J. Gerard.....	484,090	Oct. 11	847	215	61	188
Dust-collector.....	W. Ince.....	484,717	Oct. 18	1839	467 } 468 }	61	396
Dust-collector.....	O. M. Morse.....	468,935	Feb. 16	1607	407	58	857
Dust-collector.....	O. M. Morse.....	471,272	Mar. 22	2533	643	58	1617
Dust-collector.....	P. Van Gelder.....	479,231	July 19	1797	450	60	376
Dust-collector.....	G. Walter.....	474,490	May 10	973	251	59	835
Dust-collector.....	G. Walter.....	474,491	May 10	974	251	59	835
Dust-collector.....	R. E. Wardhaugh.....	470,523	Mar. 8	1398	365	58	1375
Dust-collector.....	R. E. Wardhaugh.....	470,524	Mar. 8	1399	365	58	1375
Dust-collector and conveyor.....	B. F. Mohr.....	481,185	Aug. 23	2313	570	60	1067
Dust-collector and grain-cleaner.....	P. Haeckel.....	473,662	Apr. 26	2644	666	59	551
Dust-collector. Electric.....	R. E. Wardhaugh.....	470,608	Mar. 8	1509	394	58	1309
Dust from air. Apparatus for separating.....	P. Van Gelder.....	479,267	July 19	1851	463 } 464 }	60	387
Dust-guard for attrition-mills.....	T. Blass.....	479,547	July 26	2336	583	60	497
Dust-pan.....	G. C. Foose.....	469,781	Mar. 1	185	48	58	1137
Dust-pan.....	J. Lees, Jr.....	472,371	Apr. 5	569	147	59	1107
Dust-pan. Adjustable.....	G. D. Miles.....	469,709	Mar. 1	58	17	58	1110
Dust-pan and broom-holder. Combined.....	G. H. Bishop.....	468,433	Feb. 9	819	206	58	693
Dust-pan and support. Combined.....	H. H. Hull.....	473,004	Apr. 19	1528	390	59	317
Dye. Alizarine.....	R. E. Schmidt.....	476,419	June 7	300	.....	59	1496
Dye. Alizarine.....	R. E. Schmidt.....	476,491	June 7	409	.....	59	1517
Dye and making the same. Red.....	C. Duisberg.....	481,934	Sept. 6	23	.....	60	1339
Dye. Azo.....	H. Kuzel. (Reissne).....	11,231	Apr. 5	796	.....	59	151
Dye. Azo.....	C. Rudolph.....	468,049	Feb. 2	215	.....	58	567
Dye. Basic yellow.....	R. Gnehm and J. Schmid.....	488,430	Dec. 20	1975	.....	61	1747
Dye. Black azo.....	M. Ulrich.....	476,336	June 7	174	.....	59	1470
Dye. Blue.....	R. Bohn.....	484,697	Oct. 18	1814	.....	61	392
Dye. Blue.....	M. Ulrich and R. Lanch.....	476,337	June 7	175	.....	59	1470
Dye. Blue.....	A. Weinberg.....	469,329	Feb. 23	2223	.....	58	985
Dye. Blue-red.....	E. Hepp.....	466,826	Jan. 12	834	.....	58	169
Dye. Blue-red azo.....	M. Ulrich.....	468,142	Feb. 2	356	.....	58	593
Dye. Diazo.....	M. Hoffmann.....	480,326	Aug. 9	933	.....	60	772
Dye. Induline.....	R. Senger.....	475,616	May 24	2757	.....	59	1213
Dye. Manufacture of blue.....	A. Weinberg.....	472,091	Apr. 5	116	.....	59	24
Dye. Olive.....	R. Lanch.....	479,515	July 26	2291	.....	60	488
Dye. Red.....	O. Borgmann.....	468,539	Feb. 9	997	.....	58	727
Dye. Red.....	M. Epting.....	473,453	Apr. 26	2289	.....	59	483
Dye. Red azo.....	M. Ulrich.....	466,841	Jan. 12	864	.....	58	174
Dye-stuff.....	R. Lanch.....	476,393	June 7	263	.....	59	1489
Dye-stuff. Yellow.....	H. Kuzel.....	484,521	Oct. 18	1538	.....	61	335
Dye. Tetrazo.....	C. Duisberg.....	467,162	Jan. 19	1417	.....	58	286
Dye. Tetrazo blue.....	C. Duisberg.....	476,371	June 7	230	.....	59	1481
Dye. Triphenylmethane.....	F. Runkel.....	476,413	June 7	292	.....	59	1495

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Dye. Triphenylmethane	F. Runkel	476,414	June 7	293		59	1495
Dye-tub	C. L. Auger	472,327	Apr. 5	502	130	59	95
Dye. Violet	R. Gnehm and J. Schmid	478,007	June 28	2850		59	2042
Dye. Violet azo	M. Ulrich	476,335	June 7	173		59	1470
Dyes. Making rosaniline	B. Homolka	471,638	Mar. 29	3061		58	1726
Dyes. Manufacture of yellow	M. Hoffmann. (Reissue)	11,267	Sept. 6	686		60	1470
Dyes. Manufacture of yellow	M. Hoffmann	472,121	Apr. 5	175		59	33
Dyeing	E. Michaëlis and C. Henning	472,267	Apr. 5	409		59	76
Dyeing	E. Zillesen	484,080	Oct. 11	835		61	186
Dyeing apparatus	E. J. Gerber	483,607	Oct. 4	135	34	61	28
Dyeing apparatus	R. Nicklès	458,216	Dec. 20	1631	{ 406 407 }	61	1681
Dyeing apparatus	A. Reid	475,065	May 17	1892	480	59	1028
Dyeing apparatus	G. M. Undy	476,580	June 7	528	125	59	1541
Dyeing. Apparatus for skein-	A. S. Lyon	476,286	June 7	80	18, 19	59	1453
Dyeing black	M. Hoffmann	473,928	May 3	68		59	649
Dyeing fabrics. Machine for	W. M. Robertson	468,579	Feb. 9	1058	269	58	739
Dyeing machine. Fabric-	A. Moberg	466,921	Jan. 12	1002	256	58	200
Dyeing or scouring machine	J. H. Lorimer	480,502	Aug. 9	1213	303	60	824
Dyeing with alizarin	H. N. F. Schaeffer	481,591	Aug. 30	2990		60	1211
Dyeing wool	J. A. Young	475,229	May 17	2142	543	59	1078
Dynamo	W. H. Elkins	470,784	Mar. 15	1779	458	58	1460
Dynamo	W. H. Elkins	470,785	Mar. 15	1780	458	58	1460
Dynamo	W. H. Elkins	485,181	Nov. 1	40	13	61	580
Dynamo and motor regulator	W. H. Elkins	474,165	May 3	430	{ 103 104 }	59	721
Dynamo. Compensating alternating-current	O. B. Shallenberger	476,830	June 14	922	226	59	1634
Dynamo. Compound-wound alternating-current	H. Lemp	479,170	July 19	1697	{ 125 126 }	60	358
Dynamo or motor	R. C. Kintzing	470,057	Mar. 1	620	154	58	1219
Dynamo-regulator	C. J. Bogue	488,261	Dec. 20	1697	424	61	1693
Dynamos and motors. Brush-holder for	M. H. Hathaway	478,104	July 5	41	13	60	11
Dynamos and motors. Field-magnet for	R. Lundell	468,953	Feb. 16	1641	418	58	864
Dynamos. Connection-plate for	J. J. Wood	487,462	Dec. 6	384	100	61	1397
Dynamos or motors. Speed-regulator for	L. H. Leber	469,257	Feb. 23	2106	541	58	963
Dynamos. Ventilated brush for	H. H. Cherry and S. D. Yonuglove	480,762	Aug. 16	1620	407	60	720
Dynamometer	E. P. Warner	480,981	Aug. 16	1968	492	60	988
Dynamometer	E. J. Wood	468,947	Feb. 16	1633	416	58	862
Dynamometer. Rotary transmitting	F. Van Winkle	472,466	Apr. 5	713	182	59	135
Ear appliance or instrument for teachers of music, &c	G. Mellor	486,725	Nov. 22	2452	639	61	1115
Ear-compressing cap	A. S. Turner	488,802	Dec. 27	2563	636	61	1880
Ear-drum. Artificial	G. H. Wilson	476,853	June 11	963	234	59	1642
Ear-muff	H. Hadden	479,185	July 19	1733	434	60	364
Ear-ring	T. F. Gaynor	483,214	Sept. 27	2101	533	60	1787
Ear-ring	C. L. Marsters	468,883	Feb. 16	1520	388	58	840
Ear-ring	M. Stern	477,025	June 14	1237	290	59	1698
Ear-trumpet	F. W. Aschendorf	466,531	Jan. 5	355	89	58	68
Ear-trumpet	W. G. A. Bonwill	473,608	Apr. 26	2501	645	59	535
Ear-trumpet	W. G. A. Bonwill	473,865	Apr. 26	2954	745	59	611
Ear-wire-forming device	D. Mendelson	485,964	Nov. 8	1241	328	61	843
Earth-boring apparatus	J. H. Stokesbary	469,219	Feb. 16	2053	{ 527 528 }	58	944
Earth-closet	H. A. Jukes	479,712	July 26	2599	647	60	544
Earthenware, &c. Apparatus for molding	J. Crossley	474,496	May 10	923	{ 253 254 }	59	837
Earthenware pipes, &c. Machine for molding	E. B. Brooke	475,481	May 24	2542	{ 647 648 }	59	1171
Easel	A. C. Terslose	486,549	Nov. 22	2162	571	61	1058
Easel and stool. Portable sketching	J. D. Cole	487,553	Dec. 6	521	135	61	1424
Easel attachment for chairs and other supports	H. J. Muhlfeld and F. J. Spillane	481,045	Aug. 16	2060	514	60	1007
Easel. Cabinet	H. Pistorius	487,964	Dec. 13	1187	296	61	1573
Easel rest or bracket	W. Rochlitz	480,280	Aug. 9	855	218	60	758
Eaves or roof gutter	E. R. Denmore	472,014	Mar. 29	3628	927	58	1835
Eaves-trough	L. S. Bonbrake	485,573	Nov. 1	646	172	61	706
Eaves-trough	A. C. and J. L. Byers	474,442	May 10	908	234	59	823
Eaves-trough fastener	R. G. Kelso	488,075	Dec. 13	1395	347	61	1617
Eaves-trough hanger	W. C. Berger	471,936	Mar. 29	3523	900	58	1814
Eaves-trough hanger	G. W. Heartley	472,294	Apr. 5	449	116	59	85
Eaves-trough hanger	B. F. Norton	474,184	May 3	460	111	59	727
Eaves-trough hanger	W. E. Tuller	484,347	Oct. 11	1259	321	61	268
Eaves-troughs. Sieve attachment for	J. G. Lavallet	471,427	Mar. 22	2766	785	58	1662
Eccentric coupling and tool and work holder	A. Johnson	472,126	Apr. 5	183	49 50	59	34
Ecraseur	C. H. Harris	480,870	Aug. 16	1784	417	60	953
Edge-protector. Metallic	F. F. Atkinson	480,241	Aug. 9	787	201	60	743
Edge-runner or vertical millstone	H. Mantey	487,930	Dec. 13	1142	285	61	1564
Edge-runner or vertical millstone	H. Mantey	488,146	Dec. 13	1497	376	61	1637
Edge. Straight	C. T. Ridgely and M. A. Smith	480,516	Aug. 9	1228	307	60	828
Edged tools. Apparatus for whetting and sharpening the edges of	C. Spruce	480,634	Aug. 9	1421	351	60	866
Edger. Gang	F. W. Cook	469,543	Feb. 23	2553	656	58	1049
Edging machine. Gang	E. and B. Holmes	484,431	Oct. 18	1396	357	61	307
Educational apparatus	W. H. Leek	476,468	June 7	370	86	59	1509
Educational appliance	S. S. Barrett	480,164	Aug. 2	643	164	60	705
Educational appliance	J. L. Collins	487,695	Dec. 6	741	190	61	1467
Educational appliance	J. H. Eickershoff, J. and H. Knost	474,773	May 10	1419	361	59	923
Educational appliance	S. M. Sapp	468,475	Feb. 9	887	225	58	705
Educational appliance	W. H. Wind	472,419	Apr. 5	640	164	59	120
Egg-beater	H. M. Brittain	472,803	Apr. 12	1212	311	59	242
Egg-beater	E. A. Eichenberg	467,328	Jan. 19	1668	425	58	231
Egg-beater	U. D. Seltzer	474,024	Nov. 20	2983	768	61	1236
Egg-box	D. Neefus Jr.	484,863	Oct. 25	2099	541	61	463
Egg carrier and holder	C. W. Costellow	484,876	Oct. 25	2121	545	61	467
Egg-carrying package	R. G. Dale and W. S. Weightman	478,924	July 12	1310	326	60	274
Egg-crate	J. P. Berger	469,114	Feb. 16	1885	482	58	913

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Egg-crate	T. J. King	466,691	Jan. 5	599	155	58	116
Egg-preserving apparatus	L. O. Dion	466,333	Jan. 5	39	10	58	10
Egg-tester	J. B. Garland	481,487	Aug. 23	2821	693	60	1162
Eggs. Device for separating the white and yolk of	L. F. Pettee	479,016	July 19	1463	364	60	314
Eggs. Liquid substitute for	J. E. Furber	471,236	Mar. 22	2480		58	1607
Eggs. Preserving	E. T. Burnette	479,970	Aug. 2	312		60	641
Elastic cord and making the same	A. M. Ziegler	487,042	Nov. 29	3007	774	61	1241
Elastic knit fabric	J. Cooper	471,349	Mar. 22	2642	671	58	1640
Elastic looped fabrics. Apparatus for producing	A. J. Black	466,898	Jan. 12	967	247	58	193
Elastic wheel	H. Clais	488,539	Dec. 27	2152	532	61	1798
Elastic wheel	J. von Olivier	480,738	Aug. 16	1589	398	60	913
Election-booth	F. W. Barrett	488,747	Dec. 27	2476	615	61	1862
Election-booth	J. Jones	481,571	Aug. 30	2964	727	60	1206
Election-booth. Folding	J. Hanley	475,013	May 17	1815	460	59	1013
Electric accumulator	G. Gandini	480,575	Aug. 9	1315	329	60	846
Electric alarm	H. A. Hull	486,338	Nov. 15	1849	486	61	992
Electric alarm	R. L. Keith	179,282	July 19	1872	469	60	393
Electric alarm	S. M. Mathews	477,950	June 28	2760	691	59	2025
Electric battery	P. B. Delany	466,664	Jan. 5	561	145	58	109
Electric battery	J. E. Emley	473,386	Apr. 19	2182	548	59	441
Electric battery	A. S. Keating	474,912	May 17	1644	420	59	981
Electric battery	J. S. Nowotny	466,798	Jan. 12	792	205	58	160
Electric battery	J. J. O'Lalor	486,264	Nov. 15	1741	458	61	961
Electric battery	E. Ortelli	470,073	Mar. 1	643	159	58	1224
Electric battery	R. P. Osgood	476,296	June 7	106	25	59	1459
Electric battery	V. Riatti	470,260	Mar. 8	941	233	58	1290
Electric battery	C. B. Schoenmehl	467,240	Jan. 19	1531	391	58	308
Electric battery	P. Stiens	481,075	Aug. 16	2120	528	60	1017
Electric battery	C. F. Waldron	478,485	July 5	647	159	60	129
Electric battery. Thermo-	R. J. Gülicher	472,261	Apr. 5	400	104	59	74
Electric battery. Thermo-	P. Giraud	483,782	Oct. 4	394	98	61	83
Electric block system. Automatic	J. A. Carlton and H. L. Johnston	471,525	Mar. 22	2899	737 738	58	1689
Electric body-wear	R. S. Mears	476,473	June 7	378	88	59	1510
Electric cable	J. A. Barrett	482,328	Sept. 6	683	163	60	1469
Electric cable	T. Guilleaume	483,285	Sept. 27	2239	563	60	1811
Electric cable	H. V. Hayes	469,522	Feb. 23	2526	649	58	1043
Electric cable	H. V. Hayes and J. S. Stone	469,475	Feb. 23	2451	628	58	1029
Electric cable	W. R. Patterson	476,484	June 7	400	93	59	1515
Electric cable	W. H. Sawyer	473,267	Apr. 19	1974	495	59	400
Electric cable	W. H. Sawyer	473,351	Apr. 19	2118	532	59	428
Electric cable	W. H. Sawyer	473,352	Apr. 19	2119	532	59	428
Electric cable	W. H. Sawyer	473,353	Apr. 19	2120	532	59	429
Electric cable	W. H. Sawyer	478,367	July 5	477	116	60	95
Electric cable	W. Vogler	468,585	Feb. 9	1066	272	58	741
Electric cables. Underground conduit for	C. A. W. Hultman	470,329	Mar. 8	1093	279	58	1318
Electric circuit and cable	J. A. Barrett	482,152	Sept. 6	380	89	60	1409
Electric-circuit closer	G. W. Price	470,596	Mar. 8	1493	388	58	1396
Electric-circuit connection	A. Noll	481,914	Aug. 30	3528	863	60	1315
Electric-circuit connector	W. E. Gill	479,325	July 19	1930	483	60	404
Electric-circuit connector	J. F. Wollensak	479,322	July 19	1927	482	60	403
Electric-circuit-controlling and interlocking apparatus. Pneumatic	W. W. Slater and H. C. Barnes	481,430	Aug. 23	2729	671	60	1144
Electric-circuit-controlling device	M. Thum	473,594	Apr. 26	2542	641	59	532
Electric-circuit safety device	L. B. Atkinson	482,433	Sept. 13	862	207	60	1517
Electric-circuit safety device	G. Cutter	487,002	Nov. 29	2949	760	61	1230
Electric-circuit safety device	M. Thum	479,035	July 19	1494	372	60	320
Electric-circuit time-switch	B. E. Waters	478,180	July 5	172	45	60	37
Electric circuits. Fuse-block for	E. A. Sperry	476,570	June 7	516	122	59	1539
Electric circuits. Fuse for	C. F. Scott and A. Wurts	470,014	Mar. 1	554	137	58	1206
Electric circuits. Regulation of	F. B. Rae	467,773	Jan. 26	2384	606	58	476
Electric circuits. Repeater for	M. G. Crane and F. W. Cole	468,473	Feb. 9	878	223 224	58	704
Electric circuits. System of testing	C. H. Rudd	476,317	June 7	133	32	59	1464
Electric circuits. System of testing	C. H. Rudd	476,490	June 7	407	95	59	1516
Electric circuits. Tell-tale device for	E. Tregoning	470,722	Mar. 15	1686	435	58	1442
Electric conducting-wires. Safety attachment for	R. Furgang	481,666	Aug. 30	3106	758	60	1233
Electric conductor	J. A. Barrett	482,150	Sept. 6	373	88	60	1409
Electric conductor	J. A. Barrett	482,151	Sept. 6	375	88	60	1409
Electric conductor	C. W. Bassett	475,920	May 31	3254	621	59	1382
Electric conductor	T. A. Edison	470,924	Mar. 15	1934	510	58	1501
Electric conductor	W. R. Patterson	472,643	Apr. 12	970	253	59	199
Electric conductor	E. A. C. Perrine	479,527	July 26	2303	575	60	490
Electric conductor	C. T. Snedeker	477,787	June 28	2493	624	59	1974
Electric-conductor clamp	J. Ingmanson and R. Lorang	479,216	July 19	1776	445	60	372
Electric-conductor clamp	H. Lindahl	487,332	Dec. 6	154	44	61	1351
Electric conductor. Composite	C. A. Mezger	477,951	June 28	2761	692	59	2026
Electric-conductor conduit	E. T. Greenfield	469,470	Feb. 23	2440	626	58	1027
Electric-conductor conduit	A. Noll	481,912	Aug. 30	3526	863	60	1314
Electric-conductor conduit	A. Noll	481,913	Aug. 30	3527	863	60	1315
Electric-conductor connection	C. W. Tobey	474,584	May 10	1128	288	59	865
Electric conductor for metallic circuits	S. W. Holman	469,248	Feb. 23	2094	538	58	960
Electric-conductor joint	J. W. Marsh	483,074	Sept. 20	1873	475	60	1730
Electric-conductor joint	T. F. O'Connor	472,933	Apr. 12	1397	358	59	280
Electric-conductor support	E. M. Boynton	467,679	Jan. 26	2232	568	58	447
Electric-conductor tube	E. T. Greenfield	469,469	Feb. 23	2438	625	58	1027
Electric conductors. Safety attachment for	R. Furgang	481,665	Aug. 30	3105	757	60	1232
Electric conductors. Safety-fuse for	J. A. Wotton	466,761	Jan. 5	728	188	58	139
Electric conduit	A. Braner	474,468	May 10	943	243	59	829
Electric conduit. Elevated	C. O. Newton	468,388	Feb. 9	755	187 188	58	679
Electric conduit. Underground	J. F. Munsie	470,946	Mar. 15	2031	519	58	1509
Electric conduit. Underground	E. P. Robbins	469,723	Mar. 1	63	23	58	1115

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Electric connector.	W. H. Garland	470,820	Mar. 15	1849	474	58	1474
Electric connector.	G. Gibbs	468,654	Feb. 9	1165	297	58	761
Electric connector for converters.	G. D. Burton	475,180	May 17	2068	521	59	1063
Electric-contact protector.	R. Varley, Jr.	473,717	Apr. 26	2724	686	59	566
Electric converter.	L. Gutmann	424,959	Oct. 25	2258	583	61	495
Electric converter.	G. Pfannkuche	466,937	Jan. 12	1024	261		
Electric converter.	G. and A. Pfannkuche.	476,216	June 14	901	221	58	204
Electric-cord tip.	C. W. Tobey	480,152	Aug. 2	627	159	60	702
Electric coupling.	J. J. Purcell	488,027	Dec. 13	1303	324	61	1598
Electric-current generators. Regulator for.	G. Pfannkuche	468,260	Feb. 2	543	133	58	629
Electric-current indicator.	C. P. L. Noxon	487,093	Nov. 29	3090	794	61	1259
Electric-current meter.	J. W. T. Olán	470,441	Mar. 8	1277	327	58	1352
Electric-current meter.	J. F. Ott and A. E. Kennelly	479,172	July 19	1702	427	60	359
Electric-current regulator.	A. S. Krotz	479,886	Aug. 2	169	42	60	615
Electric-current regulator.	C. D. Sigsbee, T. S. Hayward, and F. S. Anderson.	477,708	June 28	2371	593	59	1951
Electric-current transformer.	N. T. Wilcox	477,879	June 28	2655	663	59	2003
Electric currents. Automatic potential-regulator for.	A. L. Ellis	471,953	May 17	1713	436	59	995
Electric currents. Distribution of.	E. Thomson	478,722	July 12	994	247	60	214
Electric currents. Distribution of rotary.	A. E. Du Bois-Reymond.	477,250	June 21	1629	398	59	1787
Electric currents. Meter for alternating.	O. B. Shallenberger.	481,975	Sept. 6	82	21	60	1351
Electric currents. Method of and means for interrupting.	E. Thomson	468,120	Feb. 2	319	78	58	586
Electric currents. System of distributing.	C. J. Van Depoele	479,964	Aug. 2	301	74	60	639
Electric cut-out.	A. L. Clough	467,919	Feb. 2	22	6	58	531
Electric cut-out.	V. A. Thomas	469,220	Feb. 16	2055	528	58	944
Electric cut-out and safety device.	C. R. and A. W. Meston	470,204	Mar. 8	862	213	58	1275
Electric cut-out and switch-box.	L. D. McMunn	483,235	Sept. 27	2137	541	60	1793
Electric cut-out. Automatic.	C. O. Mailoux	482,374	Sept. 13	771	185	60	1500
Electric cut-out. Automatic.	E. A. Manship.	471,997	Mar. 29	3603	920		
Electric dispatch system.	A. Bryson, Jr.	480,804	Aug. 16	1689	421	60	933
Electric distribution for moving translating devices. System of.	N. W. Perry.	466,368	Jan. 5	92	25, 26	58	20
Electric distribution. System of.	N. W. Perry.	467,897	Jan. 26	2586	655	58	514
Electric drill. Reciprocating.	F. F. Loomis	479,948	Aug. 2	269	66	60	633
Electric drop-light.	G. E. Painter	466,509	Jan. 5	324	81	58	62
Electric element. Thermo.	E. N. Dickerson	472,037	Apr. 5	39	8	59	10
Electric element. Thermo.	C. W. Iden	479,596	July 26	2401	598	60	508
Electric elevator.	W. Baxter, Jr.	466,973	Jan. 12	1079	273	58	213
Electric elevator.	W. Baxter, Jr.	481,386	Aug. 23	2656	651		
Electric elevator.	J. H. Clark	477,100	June 14	1364	332	59	1723
Electric elevator.	F. E. Herdman	480,845	Aug. 16	1747	436	60	945
Electric elevator.	F. E. Herdman	480,846	Aug. 16	1749	437		
Electric elevator.	H. W. Leonard	468,100	Feb. 2	285	70	58	579
Electric elevator.	A. Neuburger	468,253	Feb. 2	519	129	58	626
Electric elevator.	N. P. Otis and R. C. Smith	467,192	Jan. 19	1459	130		
Electric elevator.	C. R. Pratt	472,909	Apr. 12	1358	349	59	272
Electric elevator.	A. B. See and W. L. Tyler.	478,821	July 12	1174	350		
Electric elevator.	R. C. Smith	468,903	Feb. 16	1550	291	60	248
Electric elevator.	R. C. Smith	471,063	Mar. 15	2201	394	58	846
Electric elevator.	R. C. Smith	471,064	Mar. 15	2205	395		
Electric elevator.	C. J. Sturgeon	470,158	Mar. 1	770	191	58	1248
Electric elevator.	R. Watson	469,361	Feb. 23	2267	582	59	994
Electric engine. Reciprocating.	C. J. Van Depoele	467,451	Jan. 19	1855	473	59	369
Electric engine. Reciprocating.	C. J. Van Depoele	479,962	Aug. 2	297	73, 74	60	638
Electric furnace generator.	E. Berliner.	481,999	Sept. 6	117	29, 30	60	1358
Electric generation. Means for controlling.	T. A. Edison	482,549	Sept. 13	1659	257	60	1556
Electric generator.	C. J. Van Depoele	470,521	Mar. 8	1395	364	58	1374
Electric generator. Magneto.	S. Evershed	484,785	Oct. 25	1973	503	61	438
Electric generator or motor.	E. A. Sperry.	476,426	June 7	310	71, 72	59	1498
Electric generator or motor. Dynamo.	C. W. and L. B. Atkinson	471,691	Mar. 29	3146	891	58	1742
Electric generator regulator.	E. W. Rice, Jr.	467,358	Jan. 19	1715	438	58	342
Electric governor.	J. T. O'Brian	468,686	Feb. 9	1217	439		
Electric heater.	T. Ahearn	483,124	Sept. 27	1953	309	58	772
Electric heater.	G. D. Burton and E. E. Angell	475,189	May 17	2082	495	60	1757
Electric heater.	C. E. Carpenter	477,628	June 21	2243	526	59	1066
Electric heater.	L. Gutmann	467,538	Jan. 26	2019	562	59	1907
Electric heater.	F. B. Perkins and C. S. Jones.	483,940	Oct. 4	619	511	58	408
Electric-heater bracket.	G. D. Burton	472,634	Apr. 12	966	512		
Electric indicating-instrument.	H. J. Haight.	467,505	Jan. 26	1944	496	58	395
Electric indicating system and instrument.	H. J. Haight.	473,174	Apr. 19	1821	497		
Electric indicator.	W. E. Decrow	478,274	July 5	341	459	59	369
Electric indicator.	C. W. Holtzer and G. E. Cabot	466,787	Jan. 12	774	460	60	68
Electric intermutator.	H. G. O'Neill	485,425	Nov. 1	426	201	58	157
Electric-light brackets. Swing-joint for.	H. P. Drew	478,417	July 5	550	202		
Electric-light circuits. Switchboard for.	J. J. Moore and D. A. Henry	485,643	Nov. 8	744	113	61	659
Electric-light crane.	J. Gallagher	471,968	Mar. 29	3566	114	60	108
					196	61	741
					911	58	1822

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Electric-light fixture.	E. R. Crolius	482,339	Sept. 13	702	167	60	1487
Electric-light fixture.	D. S. Page	484,450	Oct. 18	1425	364	61	313
Electric-light fixture.	J. T. Robb	480,745	Aug. 16	1596	400	60	915
Electric-light hanger. Adjustable	H. L. Holt	483,556	Oct. 4	59	15	61	14
Electric-light holder. Adjustable	L. S. Pfouts	487,022	Nov. 29	2977	767	61	1235
Electric light. Incandescent	E. McQuat	481,047	Aug. 16	2063	515	60	1007
Electric-light mast-arm	J. H. Caldwell	476,607	June 7	574	137	59	1550
Electric-light poles. Mast-arm for.	A. B. Allison and G. B. Scott	484,565	Oct. 18	1601	407	61	348
Electric-light shade, &c.	H. A. Minor	476,021	May 31	3404	859	59	1353
Electric-light support.	G. M. Kim	473,220	Apr. 19	1916	482	59	368
Electric-light support.	J. J. Walsh	471,537	Mar. 29	3327	864	58	1787
Electric-light tower	C. A. Beardsley	463,186	Feb. 2	426	105	58	608
Electric lights. Device for raising and lowering suspended	S. M. Terry	468,159	Feb. 2	379	93	58	598
Electric lights. Device for raising or lowering suspended	F. P. Welsh	488,298	Dec. 20	1757	442	61	1704
Electric lights. Door-lock switch for	C. Green	483,739	Oct. 4	323	81	61	68
Electric lights. Globe-guard for	C. P. Robbins	466,576	Jan. 5	428	110	58	82
Electric-lighting apparatus. Automatic	L. G. Woolley	487,109	Nov. 29	3115	800	61	1264
Electric-lighting circuits. Testing apparatus for	C. H. Rudd	480,038	Aug. 2	449	114	60	667
Electric-lighting rosette	E. W. Buffinton	480,915	Aug. 16	1853	462	60	967
Electric-lighting system	E. T. Cooke and W. H. Mackay	478,186	July 5	181	47	60	38
Electric-lighting system	M. J. Cowgill	475,538	May 24	2637	670	59	1189
Electric-lighting system	P. Cravath	481,785	Aug. 30	3316	810	60	1274
Electric-lighting system	T. A. Edison	476,527	June 7	455	108	59	1527
Electric-lighting system	T. A. Edison	476,531	June 7	461	109	59	1528
Electric-lighting system	E. Huber	481,904	Aug. 30	3567	859	60	1310
Electric-lighting system	J. M. Lockwood	472,623	Apr. 12	955	247	59	195
Electric-lighting system	W. H. MacKay	485,287	Nov. 1	199	56	61	613
Electric-lighting system	J. F. McElroy	469,656	Feb. 23	2711	698	58	1082
Electric-lighting system	G. F. Myers	480,372	Aug. 9	1004	252	60	785
Electric-lighting system	M. J. Quirk and C. Bach, Jr.	480,782	Aug. 16	1653	413		
Electric-lighting system	A. Sechrist	476,492	June 7	304	70	59	1497
Electric-lighting system	C. Selden	480,375	Aug. 9	1008	254	60	786
Electric-lighting system	S. L. Trippe	468,487	Feb. 9	911	231	58	710
Electric-lighting system	B. B. Ward	484,479	Oct. 18	1474	375		
Electric-lighting systems. Time-meter for	J. O. Ball	488,107	Dec. 13	1442	362	61	1626
Electric lock	C. H. Crockett and C. C. Allen	473,061	Apr. 19	1620	413	59	334
Electric lock	W. H. Hollar and F. S. Holmes	477,297	June 28	2681	670	59	2008
Electric lock	W. H. Hollar and F. S. Holmes	477,898	June 28	2683	671		
Electric lock	F. S. Holmes	467,465	Jan. 19	1874	478	58	374
Electric lock	F. Morgenthaler	475,137	May 17	2003	507		
Electric lock	J. G. Thompson	471,913	Mar. 29	3485	891	58	1807
					892		
					644		
					645		
Electric machine	M. von Dolivo-Dobrowolsky	469,515	Feb. 23	2512	646	58	1040
					646		
Electric machine	H. A. Wagner and F. Schwedtmann	474,787	May 10	1444	366	59	928
Electric machine. Dynamo	W. S. Andrews and T. Spencer. (Re-issue.)	11,266	Aug. 30	3552	869	60	1319
Electric machine. Dynamo	G. Baehr	486,524	Nov. 22	2132	563	61	1052
Electric machine. Dynamo	W. Decker	473,547	Apr. 26	2443	618	59	512
Electric machine. Dynamo	G. E. Dorman	468,416	Feb. 9	799	199	58	689
Electric machine. Dynamo	G. E. Dorman	472,943	Apr. 12	1413	361	59	283
Electric machine. Dynamo	T. A. Edison	470,330	Mar. 15	2001	512	58	1503
Electric machine. Dynamo	R. Eickemeyer	473,618	Apr. 26	2578	649	59	538
					650		
Electric machine. Dynamo	R. Eickemeyer	473,619	Apr. 26	2581	650	59	539
Electric machine. Dynamo	R. Eickemeyer	479,118	July 19	1625	406	60	344
Electric machine. Dynamo	W. Koedding	476,151	May 31	3616	914	59	1395
Electric machine. Dynamo	D. Pepper, Jr.	485,220	Nov. 1	100	36	61	593
Electric machine. Dynamo	L. S. M. Pyke and H. T. Barnett	472,628	Apr. 12	961	249	59	196
Electric machine. Dynamo	S. H. Short	473,367	Apr. 19	2142	537	59	433
Electric machine. Dynamo	J. Sohlman	469,281	Feb. 23	2152	553	58	970
Electric machine. Dynamo	E. A. Sperry	469,725	Mar. 1	92	24, 25	58	1116
					174	60	143
					175		
Electric machine. Dynamo	C. W. Thomas	478,529	July 5	720	176	58	586
					176		
Electric machine. Dynamo	E. Thomson	468,121	Feb. 2	320	78, 79	58	586
Electric machine. Dynamo	E. Thomson	476,331	June 7	166	40	59	1469
Electric machine. Dynamo	J. J. Wood	477,729	June 28	2401	600	59	1957
					601		
Electric machine. Magneto	J. Hunt	468,451	Feb. 9	843	213	58	698
					214		
Electric machine or motor. Dynamo	J. D. F. Andrews	474,624	May 10	1191	302	59	876
Electric machine or motor. Dynamo	H. M. Byllesby	469,193	Feb. 16	2000	510	58	935
Electric machine or motor. Dynamo	T. A. Edison	470,926	Mar. 15	1996	510	58	1502
Electric machine or motor. Dynamo	W. T. Goulden and L. B. Atkinson	471,693	Mar. 29	3149	802	58	1742
Electric machine or motor. Dynamo	C. D. Jenney	474,328	May 10	814	212	59	805
					213		
Electric machine or motor. Dynamo	E. A. Sperry	478,142	July 5	101	26	60	22
Electric-machine regulator. Dynamo	A. Dow	486,417	Nov. 15	1974	524	61	1007
Electric-machine regulator. Dynamo	C. E. Scribner	484,611	Oct. 18	1673	425	61	363
					426		
Electric-machine regulator. Dynamo	E. Thomson	485,239	Nov. 1	126	38	61	599
Electric machines and motors. Brush-holder for dynamo	F. B. Daggett	476,368	June 7	223	55	59	1479
Electric machines. Automatic safety device for dynamo	F. B. Badt	487,816	Dec. 13	953	241	61	1528
Electric machines. Commutator for	N. C. Bassett	483,732	Oct. 4	311	78	61	65

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Electric machines. Field-magnet frame for dynamo.	E. P. Warner	480,049	Aug. 2	469	119	60	671
Electric machines. Magnetic inductor for dynamo.	L. S. M. Pyke and E. S. Harris	476,818	June 14	908	222	59	1631
Electric machines. Regulation of dynamo.	R. Tbury	466,760	Jan. 5	725	187	58	139
Electric meter	C. W. Ayton	487,703	Dec. 13	755	194	61	1487
Electric meter	L. V. Brillie	479,032	Aug. 2	245	60, 61	60	629
Electric meter	T. A. Edison	470,990	June 14	1185	287	59	1686
Electric meter	O. Ericsson	475,759	May 31	2979	755	59	1269
Electric meter	C. K. Huguet	466,686	Jan. 5	593	154	58	115
Electric meter	A. G. McKenna and H. T. Weed	475,411	May 24	2430	620	59	1150
Electric meter	J. F. Ott and A. E. Kennelly	479,171	July 19	1700	426	60	359
Electric meter	J. Perry	486,123	Nov. 15	1521	402	61	916
Electric meter	F. Teague	482,324	Sept. 6	677	161	60	1468
Electric meter	A. G. Waterhouse	483,189	Sept. 27	2065	521	60	1779
Electric meter	J. J. Wood	469,800	Mar. 1	217	56	53	1143
Electric meter	F. H. Beers	487,242	Dec. 6	10	3	61	1323
Electric meter	C. S. Bradley	488,305	Dec. 20	1767	445	61	1706
Electric motor	J. W. Darley, Jr.	467,924	Feb. 2	30	7, 8	58	532
Electric motor	W. M. Dresskell	483,431	Sept. 27	2448	616	60	1851
Electric motor	H. F. Ong	478,968	July 12	1380	339	60	287
Electric motor	J. H. Palmer	467,048	Jan. 12	1207	304	58	237
Electric motor	J. B. Secor	478,475	July 5	633	151	60	126
Electric motor	I. E. Storey	488,041	Dec. 13	1337	311	61	1604
Electric motor	D. H. Wilson	476,347	June 7	187	44, 45	59	1472
Electric motor	J. T. Wilson	468,716	Feb. 9	1265	3, 2	58	762
Electric motor	F. Yeiser	477,483	June 21	1997	496	59	1859
Electric motor and generator	C. S. Bradley and J. J. Wood	481,220	Aug. 23	2376	585	60	1080
Electric motor and regulating device therefor.	F. J. Sprague	481,739	Aug. 30	3237	788	60	1258
Electric-motor controller	J. P. B. Fiske	485,620	Nov. 8	711	186	61	734
Electric-motor-controlling apparatus	C. J. Van Depoele	467,449	Jan. 19	1852	473	58	369
Electric-motor-controlling device	A. L. Parcellle	469,712	Mar. 1	61	18	58	1110
Electric-motor mechanism	S. E. Mower	474,328	May 3	706	182	59	772
Electric-motor mechanism	E. B. Phillips	474,857	May 17	1567	399	59	964
Electric motor or dynamo	A. W. Smith	484,724	Oct. 18	1851	470	61	399
Electric motor or dynamo-electric machine	H. H. Hosford	470,194	Mar. 8	846	208	58	1272
Electric motor or dynamo-electric machine	R. Lundell	481,701	Aug. 30	3162	772	60	1244
Electric motor or generator	R. M. Hunter	472,708	Apr. 12	1081	277	59	217
Electric motor or generator	R. Kennedy	470,199	Mar. 8	854	211	58	1274
Electric-motor regulation	F. O. Blackwell	468,128	Feb. 2	333	82, 83	58	589
Electric-motor safety device	E. Thomson	476,330	June 7	163	40	59	1468
Electric motors and generators. Method of and apparatus for controlling	C. T. Hutchinson	467,230	Jan. 19	1514	357	58	305
Electric motors. Circuit-controller for	W. S. Andrews	474,623	May 10	1190	302	59	876
Electric motors. Governing	R. Lundell	486,213	Nov. 15	1646	435	61	941
Electric motors. Governing	R. Lundell	486,214	Nov. 15	1649	436	61	941
Electric motors or dynamo-electric machines. Brush-holder for	C. A. Hussey	471,819	Mar. 29	3364	856	58	1782
Electric motors. Rheostatic controller for	J. P. B. Fiske	485,619	Nov. 8	709	186	61	733
Electric motors. Switch-box for	P. Wright	472,283	Apr. 5	430	110	59	80
Electric or cable roads. Conduit for	C. H. Bates	468,314	Feb. 2	634	158	58	647
Electric plaster. Galvanic	J. W. Shults	469,796	Mar. 1	210	54	58	1142
Electric plaster. Galvanic	J. W. Shults	469,797	Mar. 1	212	55	58	1142
Electric push	J. F. Wollensak	466,644	Jan. 5	528	137	58	102
Electric push	J. F. Wollensak	480,683	Aug. 9	1502	374	60	880
Electric reciprocating tool	H. N. Marvin	466,541	Jan. 5	369	92	58	71
Electric regulating apparatus	J. M. Bradford	477,637	June 28	2266	567	59	1928
Electric resistance-box	A. Wirsching	474,073	May 3	301	73	59	696
Electric search-light	R. S. Dobbie	470,633	Mar. 8	1557	405	58	1408
Electric search-light	L. Hills	484,964	Oct. 25	2267	585	61	496
Electric search-light	B. B. Ward	472,721	Apr. 12	1099	282	59	220
Electric search-light	N. Weeks, Jr.	469,050	Feb. 16	1802	461	58	597
Electric-service systems. Time cut-out for	S. R. Linville	480,369	Aug. 9	999	251	60	784
Electric shocks. Coin-freed machine for giving	J. Mason	468,955	Feb. 16	1644	418	58	864
Electric signal	G. McIntosh	485,352	Nov. 1	315	84	61	636
Electric signal-circuit	J. V. Young	488,138	Dec. 13	1486	374	61	1635
Electric signal system	H. F. Eaton	468,107	Feb. 2	299	72, 73	58	582
Electric snap-switch	S. F. Alden	483,316	Sept. 27	2288	575	60	1820
Electric snap-switch	A. Ekström	483,713	Oct. 4	283	71	61	60
Electric snap-switch	G. K. Hutchins	474,473	May 10	948	244	59	830
Electric switch	D. H. Armstrong	483,704	Oct. 4	274	68	61	57
Electric switch	F. Broadnax	476,781	June 14	840	207	59	1618
Electric switch	J. H. Clark	481,297	Aug. 23	2521	619	60	1105
Electric switch	C. E. Davis	476,613	June 7	584	139	59	1552
Electric switch	S. Deacon	470,748	Mar. 15	1725	444	58	1450
Electric switch	A. Ekström	483,712	Oct. 4	282	70	61	59
Electric switch	J. S. Gibbs	480,694	Aug. 9	1517	377	60	884
Electric switch	W. M. Goodridge	476,792	June 14	861	212	59	1621
Electric switch	E. T. Greenfield	477,409	June 21	1879	463	59	1836
Electric switch	H. J. Haight	467,504	Jan. 26	1939	495	58	394
Electric switch	J. L. Hinds	477,595	June 21	2172	539	59	1894
Electric switch	H. K. Hitchcock	473,504	Apr. 26	2372	601	59	499

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Electric switch	H. Hubbell	471,612	Mar. 29	3022	769	58	1718
Electric switch	E. H. Johnson	473,228	Apr. 19	1913	482	59	387
Electric switch	C. J. Klein	467,540	Jan. 26	2024	512	58	409
Electric switch	F. F. Loomis	479,949	Aug. 2	271	66	60	633
Electric switch	A. P. Lundberg	479,821	Aug. 2	71	17	60	596
Electric switch	A. Metzger	471,271	Mar. 22	2532	643	58	1617
Electric switch	H. Moore and O. O. Jarrard	470,790	Mar. 15	1787	460	58	1462
Electric switch	J. J. Nate	487,092	Nov. 29	3087	793 794	61	1258
Electric switch	J. C. O'Neil	485,558	Nov. 1	617	164 165	61	699
Electric switch	G. E. Painter	466,508	Jan. 5	323	81	58	61
Electric switch	H. T. Paiste	483,862	Oct. 4	507	126 127	61	105
Electric switch	C. G. Perkins	471,760	Mar. 29	3258	830	58	1762
Electric switch	G. Pfannkuche	474,921	May 17	1657	423 424	59	924
Electric switch	H. M. Pilkington and R. S. White	477,869	June 28	2639	659	59	2900
Electric switch	E. W. Rice, Jr.	466,802	Jan. 12	799	206	58	162
Electric switch	W. J. Schultz	4-6,987	Nov. 29	2925	755	61	1226
Electric switch	A. P. Seymour	476,829	June 14	921	225	59	1634
Electric switch	E. A. Snow	477,612	June 21	2201	546	59	1899
Electric switch	F. H. Soden	473,132	Apr. 19	1739	439 440	59	354
Electric switch	F. H. Soden	473,134	Apr. 19	1743	440	59	355
Electric switch	L. T. Stanley	472,610	Apr. 12	935	241	59	191
Electric switch	E. Thomson	468,119	Feb. 2	317	77	58	585
Electric switch	M. R. Utley	4-4,380	Oct. 11	1308	334	61	279
Electric switch	E. P. Warner	473,435	Apr. 19	2249	566	59	454
Electric switch	E. P. Warner	426,241	Nov. 15	1693	448	61	950
Electric switch	A. Wright	468,125	Feb. 2	328	80	58	528
Electric switch	C. A. P. Willing and R. J. G. Violet	474,541	May 10	1058	271	59	851
Electric switch	J. J. Wood	474,050	May 3	269	65, 66	59	689
Electric switch and case	A. Wright	482,936	Sept. 20	1652	416	60	1684
Electric switchboard	J. B. Mayer	473,848	Apr. 26	2927	737	59	606
Electric switchboard	C. E. Scribner	486,506	Nov. 22	2105	557	61	1047
Electric switch. Mast-arm	T. Dillon	477,890	June 28	2673	668	59	2007
Electric switch. Non-sparking	G. E. Painter	468,899	Dec. 27	2766	670	61	1910
Electric switch. Vibrating	J. S. Gibbs	471,237	Mar. 22	2481	630	58	1607
Electric switches. Arc-extinguisher for	S. H. Short	478,718	July 12	969	245	60	213
Electric telpherage apparatus	M. W. Hassan	471,790	Mar. 29	3320	845	58	1774
Electric terminal	H. Sanche	476,080	May 31	3496	881	59	1372
Electric translating devices. Meter for	H. H. Cntler	467,669	Jan. 26	2216	564	58	445
Electric trolley system. Underground	R. B. Ayres	485,252	Nov. 1	149	44	61	604
Electric-wire conduit	S. H. Flagg	480,573	Aug. 9	1313	328	60	845
Electric-wire conduit	C. A. Freeman	470,237	Mar. 8	912	225	58	1285
Electric-wire conduit	C. H. Wilson	473,044	Apr. 19	1596	406	59	329
Electric-wire connector	C. J. Coleman	468,293	Feb. 2	596	147	58	639
Electric-wire coupling	W. B. Lillard	468,086	Feb. 2	266	65	58	576
Electric-wire coupling	J. F. McElroy	473,337	Apr. 26	2607	656	59	544
Electric wire. Covered	H. A. Rueter	473,713	Apr. 26	2719	684	59	565
Electric-wire joint	W. E. Harrington	481,025	Aug. 16	2027	506	60	999
Electric-wire joint	R. H. Smith	471,625	Mar. 29	3046	775	58	1723
Electric-wire hanger	T. Imeson, L. D. Tibbets, and C. L. F. Kellogg	473,158	Apr. 19	1784	450	59	363
Electric-wire hanger	H. H. Luscomb	472,220	Apr. 5	335	87	59	63
Electric-wire holder	E. L. Lloyd	475,781	May 31	3013	764	59	1275
Electric-wire pole	J. Meyer and C. Binder	476,889	June 14	1021	247 248	59	1653
Electric-wire standard	E. C. Morgan	474,847	May 17	1552	396	59	961
Electric-wire support	F. O. Blackwell	470,844	Mar. 15	1896	483	58	1480
Electric-wire support	W. B. Bragdon	479,052	July 19	1517	378	60	325
Electric-wire taper	G. S. Neu	467,891	Jan. 26	2578	653	58	512
Electric wires. Apparatus for laying underground conduit for	H. B. Camp	467,650	Jan. 26	2188	556	58	439
Electric wires. Molding for	W. Gritten and A. Parmley	469,241	Feb. 23	2084	536	58	959
Electric wires. Pole for supporting	J. H. Huntress	471,750	Mar. 29	3257	830	58	1761
Electric wires. Safety attachment for overhead	C. D. Brown	472,784	Apr. 12	1186	304	59	237
Electrical apparatus	L. G. Woolley	482,668	Sept. 13	1225	299	60	1587
Electrical apparatus. Coil for	H. C. Back	486,926	Nov. 29	2831	733	61	1207
Electrical apparatus. Coin-controlled	H. Wickham	475,527	May 24	2620	667	59	1186
Electrical-apparatus protector	W. O. Morse	470,697	Mar. 15	1648	428	58	1435
Electrical cells. Diaphragm for	C. H. Waite	469,428	Feb. 23	2375	58	1015	
Electrical circuit and cable	J. A. Barrett	482,149	Sept. 6	371	88	60	1408
Electrical circuits. Temperature-regulating device for	E. Weston	480,891	Aug. 16	1815	453	60	959
Electrical conductor	P. H. Holmes	482,177	Sept. 6	424	101	60	1418
Electrical conductor. Extensible	E. C. Rowell	466,427	Jan. 5	187	49	58	36
Electrical-conductor system	C. J. Kintner	473,932	May 3	76	15, 16	59	651
Electrical conductors. Safety device for	J. Marx	471,302	Mar. 22	2575	654	58	1626
Electrical conduit	E. T. Greenfield	469,208	Feb. 16	2037	520	58	940
Electrical converter	G. D. Burton	475,184	May 17	2072	522 523	59	1064
Electrical depositing-meter	T. A. Edison	484,183	Oct. 11	990	253	61	216
Electrical distribution-box	W. H. Hart	488,198	Dec. 20	1590	398	61	1672
Electrical distribution. System of	D. B. Brace	484,549	Oct. 18	1561	401	61	344
Electrical distribution. System of	T. A. Edison	476,529	June 7	458	109	59	1527
Electrical distribution. System of	W. H. Elkins	474,166	May 3	432	104	59	72
Electrical distribution. System of	H. W. Leonard	468,099	Feb. 2	223	69	58	579
Electrical distribution. System of	H. W. Leonard	476,544	June 7	478	113 114	59	1532
Electrical distribution. System of	H. W. Leonard	478,344	July 5	439	108 109	60	87
Electrical distribution. System of	H. W. Leonard	484,208	Oct. 11	1032	262	61	224

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Electrical distribution. System of.....	C. O. Mailloux.....	475,877	May 31	3184	{ 807 808 }	59	1309
Electrical distribution. System of.....	W. Marshall.....	472,193	Apr. 5	287	75	59	54
Electrical distribution. System of.....	O. B. Shallenberger.....	487,543	Dec. 6	508	132	61	1421
Electrical distribution. System of.....	W. Stanley, Jr.....	469,809	Mar. 1	231	58	58	1146
Electrical distribution. System of.....	E. Thomson.....	468,122	Feb. 2	323	79	58	587
Electrical distribution. System of.....	E. Thomson and E. W. Rico, Jr.....	468,123	Feb. 2	325	79	58	587
Electrical distribution. System of.....	C. J. Van Depoele.....	488,928	Dec. 27	2759	681	61	1921
Electrical energy to a distance. Transmission of.....	M. Deprez and J. Carpentier.....	470,865	Mar. 15	1910	489	58	1485
Electrical furnace.....	T. Parker.....	482,586	Sept. 13	1112	269	50	1566
Electrical heater.....	A. E. Appleyard.....	483,754	Oct. 4	352	88	61	74
Electrical heater.....	A. E. Appleyard.....	483,759	Oct. 4	353	89	61	74
Electrical heater.....	J. V. Capek.....	482,074	Sept. 6	248	60	60	1384
Electrical heater.....	W. Mitchell.....	474,797	May 10	1465	372	59	932
Electrical heater.....	W. Mitchell.....	487,285	Dec. 6	74	22	61	1336
Electrical heater.....	H. G. O'Neill.....	485,424	Nov. 1	424	113	61	659
Electrical heating currents. System of distribution of.....	G. D. Burton.....	468,938	Feb. 16	1611	407	58	858
Electrical indicator.....	M. A. Deuel.....	468,597	Feb. 9	1080	276	58	744
Electrical indicator.....	J. W. Gibboney.....	474,523	May 10	1028	264	59	846
Electrical indicator.....	J. W. Henderson.....	472,500	Apr. 5	774	197	59	147
Electrical instruments. Apparatus for retarding or dampening the motion of moving bodies in.....	E. Weston.....	480,889	Aug. 16	1810	452	60	958
Electrical keyboard.....	W. E. Blodgett.....	477,635	June 28	2261	566	59	1927
Electrical machines. Cut-off for.....	J. P. Woolley.....	473,282	Apr. 19	1997	502	59	405
Electrical meter.....	J. F. Kelly.....	472,265	Apr. 5	407	105	59	76
Electrical meter.....	A. E. Kennelly.....	479,167	July 19	1694	424	60	358
Electrical meter for three-wire systems.....	A. E. Kennelly and J. F. Ott.....	479,168	July 19	1695	425	60	358
Electrical protective and time-detecting system. Combined.....	J. S. Morse.....	466,505	Jan. 5	317	80	58	60
Electrical reciprocating tool.....	W. P. Carstarphen, Jr.....	476,225	May 31	3749	947	59	1420
Electrical regulation.....	H. E. Vineing.....	480,393	Aug. 9	1040	261	60	791
Electrical safety cut-out.....	H. S. Keating.....	488,123	Dec. 13	1462	369	61	1631
Electrical spool.....	S. S. Wheeler.....	480,681	Aug. 9	1498	373	60	880
Electrical switch.....	G. Binswanger.....	485,028	Oct. 25	2379	611	61	518
Electrical switch.....	C. J. Klein.....	477,374	June 21	1826	447	59	1824
Electrical switch.....	C. E. Pattison.....	488,740	Dec. 27	2466	613	61	1860
Electrical switchboard.....	L. A. Fehr.....	474,632	May 10	1200	{ 305 306 }	59	879
Electrical switchboard.....	J. W. Lyon.....	488,532	Dec. 20	2142	530	61	1780
Electrical switchboards. Mold for the manufacture of.....	J. B. Lyon.....	479,891	Aug. 2	177	44	60	617
Electrical transformer.....	E. Thomson.....	486,916	Nov. 29	2818	730	61	1205
Electrical translating devices. Adjustable suspension apparatus for.....	H. D. Sisson.....	470,080	Mar. 1	655	162	58	1226
Electrical transmitting apparatus.....	A. D. Neal and H. F. Eaton.....	486,888	Nov. 29	2729	712	61	1187
Electrical transmitting system.....	F. E. Now.....	475,464	May 24	2523	642	59	1167
Electrical-wire stripper.....	A. Cuthbert.....	470,318	Mar. 8	1067	271	58	1313
Electrically-controlled elevator.....	A. M. Coyle.....	471,100	Mar. 22	2267	583	58	1568
Electrically-heated vessel.....	W. Mitchell.....	474,398	May 10	826	{ 216 217 }	59	808
Electrically reducing refractory compounds.....	T. L. Willson.....	486,575	Nov. 22	2209	.....	61	1066
Electrically-repeating signal.....	S. D. Field.....	488,550	Dec. 27	2163	{ 534 535 }	61	1800
Electricity. Apparatus for distribution of.....	T. Tomlinson.....	487,356	Dec. 6	194	53, 54	61	1359
Electricity. Development and distribution of.....	J. S. Stone.....	487,102	Nov. 29	3105	797	61	1262
Electricity. Device for treating patients by.....	E. M. Thomas.....	485,238	Nov. 1	124	38	61	599
Electricity. Influence-generator of.....	W. Henry.....	479,941	Aug. 2	256	63	60	631
Electricity. Process of and apparatus for generating.....	J. S. Rogers.....	487,644	Dec. 6	657	169	61	1451
Electricity. Production and distribution of.....	W. Marshall.....	472,379	Apr. 5	586	149	59	110
Electricity. Time-registering apparatus for.....	H. H. Pattee.....	478,237	July 5	277	68, 69	60	56
Electro-magnetic brake.....	H. E. Walter.....	467,243	Jan. 19	1542	393	58	310
Electro-magnetic machine.....	A. E. Kennelly and J. F. Ott.....	479,169	July 19	1696	425	60	358
Electro-magnetic machine.....	R. Lundell.....	469,862	Mar. 1	316	81	58	1162
Electro-magnetic motor.....	J. F. Kelly and W. Stanley, Jr.....	479,746	July 26	2661	660	60	556
Electro-magnetic reciprocating engine.....	M. J. Wightman.....	469,441	Feb. 23	2391	{ 613 614 }	58	1018
Electro-therapeutical instrument.....	J. W. Molère.....	483,745	Oct. 4	334	84	61	70
Electrode.....	P. L. T. Héroult.....	473,393	Apr. 19	2195	551	59	443
Electrode.....	A. Vanden-Kerkhove.....	478,664	July 12	913	226	60	196
Electrode and incandescent electrical conductor.....	L. L. Jones.....	484,553	Oct. 18	1585	402	61	315
Electrode and making the same. Secondary-battery.....	A. Reckenzann.....	475,797	May 31	3038	769	59	1280
Electrode. Arc-lamp.....	C. W. Hazeltine.....	487,220	Nov. 29	3266	839	61	1296
Electrode. Electro-therapeutic.....	H. Bonis.....	471,850	Mar. 29	3404	868	58	1790
Electrode. Flexible.....	G. D. Burton and E. E. Angell.....	475,191	May 17	2055	527	59	1067
Electrode for medicinal purposes.....	E. H. McBride.....	484,522	Oct. 18	1538	390	61	335
Electrode for use in electro-metallurgical processes.....	P. Héroult.....	473,117	Apr. 19	1715	434	59	350
Electrode. Secondary-battery.....	H. G. Osburn.....	478,018	June 28	2865	717	59	2045
Electrode. Secondary-battery.....	C. F. Winkler.....	471,591	Mar. 29	3000	763	58	1714
Electrode. Storage-battery.....	H. Tudor.....	478,661	July 12	907	225	60	195
Electrodes for secondary batteries. Manufacture of.....	J. F. McLaughlin.....	475,335	May 24	2310	593	59	1129
Electrodes. Manufacture of secondary-battery.....	W. W. Griscom.....	487,834	Dec. 13	980	247	61	1534
Electrolier. Extension.....	C. Deavs.....	469,895	Mar. 1	366	92	58	1171
Electrolytic apparatus.....	T. Cranev.....	482,724	Sept. 20	1325	324	60	1620
Electrolytic apparatus.....	T. Cranev.....	487,996	Dec. 13	1248	311	61	1585
Electrolytic apparatus.....	T. Cranev.....	488,708	Dec. 27	2420	600	61	1851
Electrolytic cell.....	E. B. Cutten.....	480,491	Aug. 9	1194	300	60	821
Electrolytic cell.....	E. A. Le Suenr.....	468,880	Feb. 16	1515	387	58	839
Electrolytic decomposition.....	T. A. Edison.....	466,460	Jan. 5	243	61	58	46
Electrolytic diaphragm.....	A. J. Ledman.....	483,692	Oct. 4	254	.....	61	53
Electrolytic process and apparatus.....	H. Blackman.....	484,990	Oct. 25	2312	{ 596 597 }	61	505
Electrolytical plant.....	O. Stalman.....	467,350	Jan. 19	1705	436	58	340

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Electrolytical process and apparatus for carrying out said process.	O. Stalman	467,484	Jan. 19	1907	488	58	380
Electroplate attachment.	C. Keck	476,653	June 7	644	156	59	1564
Electroplating apparatus.	F. H. Howard	484,535	Oct. 18	1560	397	61	339
Electroplating with alloys.	E. T. Burrowes	477,350	June 21	1783		59	1817
Electrostatic switch and phase-indicator.	A. U. Alcock	482,032	Sept. 6	180	43	60	1370
Electrotype and stereotype plates. Machine for bending.	W. Scott. (Reissue)	11,279	Oct. 18	1936	{492 493}	61	418
Electrotype-plates. Means for bending.	C. B. Cottrell	487,915	Dec. 13	1119	279	61	1559
Electrotype-shells and similar articles. Mold for.	J. C. Wolfe	476,717	June 7	730	{180 181 135}	59	1582
Elevated carrier.	M. E. Benson	476,600	June 7	566	135	59	1548
Elevated carrier.	A. T. Kelliher	487,485	Dec. 6	417	{107 108}	61	1403
Elevated carrier.	A. T. Kelliher	488,765	Dec. 27	2500	622	61	1867
Elevated carrier.	J. J. Robinson	476,072	May 31	3484	878	59	1370
Elevated structure.	C. C. Lockstaedt	477,907	June 28	2694	674	59	2011
Elevating apparatus.	A. Miller	466,571	Jan. 5	421	108	58	81
Elevating bags, barrels, &c. Apparatus for.	J. B. Deffler	474,653	May 10	1232	315	59	885
Elevating machinery. Hydraulic.	T. F. Rowland	488,836	Dec. 27	2613	{647 648 649}	61	1890
Elevating machinery. Hydraulic.	T. F. Rowland	488,837	Dec. 27	2616	{648 649}	61	1891
Elevator:							
See Barrel-elevator.	Hand-elevator.						
Binder-elevator.	Harvester-elevator.						
Brick-elevator.	Hay-elevator.						
Bucket-elevator.	Hydraulic-elevator.						
Cable-elevator.	Lumber-elevator.						
Chain elevator.	Mail-elevator.						
Cotton-elevator.	Milk-elevator.						
Electric elevator.	Mine-elevator.						
Electrically-controlled elevator.	Newspaper-elevator.						
Endless-chain elevator.	Stone-crusher elevator.						
Grain-elevator.	Straw-elevator.						
Water-elevator.	Trunk-elevator.						
Elevator.	W. N. Anderson	480,542	Aug. 9	1270	{318 319}	60	830
Elevator.	J. B. Bailey	468,756	Feb. 9	1323	335	58	793
Elevator.	W. C. Baird	471,497	Mar. 22	2867	730	58	1682
Elevator.	C. W. Baldwin	478,040	June 28	2900	{724 725}	59	2052
Elevator.	C. M. Bartholomew	483,277	Sept. 27	2223	560	60	1809
Elevator.	A. W. D. Bell and J. Welsby	469,368	Feb. 23	2282	{587 588}	58	997
Elevator.	J. W. Brook	483,894	Oct. 4	550	139	61	114
Elevator.	M. Y. Calcutt	479,390	July 19	2061	{515 516}	60	429
Elevator.	C. A. Case	478,986	July 19	1414	350	60	305
Elevator.	C. W. Collins	479,559	July 26	2353	587	60	500
Elevator.	J. A. Dean	472,012	Mar. 29	3626	927	58	1834
Elevator.	W. D. Ewart and J. M. Dodge	480,659	Aug. 9	1462	364	60	874
Elevator.	C. W. Fowler	472,113	Apr. 5	163	44	59	31
Elevator.	C. W. Fowler	486,709	Nov. 2	2434	634	61	1111
Elevator.	F. Giles	483,145	Sept. 27	1982	502	60	1762
Elevator.	S. H. Hale	482,247	Sept. 6	529	126	60	1437
Elevator.	H. Hanson and J. E. Bergman	485,034	Oct. 25	2386	613	61	519
Elevator.	P. D. Harper	478,999	July 19	1438	357	60	309
Elevator.	F. E. Herdman	480,847	Aug. 16	1753	439	60	946
Elevator.	F. E. Herdman	480,848	Aug. 16	1754	{439 440}	60	946
Elevator.	F. E. Herdman	480,849	Aug. 16	1755	440	60	947
Elevator.	F. E. Herdman	487,266	Dec. 6	42	13	61	1329
Elevator.	F. E. Herdman	487,267	Dec. 6	42	14	61	1330
Elevator.	F. E. Herdman	487,268	Dec. 6	43	14	61	1330
Elevator.	A. R. Holder	486,161	Nov. 15	1577	418	61	928
Elevator.	H. L. Hollis	476,017	May 31	3399	{257 258}	59	1352
Elevator.	L. M. Hosea	479,943	Aug. 2	261	64	60	632
Elevator.	C. N. Judson	476,387	June 7	251	60, 61	59	1486
Elevator.	L. M. Kuehn	487,576	Dec. 6	551	142	61	1430
Elevator.	T. Mason	481,577	Aug. 30	2970	729	60	1207
Elevator.	A. McEachran	472,768	Apr. 12	1164	298	59	233
Elevator.	E. W. Moon	480,202	Aug. 2	708	181	60	716
Elevator.	J. R. Moss	478,263	July 5	325	78, 79	60	65
Elevator.	P. P. Quackenbush	467,135	Jan. 12	1370	350	58	269
Elevator.	C. E. Reid	486,794	Nov. 22	2569	670	61	1139
Elevator.	W. J. Rochford and E. W. Kemper	484,766	Oct. 18	1929	491	61	417
Elevator.	C. Ross	474,609	May 10	1165	296	59	872
Elevator.	C. M. Stearns	479,314	July 19	1918	479	60	401
Elevator.	S. E. Stokes	469,984	Mar. 1	518	129	58	1199
Elevator.	J. H. Tardy	487,104	Nov. 29	3110	798	61	1263
Elevator.	S. T. Teachout	475,524	May 24	2616	666	59	1185
Elevator.	W. Veenschoten	473,036	Apr. 19	1580	{402 403}	59	327
Elevator.	A. P. Webb	475,834	May 31	3116	789	59	1295
Elevator.	G. A. Wheeler	479,864	Aug. 2	132	32, 33	60	608
Elevator.	C. Whittier	474,431	May 10	825	230	59	819
Elevator.	W. Wright	477,730	June 28	2404	601	59	1958
Elevator and carrier.	P. H. Brodusser	481,926	Sept. 6	7	2, 3	60	1336
Elevator and dump.	A. Peterson	471,137	Mar. 22	2323	597	58	1578
Elevator-belt drive.	D. A. Robinson	481,150	Aug. 16	2255	{556 557}	60	1041
Elevator-brake.	J. Rose	486,168	Nov. 15	1586	420	61	929

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Elevator-bucket	F. G. Winkler	168,517	Feb. 9	961	244	58	721
Elevator-control gear	T. W. Heermans	168,520	Feb. 9	965	245	58	721
Elevator-controller	E. S. Matthews	469,655	Feb. 23	2710	697	58	10-2
Elevator-controller	E. S. Matthews	472,930	Apr. 12	1394	357	59	279
Elevator-controller	J. Reilly	483,943	Oct. 4	623	157	61	128
Elevator-controller	H. Rowntree and I. Veeder	473,199	Apr. 19	1864	{469 470}	{59 60}	377
Elevator controlling device	N. C. Bassett	482,495	Sept. 13	971	235	60	1538
Elevator controlling device	J. M. Locke	469,196	Feb. 16	2003	511	58	936
Elevator-controlling device	H. Rowntree	473,198	Apr. 19	1862	469	59	377
Elevator-controlling mechanism	E. S. Matthews	481,580	Aug. 30	2975	730	60	1208
Elevator-controlling mechanism	A. J. McAdam	482,131	Sept. 6	336	80	60	1401
Elevator-door-closing apparatus	C. N. Judson	476,388	June 7	255	61	59	1487
Elevator-door-operating apparatus	D. Tufts	483,407	Sept. 27	2418	608	60	1845
Elevator-door-operating device	G. W. Archer	476,773	June 14	821	202	59	1814
Elevator-door-operating device	H. Rowntree	479,956	Aug. 2	223	71	60	636
Elevator-door-operating device	E. Savage	474,066	May 3	292	71	59	694
Elevator-doors. Means for operating.	R. W. Hare	486,953	Nov. 29	2875	743	61	1215
Elevator-gate	E. D. Toops	482,286	Sept. 6	597	142	60	1451
Elevator-gate-operating device	C. A. Gloekler	488,605	Dec. 27	2256	560	61	1820
Elevator-gates. Device for closing	C. N. Judson	476,386	June 7	249	60	59	1485
Elevator-gearing	N. C. Bassett	483,203	Sept. 27	2087	529	60	1784
Elevator-gearing	N. C. Bassett	485,163	Nov. 1	8	2,3	61	574
Elevator-guide lubricator	H. M. Angle and W. D. Hess	466,971	Jan. 12	1075	273	58	213
Elevator-indicator	T. W. Heermans	479,422	July 26	2124	531	60	456
Elevator-indicator	E. Wyde	479,484	July 26	2246	563	60	479
Elevator limit-stop	T. W. Heermans	480,583	Aug. 9	1334	{332 333}	{60 61}	849
Elevator-operating mechanism	C. E. Moore	488,526	Dec. 20	2135	528	61	1779
Elevator reversing mechanism	E. T. Young. (Reissue)	11,251	June 28	2957	{738 739}	{59 60}	2062
Elevator safety appliance	R. Uren	488,137	Dec. 13	1484	374	61	1635
Elevator safety attachment	L. W. Butler	488,424	Dec. 20	1968	492	61	1746
Elevator safety attachment	L. M. Kellogg	477,371	June 21	1821	{445 446}	{59 60}	1823
Elevator safety attachment	J. Messner	483,569	Oct. 4	79	20	61	18
Elevator safety attachment	M. J. O'Donnell, W. C. Smith, and H. Bound.	478,169	July 5	157	40	60	33
Elevator safety attachment	A. A. Stoltzenburg	483,025	Sept. 20	1804	456	60	1715
Elevator safety attachment	W. J. White	486,518	Nov. 22	2121	560	61	1050
Elevator safety device	E. S. Matthews	476,289	June 7	88	20	59	1455
Elevator safety device	H. Mundt and H. A. Hoops	484,109	Oct. 11	870	221	61	192
Elevator safety device	E. W. Naylor	471,825	Mar. 29	3370	858	58	1783
Elevator safety device	H. R. Tracy	470,960	Mar. 15	2050	{524 525}	{58 59}	1513
Elevator-shafts. Device for closing.	N. J. Blagen	483,416	Sept. 27	2428	611	60	1847
Elevator-shifting device	J. Flemming	487,559	Dec. 6	530	136	61	1436
Elevator-wells. Device for operating doors to	J. P. Runkel	475,022	May 17	1828	463	59	1016
Elevators. Automatic safety device for	C. W. Fowler and A. M. Coyle	467,591	Jan. 26	2104	532	58	423
Elevators. Automatic safety device for	C. W. Fowler and J. Gustafson	467,590	Jan. 26	2102	{532 533}	{58 59}	423
Elevators. Carrier attachment for bucket.	M. Garland	478,322	July 5	410	98	60	82
Elevators. Device for electric	R. C. Smith	466,447	Jan. 5	221	56,57	58	42
Elevators. Electric brake mechanism for	C. E. Moore	468,917	Feb. 16	1577	400	58	552
Elevators. Feed mechanism for	B. S. Constant	467,887	Jan. 26	2571	651	58	511
Elevators. Means for operating safety cut-offs for grain.	W. G. Cogswell	482,468	Sept. 13	914	223	60	1526
Elevators. Means for transmitting power to grain.	D. A. Robinson	484,048	Oct. 11	791	{199 200}	{61 62}	177
Embalming	T. Martin	488,338	Dec. 20	1827	456	61	1718
Embalming apparatus	H. J. Breeze	487,244	Dec. 6	12	4	61	1323
Embalming-table foot-rest	W. Clouser	478,568	July 12	782	191	60	170
Embossing-machine	W. Craban and T. Nesom	483,247	Sept. 27	2150	545	60	1796
Embossing-machine	E. Jaeck	467,175	Jan. 19	1437	366	58	289
Embossing-machine	T. C. Orndorff	477,062	June 14	1298	{315 316}	{59 60}	1710
Embossing-machine	H. Zitzewitz	468,168	Feb. 2	394	98	58	601
Embroidering-machine	E. and R. Cornely	466,889	Jan. 12	954	243	58	191
Embroidering-machine	E. and R. Cornely	479,057	July 19	1523	{379 380}	{60 61}	326
Embroidering-machine beading attachment.	F. P. Langet	473,936	May 3	84	17,18	59	652
Embroidering-machines. Fabric-guiding device for.	M. H. Rumpf	486,355	Nov. 15	1876	{493 494}	{61 62}	987
Embroidering-machines. Fabric-holder for	T. D. Eisner	481,553	Aug. 30	2935	721	60	1200
Embroidering-machines. Fabric-holding frame for	H. Gehrich	478,853	July 12	1211	301	60	255
Embroidering-machines. Fabric-holding frame for	F. Hürzeler	478,192	July 5	189	48	60	39
Embroidering-machines. Fabric-holding frame for	J. Irish	471,793	Mar. 29	3323	846	58	1774
Embroidering-machines. Fabric-holding frame for	J. J. Niederer	476,809	June 14	891	218	59	1628
Embroidering-machines. Fabric-holding frame for	J. J. Niederer	477,264	June 21	1651	403	59	1791
Embroidery	C. J. Jenny	466,566	Jan. 5	414	{105 106}	{58 59}	79
Emery-wheels. Forming	S. G. Hodges	467,254	Jan. 19	1556	396	58	313
Emery-wheels or grindstones. Hood, casing, or covering for	G. W. Wilson	469,310	Feb. 23	2194	562	58	979
Emery-wheels. Process of and machine for making.	A. Johnston	476,799	June 14	872	{214 215}	{59 60}	1624
Emulsifying liquids. Centrifugal machine for	G. W. Towar, Jr	474,880	May 17	1598	407	59	971
Emulsion	S. de Jager	472,925	Apr. 12	1387	59	59	278
Enamel designs. Producing ornamental	F. B. Nichols and A. T. Crane	477,568	June 21	2129	59	59	1886
Enamel for metal articles	H. Claus	485,574	Nov. 1	647	172	61	706
Enameling	C. F. Pauls	467,356	Jan. 19	1713	58	58	312
End-gate	C. H. Chain	472,523	Apr. 12	810	208	59	167
End-gate	W. Cooper	471,377	Mar. 22	2686	685	58	1649
End-gate	W. N. De Vanlt	466,845	Jan. 12	869	232	58	175

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
End-gate.....	W. D. Hawk and O. S. French.....	481,491	Aug. 23	2826	695	60	1163
End-gate.....	M. E. Hunt.....	471,178	Mar. 22	2 91	610	58	1591
End-gate.....	G. H. Johnson.....	470,197	Mar. 8	852	210	58	1273
End-gate.....	H. W. Leavitt and J. A. Bryson.....	477,131	June 14	1408	342	59	1732
End-gate.....	R. T. Lemar.....	467,420	Jan. 19	1804	461	58	359
End-gate. Carriage.....	S. R. Bailey.....	474,353	May 10	763	199	59	795
End-gate fastening.....	G. W. Kerr.....	466,827	Jan. 12	834	215	58	169
End-gate locking-rod.....	T. M. Owen.....	487,766	Dec. 13	867	220	61	1511
End-gate tightener for cars and wagons.....	A. E. S. Lindsey.....	480,664	Aug. 9	1471	366	60	875
End-gate. Wagon.....	H. C. Bennett.....	470,465	Mar. 8	1318	310	58	1359
End-gate. Wagon.....	L. and H. F. Buesing.....	466,885	Jan. 12	947	242	58	189
End-gate. Wagon.....	J. Butler.....	477,988	June 28	2813	704	59	2037
End-gate. Wagon.....	B. F. Clark and J. C. Carrick.....	480,383	Aug. 9	1023	257	60	788
End-gate. Wagon.....	F. B. Cunningham.....	469,903	Mar. 1	377	95	58	1174
End-gate. Wagon.....	G. H. Johnson.....	479,810	Aug. 2	54	13	60	592
End-gate. Wagon.....	P. Millet.....	479,076	July 19	1552	388	60	331
End-gate. Wagon.....	G. S. Sneer.....	462,835	Sept. 20	1493	371	60	1653
End-gate. Wagon.....	E. L. Stanfield.....	488,584	Dec. 27	2224	551	61	1813
End-gate. Wagon-body.....	L. and H. F. Buesing.....	466,886	Jan. 12	950	242	58	189
Endless-apron carriers. Driving mechanism for.....	J. Dick.....	471,743	Mar. 29	3237	824	58	1757
Endless-chain elevator.....	B. Arnold.....	476,507	June 7	428	100	59	1521
Endoscopic instrument.....	J. W. Daily.....	471,990	Mar. 29	3594	918	58	1827
Engine:							
See Carding-engine. Motive-power engine.							
Compound engine. Oil-motor engine.							
Compressing or Oscillating engine.							
blowing engine. Petroleum or similar en-							
Cylinder-engine. gine.							
Dental engine. Pulp-engine.							
Electric engine. Pulp beating and refining							
Electro-magnetic re- engine.							
ciprocating engine. Pumping-engine.							
Explosive engine. Rotary engine.							
Gas-engine. Rotary fluid pressure en-							
Gas or oil motor en- gine.							
Hydraulic engine. Rotary steam-engine.							
Lever-power engine. Steam-engine.							
Locomotive-engine. Traction-engine.							
Locomotive steam- Valveless engine.							
engine. Water-engine.							
Engine.....	J. M. Andersen.....	477,921	June 23	2715	680	59	2016
Engine.....	M. B. Dodge.....	473,657	Apr. 26	2635	664	59	559
Engine.....	J. Harris.....	474,557	May 10	1084	277	59	856
Engine.....	M. Honigmann.....	477,367	June 21	1817	444	59	1823
Engine.....	R. M. Lowne.....	479,651	July 26	2184	{ 618 619 }	60	524
Engine.....	J. Smith.....	487,132	Nov. 29	3150	807	61	1270
Engine attachment. Steam or other.....	T. B. Powers and T. W. Grevert.....	469,303	Feb. 23	2187	560	58	977
Engine-beds. Machine for planing circular guides for.....	H. Haberlin.....	475,939	May 31	3286	829	59	1328
Engine cross-head.....	W. Wright.....	475,428	May 24	2459	{ 626 627 }	59	1155
Engine cut-off mechanism. Steam.....	E. P. Cowles.....	470,863	Mar. 15	1905	478	58	1484
Engine cut-off. Steam.....	W. A. Harris.....	469,696	Mar. 1	39	13, 14	58	1106
Engine driving mechanism. Road.....	C. F. Christopher.....	483,281	Sept. 27	2233	561	60	1810
Engine frame. Locomotive.....	C. C. Higham.....	475,112	May 17	1972	499	59	1043
Engine-houses. Electrical door-trip for.....	A. Bosch.....	485,367	Nov. 1	339	89	61	642
Engine indicator. Steam.....	F. H. Pierpont.....	467,431	Jan. 19	1825	466	58	363
Engine or machinery stop.....	J. Nesbitt.....	469,213	Feb. 16	2045	523	58	942
Engine-register.....	C. C. Worthington.....	476,588	June 7	540	129	59	1544
Engine reversing-gear.....	J. O. Des Chapelles.....	487,115	Nov. 29	3126	801	61	1266
Engine-signal. Electric.....	J. C. Ricketson.....	475,066	May 17	1894	450	59	1028
Engine-stopping apparatus.....	J. P. Tirrell.....	469,669	Feb. 23	2740	{ 704 705 }	58	1089
Engines and other motors. Apparatus for stopping.....	J. P. Tirrell.....	468,753	Feb. 9	1317	334	58	792
Engines. Bogie-frame for locomotive.....	G. Lentz.....	487,187	Nov. 29	3235	828	61	1287
Engines. Controlling mechanism for reciprocating electric.....	C. J. Van Depoele.....	479,960	Aug. 2	291	72, 73	60	637
Engines. Electro-magnetic stop-motion for steam.....	W. W. Hailstone.....	469,471	Feb. 23	2441	626	58	1027
Engines. Feed mechanism for electric reciprocating.....	C. J. Van Depoele.....	479,961	Aug. 2	295	73	60	638
Engines. Reversible eccentric for.....	D. W. Kellogg.....	472,542	Apr. 12	837	214	59	172
Engines. Steam-loop connection for.....	W. Burnham.....	474,438	May 10	894	232	59	821
Engines. Steam-loop connection for steam.....	W. Burnham.....	474,437	May 10	892	232	59	821
Engines. Stop-motion for.....	J. A. Matteson.....	469,326	Feb. 23	2220	{ 569 570 }	58	984
Engines. System of supplying currents to reciprocating electric.....	C. J. Van Depoele.....	479,963	Aug. 2	300	74	60	639
Engineer's leveling-rod. Civil.....	J. Beers.....	468,864	Feb. 16	1494	381	58	836
Engraved steel plates. Fac-simile of.....	W. Wellstood and F. B. Nichols.....	474,858	May 17	1613	59	59	975
Engraver's block.....	A. Muehlmann.....	481,238	Aug. 23	2402	593	60	1084
Engraver's work-clamping block.....	C. E. Van Norman.....	476,951	June 14	1128	271	50	1675
Engraving-block.....	H. W. Barker and E. L. Wirt.....	467,911	Feb. 2	9	3	58	528
Engraving in rilievo. Machine for.....	P. Otto.....	469,047	Feb. 16	1798	{ 459 460 461 }	58	895
Engraving-machine.....	C. A. Ker.....	477,257	June 21	1641	{ 400 401 }	59	1789
Engraving-machine. Pantograph.....	W. Clegg.....	476,186	May 31	3677	929	59	1407
Engraving-machine. Pantograph.....	C. H. Hope.....	474,324	May 3	699	181	59	771
Engraving-machine. Pantograph.....	J. Hope.....	486,210	Nov. 15	1642	435	61	940
Engraving-tool.....	C. F. Pratt.....	476,817	June 14	908	222	59	1631
Envelope.....	M. S. Chapman.....	470,743	Mar. 15	1718	{ 442 443 }	58	1449
Envelope.....	P. H. Flynn.....	484,733	Oct. 18	1868	475	61	402

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Envelope.....	J. W. Kohn.....	484,372	Oct. 11	1293	330	61	276
Envelope.....	E. Morgan.....	468,079	Feb. 2	256	63	58	574
Envelope.....	D. Normand.....	476,549	June 7	486	115	59	1534
Envelope.....	H. Roberts y Fernandez.....	484,674	Oct. 18	1787	455	61	386
Envelope.....	W. H. Theobald.....	466,382	Jan. 5	116	33	58	25
Envelope-dampening device.....	E. L. Kingsley.....	474,174	May 3	448	108	59	724
Envelope-delivery box. Coin-slot.....	C. E. Lee.....	484,502	Oct. 18	1508	383	61	329
Envelope-fastener.....	J. W. Gibboney.....	478,538	July 5	740	180	60	116
Envelope-fastener.....	A. J. Newbury.....	486,586	Nov. 22	2234	586	61	1071
Envelope for mailing packages.....	H. G. Mackinney.....	471,846	Mar. 29	3400	867	58	1789
Envelope-gum moistener.....	N. Macphail.....	475,693	May 24	2870	726	59	1235
Envelope-gumming mechanism.....	J. Ball.....	468,925	Feb. 16	1589	402 403	58	851
Envelope-machine.....	L. P. Bouvier.....	481,779	Aug. 30	3309	808	60	1273
Envelope-machine.....	F. A. Jones.....	467,977	Feb. 2	99	24 25 26	58	544
Envelope-machine.....	F. T. Nicholson.....	486,233	Nov. 15	1680	444 445	61	948
Envelope-machine.....	W. Piper.....	469,391	Feb. 23	2316	596	58	1004
Envelope-machine.....	A. A. Rheutan.....	466,924	Jan. 12	1007	258	58	201
Envelope-machine.....	H. D. and D. W. Swift.....	470,218	Mar. 8	883	219	58	1279
Envelope-machine.....	H. D. and D. W. Swift.....	470,632	Mar. 8	1548	403	58	1406
Envelope-machine feeding device.....	C. Beyer and D. M. Lester.....	478,779	July 12	1095	271	60	233
Envelope-making machine.....	J. West.....	479,042	July 19	1503	374 375	60	332
Envelope. Merchandise.....	J. Speed.....	468,528	Feb. 9	982	251	58	725
Envelope-opener.....	W. D. Rogers and J. D. Van Buren.....	478,889	July 12	1259	311	60	264
Envelope or case.....	P. J. Fish.....	469,204	Feb. 16	2030	518	58	939
Envelope or wrapper.....	T. J. O'Donnell.....	487,581	Dec. 6	557	143	61	1432
Envelope. Safety.....	G. W. Scovill.....	473,431	Apr. 19	2246	565	59	453
Envelopes. Manufacture of.....	A. Schwanenberger.....	478,474	July 5	633	154	60	126
Envelopes. Means for detecting the opening of sealed.....	L. P. Callmeyer.....	482,073	Sept. 6	247	60	60	1384
Envelopes. Safety fastening or seal for.....	E. W. Hall.....	484,711	Oct. 18	1831	465	61	395
Envelopes, wrappers, &c. Device for moistening.....	D. W. Collins.....	488,751	Dec. 27	2481	616 617	61	1864
Eraser. Blackboard.....	L. W. Chase.....	475,753	May 31	2971	754	59	1267
Eraser, chalk, or crayon holder.....	K. T. Erhard.....	488,604	Dec. 27	2256	559	61	1820
Eraser. Ink.....	G. W. Prouty.....	469,304	Feb. 23	2189	561	58	978
Eraser. Ink.....	J. E. Mayhew.....	486,976	Nov. 29	2907	750	61	1222
Essences. Process of and apparatus for making.....	H. Huvelle.....	487,837	Dec. 13	984	248	61	1534
Eugenol benzyl-ether and preparing the same.....	F. Ach.....	487,167	Nov. 29	3205		61	1281
Evaporating apparatus.....	T. Craney.....	470,476	Mar. 8	1331	346	58	1362
Evaporating apparatus.....	A. Miller.....	466,570	Jan. 5	419	107 108	58	81
Evaporating apparatus.....	O. B. Stillman.....	483,817	Oct. 4	443	110	61	91
Evaporating apparatus.....	O. B. Stillman.....	484,831	Oct. 25	2044	524	61	453
Evaporating apparatus. Brine.....	T. R. Timby.....	475,637	May 24	2785	705 706	59	1219
Evaporating apparatus. Liquid.....	C. W. Cooper.....	482,340	Sept. 13	703	168	60	1487
Evaporating apparatus. Portable.....	T. E. Richard.....	481,675	Aug. 30	3119	761 762	60	1235
Evaporating apparatus. Vacuum.....	S. M. Lillie.....	466,862	Jan. 12	898	230	58	180
Evaporating apparatus. Vacuum.....	H. T. Yaryan.....	485,315	Nov. 1	239	66	61	621
Evaporating-pan.....	J. B. Copeland.....	470,548	Mar. 8	1430	373	58	1382
Evaporating-pan.....	L. R. Tabor.....	471,229	Mar. 22	2470	627	58	1606
Evaporating-pan.....	H. F. Thurston.....	476,701	June 7	709	174	59	1578
Evaporating-pan. Vacuum.....	S. M. Lillie.....	470,060	Mar. 1	623	135	58	1220
Evaporator: See Fruit-evaporator. Hot-air evaporator.							
Evaporator.....	J. A. Morrell.....	468,776	Feb. 9	1359	342 343 477	58	800
Evaporator.....	G. M. Newhall and T. H. Müller.....	477,442	June 21	1931	478	59	1845
Evaporator.....	E. Stillwell.....	476,837	June 14	936	228	59	1637
Evaporators. Elevating mechanism for fruit.....	J. M. Withrow.....	474,892	May 17	1618	413	59	975
Excavating and laying sewers. Apparatus for.....	J. E. Cross.....	487,517	Dec. 6	468	122 123	61	1413
Excavating and shoveling machine.....	E. Hennebery.....	477,933	June 28	2735	685	59	2020
Excavating apparatus.....	J. T. Dougine.....	477,837	June 28	2584	647 648	59	1990
Excavating apparatus.....	I. P. Lambing.....	476,750	June 7	783	192 193	59	1593
Excavating apparatus. Sewer.....	W. Davy.....	478,254	July 5	311	76	60	62
Excavating device.....	T. McBride and E. Fisher.....	483,004	Sept. 20	1768	447	60	1707
Excavation-brace.....	W. T. Dunn.....	483,737	Oct. 4	319	50	61	67
Excavator.....	H. P. Bennett.....	485,084	Oct. 25	2454	632	61	534
Excavator.....	A. W. Robinson.....	471,246	Mar. 22	2492	632	58	1610
Excavator.....	C. A. Warren.....	471,920	Mar. 29	3499	894	58	1810
Excavator. Earth.....	B. F. Johnson.....	468,393	Feb. 9	763	190	58	681
Excavator. Hydraulic.....	W. M. Douglas.....	475,936	May 31	3281	828	59	1327
Excavator. Trench.....	A. J. Mason.....	482,260	Sept. 6	552	131 132	60	1442
Excavator. Steam.....	I. N. Hennessy.....	470,565	Mar. 8	1450	377	58	1366
Excelsior-cutting machine.....	C. G. Smith.....	474,866	May 17	1581	402	59	967
Excelsior. Device for cutting.....	J. R. Bate.....	467,531	Jan. 26	2000	506 507	58	405
Exercising apparatus.....	W. Madsen.....	478,166	July 5	145	38	60	31
Exercising apparatus.....	M. W. Newton.....	480,271	Aug. 9	844	215	60	756
Exercising apparatus. Horizontal-bar.....	F. Medart.....	475,697	May 24	2876	727	59	1236
Exercising apparatus. Line-fastener for.....	T. Peterson.....	474,760	May 10	1399	354	59	918
Exercising device. Finger.....	T. C. Guillard and V. E. Catherine.....	486,546	Nov. 22	2159	570	61	1057
Exercising-machine.....	E. Leamy.....	485,047	Oct. 25	2405	618	61	523
Exercising-machine.....	C. G. Miller.....	481,730	Aug. 30	3219	785	60	1254

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Exhaust-head	J. J. J. De Rycke	487,723	Dec. 13	796	203	61	1495
Exhaust-head	J. L. Hornig	485,195	Nov. 1	63	19	61	585
Exhaust-head	J. L. Robertson	481,373	Aug. 23	2629	647	60	1124
Exhaust-head. Detachable	W. A. Cromwell	466,657	Jan. 5	545	141	58	105
Exhibiting apparatus	C. S. Jenkins	473,508	Apr. 26	2383	603 604	59	501
Exhibiting-case	E. P. Matthews	488,715	Dec. 27	2430	602	61	1853
Exhibiting case. Needle	E. R. Denny	479,117	July 19	1623	406	60	344
Exhibiting device	W. N. Winfield	475,005	May 17	1804	457	59	1010
Exhibiting pictures, &c. Stand for	V. L. M. Renard	478,887	July 12	1256	311	60	264
Exhibition apparatus. Subterranean	H. Hardy	482,736	Sept. 20	1344	333 334 335	60	1624
Exhibition-stand. Knockdown	H. A. J. Rieckert	473,783	Apr. 26	2823	709	59	585
Exhibitor. Bedstead	J. R. Moore	479,894	Aug. 2	182	45	60	617
Exhibitor. Button	S. T. Mosser	483,469	Sept. 27	2493	628	60	1860
Exhibitor for the display of goods. Revolving	D. Green and R. M. Herron	486,545	Nov. 22	2158	570	61	1057
Exhibitor. Merchandise	F. E. Bush	471,889	Mar. 29	3593	917	58	1827
Exhibitor. Picture	W. C. Fawkes	485,464	Nov. 1	483	128	61	671
Exhibitor. Rocking-chair	H. Albin	485,831	Nov. 8	1021	274	61	798
Exhibitor. Ware	D. G. MacWaters	473,403	Apr. 19	2208	554	59	446
Exhibitors. Lining for jewelry	F. W. Martini	488,568	Dec. 27	2198	543	61	1807
Explosive	J. F. Alexander	488,534	Dec. 27	2147	61	1797	
Explosive compound	A. C. Rand	478,819	July 12	1171	60	247	
Explosive compound	S. Rodgers	478,366	July 5	477	60	95	
Explosive engine	J. Joyce	480,019	Aug. 2	418	105	60	661
Explosive powder	J. V. Skoglund	487,080	Nov. 29	3066	61	1254	
Explosives. Apparatus for the manufacture of	H. S. Maxim	474,561	May 10	1096	279 280	59	859
Explosives for aiding rain-fall. Automatic transporter and exploder for	L. L. Brown	473,820	Apr. 26	2877	722	59	596
Explosives. Manufacture of	F. Roller	474,529	May 10	1039	59	847	
Extensible brace	W. J. Dunn	485,342	Nov. 1	293	79	61	632
Extension-bracket	J. G. Brothwell	476,446	June 7	342	73	59	1504
Extension-bracket	T. Morris	476,892	June 14	1026	218	59	1654
Extension-table	F. P. Cobham	471,954	Mar. 29	3541	906	58	1818
Extension-table	F. P. Cobham	473,060	Apr. 19	1617	412 413	59	334
Extension-table	H. Cobham, Jr.	482,620	Sept. 13	1163	281 282	60	1575
Extension-table	A. M. Holstein	468,042	Feb. 2	205	50, 51	58	561
Extension-table	C. S. Homer and W. H. Pickett	472,881	Apr. 12	1318	338 339	59	263
Extension-table	G. O. Moland	471,393	Mar. 22	2715	692	58	1653
Extension-table	C. W. Munz	483,361	Sept. 27	2344	589	60	1831
Extension-table	C. Oberländer	469,214	Feb. 16	2046	523	58	912
Extension-table	W. H. Pickett	471,330	Mar. 22	2612	662 663	58	1633
Extension-table	J. F. Wiggers	488,465	Dec. 20	2028	506	61	1759
Extractor:							
See Butter-extractor.	Magnetic extractor.						
Centrifugal extractor.	Nail-extractor.						
Pen-extractor.	Pen-extractor.						
Cork-extractor.	Spoke extractor.						
Fence-staple extractor.	Staple-extractor.						
Stopper-extractor.	Stopper-extractor.						
Grease-extractor.	Stump extractor.						
Honey-extractor.	Stump or rock extractor.						
Ingot-extractor.							
Eye. Artificial	J. L. Borsch	474,808	May 17	1483	379	59	949
Eye-shade	F. Beilmann	485,448	Nov. 1	461	123	61	666
Eyes. Test-frame and trial-lens for	J. L. Borsch	466,597	Jan. 5	459	117	58	88
Eyeglass and spectacle frame	J. E. Searing	475,615	May 24	2756	698	59	1213
Eyeglass-case	C. H. Farley	474,235	May 3	541	133	59	742
Eyeglass guard	G. Bausch	478,836	July 12	1192	296	60	251
Eyeglass-holder	W. A. Copeland	485,909	Nov. 8	1149	304	61	824
Eyeglass-holder	G. Maier, Jr.	471,734	Mar. 29	3224	820	58	1755
Eyeglass-holder	E. C. Perkins	482,191	Sept. 6	444	107	60	1422
Eyeglass-holder	E. B. Wilmarth	470,136	Mar. 1	734	183	58	1242
Eyeglass or spectacle case	W. Birmingham	475,995	May 31	3369	849	59	1345
Eyeglass or spectacle case	D. R. Pruden	467,707	Jan. 26	2283	579	58	457
Eyeglasses	A. J. Bellati	468,459	Feb. 9	856	217	58	700
Eyeglasses	J. Currin	479,907	Aug. 2	196	49	60	621
Eyeglasses	B. A. Gilbert	488,312	Dec. 20	1780	448	61	1709
Eyeglasses	B. E. Gregory	468,951	Feb. 16	1638	417	58	868
Eyeglasses	M. D. Hanway	468,034	Feb. 2	193	47	58	562
Eyeglasses	A. H. Hartmann	481,400	Aug. 23	2681	658	60	1133
Eyeglasses	C. Lemke	467,034	Jan. 12	1177	298	58	232
Eyeglasses	J. Liming	478,616	July 12	849	209	60	184
Eyeglasses	E. B. Meyrowitz	469,437	Feb. 23	2384	612	58	1017
Eyeglasses	F. G. Schmidt	483,812	Oct. 4	434	107	61	90
Eyeglasses	J. J. Wood	470,020	Mar. 1	577	144	58	1211
Eyelet	F. F. Hawkins	483,784	Oct. 4	398	99	61	83
Eyeletting-machine	M. H. Pearson	478,759	July 12	1057	261 262	60	226
Eyeletting-machine	G. A. Pfueger	468,261	Feb. 2	546	134	58	630
Eyeletting-machine	E. Woodward	476,504	June 7	424	98, 99	59	1520
Fabric:							
See Carpet fabric.	Rattan fabric.						
Elastic knit fabric.	Waterproof fabric.						
Knit fabric.	Woven fabric.						
Knitted fabric.	Woven tufted fabric.						
Pile fabric.							
Fabric holding and sewing apparatus	R. M. Hunter	488,969	Dec. 27	2827	698	61	1936

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Fabric pressing and finishing machine.....	J. S. Critchley, I. Singer, and H. A. A. Dombtrain.	484,702	Oct. 18	1819	462	61	393
Fabrics. Decorating.....	H. G. Bunch.	476,033	May 31	3422	463	59	1356
Fabrics. Finish or border for the edges of.....	J. M. Merrow.	480,335	Aug. 9	943	864	60	773
Fabrics. Machine for cleaning and soaping.....	E. A. Rusden.	473,266	Apr. 19	1973	494	59	400
Fabrics. Overstitch binding for edges of.....	H. H. Fefel.	476,454	June 7	350	495	59	1505
Facial hygienic steaming apparatus.....	M. Meyberg.	472,134	Apr. 5	196	52	59	36
Facing compound.....	C. F. Lawton.	472,369	Apr. 5	565	53	59	106
Fall-hook.....	F. S. Hilton.	472,253	Apr. 5	544	141	59	102
Fan.....	F. W. Tuerk, Jr.	477,614	June 21	2210	549	50	1301
Fan. Bed.....	W. H. Wrigley.	474,710	May 10	1322	337	59	903
Fan. Electric.....	F. H. Beers.	481,646	Aug. 30	3074	750	60	1227
Fan. Electric.....	E. B. Cutten.	483,545	Oct. 4	44	11	61	11
Fan. Fly.....	A. Morton.	474,141	May 3	395	95	59	774
Fan-motor.....	R. Strasser.	473,029	Apr. 19	1571	400	59	3:5
Fan-operating device.....	R. F. Hunt.	479,425	July 26	2129	532	60	457
Fan. Power.....	E. D. Green.	466,783	Jan. 12	769	200	58	1:6
Fan. Spring-power.....	P. Schaurer.	471,196	Mar. 22	2418	615	58	15:5
Fans. Means for operating rock.....	R. Wehrle.	471,581	Mar. 29	2979	759	58	1712
Fans. Motor-mounting for electrically-driven.....	A. L. Riker.	483,582	Oct. 4	102	25	61	92
Fans. Supporting-frame for rotary.....	S. D. Shepperd.	488,293	Dec. 20	1752	441	61	1703
Fanning-mill.....	H. Bush.	479,241	July 19	1814	455	60	3:80
Fanning-mill.....	O. D. Dickey.	480,809	Aug. 16	1695	423	60	934
Fanning-mill.....	N. M. Newkirk.	467,380	Jan. 19	1747	446	58	348
Fancy box.....	A. G. Williams.	470,529	Mar. 8	1406	367	58	1376
Fare-box.....	J. W. Haigh and G. Exley.	470,933	Mar. 15	2007	514	53	1504
Fare-box.....	H. C. McEnergy.	466,797	Jan. 12	790	205	58	160
Fare-box.....	S. O. Tuerk.	473,680	Apr. 26	2669	672	59	556
Fare collecting, registering, and recording device.....	W. T. Wood.	481,993	Sept. 6	109	27	60	1356
Fare receiver and register. Portable.....	J. E. Allison.	487,168	Nov. 29	3206	821	61	1281
Fare-register.....	F. C. Boyd and R. Martin.	479,388	July 19	2055	513	60	428
Fare-register.....	C. B. Cushman and H. G. Canfield.	472,035	Apr. 5	37	7:8	59	9
Fare-register.....	L. C. De Sloovere.	470,373	Mar. 8	1164	298	58	1330
Fare-register.....	J. W. Fowler.	487,731	Dec. 13	810	299	61	1498
Fare-register.....	J. H. Greenleaf.	476,741	June 7	771	206	59	1591
Fare-register.....	J. W. Meaker.	478,167	July 5	147	189	60	32
Fare-register.....	W. L. Silvey.	472,232	Apr. 5	351	190	59	66
Fare register and recorder.....	C. Crook.	483,102	Sept. 20	1917	485	60	1738
Fare-register. Electric.....	W. H. Gilman.	468,172	Feb. 2	402	486	58	602
Fare-register operating device.....	J. W. Meaker.	480,732	Aug. 16	1579	100	58	911
Fare-registering apparatus for vehicles.....	F. W. G. Bruhn.	485,529	Nov. 1	570	395	61	690
Fare-registering device.....	M. Fortuno.	471,540	Mar. 29	2923	152	58	1701
Farm-gate.....	W. Andrews.	467,113	Jan. 12	1330	153	58	262
Farm-gate.....	T. A. Churchill.	484,568	Oct. 18	1605	744	61	349
Farm-gate.....	C. C. Holter.	475,316	May 24	2270	407	59	1120
Farm-gate.....	J. R. Means.	470,067	Mar. 1	634	585	59	1222
Farm-gate.....	W. B. Miller.	486,289	Nov. 15	1778	157	61	968
Farm-gate.....	G. H. Mitchell.	466,830	Jan. 12	837	467	58	170
Farm-gate.....	J. N. Morgan.	467,950	Feb. 2	68	215	58	538
Farm-gate.....	G. Van Horn.	474,426	May 10	878	16	59	818
Fastening device.....	J. W. Bankson.	480,242	Aug. 9	787	229	60	743
Fastening device.....	C. Liebe.	475,581	May 24	2701	201	59	1202
Fatty compound. Viscid.....	A. Sommer.	468,937	Feb. 16	1609	685	58	858
Fatty substances. Purification of.....	J. Massignon.	481,502	Aug. 23	2844	699	60	1167
Faucet.....	J. M. Gilmour.	480,090	Aug. 2	527	134	60	682
Faucet.....	K. Kiefer.	487,866	Dec. 13	1036	259	61	1544
Faucet.....	J. M. McFarland.	477,308	June 21	1726	422	59	1806
Faucet.....	S. I. Merrill.	473,325	Apr. 19	2064	519	59	419
Faucet.....	F. S. Owells.	488,401	Dec. 20	1924	482	61	1737
Faucet.....	H. S. Park.	476,167	May 31	3645	922	59	1401
Faucet.....	G. W. Renton.	476,170	May 31	3649	923	59	1402
Faucet.....	C. J. Reynolds.	467,560	Jan. 26	2063	521	58	416
Faucet.....	W. W. Riner.	485,430	Nov. 1	432	115	61	661
Faucet.....	C. Ruchti.	471,574	Mar. 29	2967	756	58	1709
Faucet.....	W. X. Stevens.	483,795	Oct. 4	410	102	61	86
Faucet.....	R. L. Webb.	469,901	Mar. 1	376	94	58	1173
Faucet.....	J. Westervelt.	473,600	Apr. 26	2549	642	59	533
Faucet and bung.....	R. Marsh.	482,408	Sept. 13	820	197	60	1510
Faucet and bushing.....	M. Anthony.	487,306	Nov. 29	3264	834	61	1292
Faucet and bushing.....	M. Anthony.	487,307	Nov. 29	3265	834	61	1292
Faucet and connection.....	S. Schlangen.	478,716	July 12	984	245	60	212
Faucet. Automatic.....	A. A. Belleau.	487,384	Dec. 6	236	64	61	1368
Faucet. Automatic cut-off cask-filling.....	J. H. Driller.	482,342	Sept. 13	708	168	60	1488
Faucet. Beer.....	F. A. Frumviller.	482,474	Sept. 13	928	169	60	1529
Faucet. Beer.....	G. H. Walker.	471,630	Mar. 29	3051	777	58	1724
Faucet. Filtering.....	H. H. Luse.	470,004	Mar. 1	543	135	58	1204
Faucet. Lock-valve.....	H. S. Johnson.	487,674	Dec. 6	704	180	61	1461
Faucet. Measuring.....	A. D. Hollis.	471,238	Mar. 22	2482	630	58	1607
Faucet. Measuring.....	H. M. Nye.	475,144	May 17	2014	509	59	1052
Faucet. Measuring.....	G. F. Oakley.	474,343	May 3	738	193	59	779
Faucet. Measuring.....	R. A. Parish.	474,583	May 10	1126	288	59	865
Faucet. Measuring.....	C. W. Steinmetz.	482,815	Sept. 20	1462	363	60	1647
Faucet. Measuring.....	J. H. Stutt.	470,881	Mar. 15	1936	495	58	1491
Faucet or valve.....	F. Pomper.	482,049	Sept. 6	208	50	60	1376

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Des.	Vol.	Page.
Faucet. Portable measuring.	S. Verburg	472,775	Apr. 12	1174	300	59	235
Faucet. Registering.	A. L. Peirce and C. E. King	474,764	May 10	1101	281	59	860
Faucet. Registering and measuring.	H. F. Read	479,721	July 26	2622	650 651	60	549
Faucet. Registering measuring.	C. A. Miller	475,945	May 31	3295	832	59	1330
Faucet. Self-closing.	A. Mayer	478,199	July 5	205	52	60	42
Faucets. Soap-holder attachment for water.	A. R. Miranda	479,330	July 19	1937	484	60	405
Feather-tip or plume	E. W. Moch	467,947	Feb. 2	65	15	58	537
Feathers. Making imitation long heron.	S. Lewinsohn	485,329	Nov. 1	273	74	61	628
Feed-bag	J. H. Williams	476,952	June 14	1130	271 272	59	1675
Feed-bag. Adjustable.	F. F. Atkinson	485,600	Nov. 8	686	181	61	729
Feed-bag attachment.	F. S. Kerr	479,646	July 26	2478	617	60	523
Feed-bag holder.	J. H. E. Zeip	484,278	Oct. 11	1153	293	61	248
Feed-bag support.	J. W. Pfeiffer	472,908	Apr. 12	1357	349	59	272
Feed-bag support.	D. N. Stock	488,850	Dec. 27	2641	654	61	1896
Feed-bag support.	D. N. Stock	488,851	Dec. 27	2643	654	61	1896
Feed-box	S. F. Weaver	487,308	Dec. 6	109	32	61	1343
Feed-box regulator.	A. A. Morris	484,039	Oct. 11	780	196	61	174
Feed-controlling apparatus	J. S. Forbes	467,717	Jan. 26	2302	584 585	58	460
Feed-cutter and corn-busker. Combined.	M. Morton and W. Rowan	468,817	Feb. 16	1420	361	58	821
Feed mechanism	H. Janssen	478,511	July 5	692	168	60	137
Feed mechanism.	F. H. Richards	487,428	Dec. 6	326	83, 84	61	1386
Feed mechanism. Duplex.	F. H. Richards	487,775	Dec. 13	884	221	61	1514
Feed mechanism. Self-adjusting.	G. Ehrhardt	487,116	Nov. 29	3126	802	61	1266
Feed mechanism. Slide	F. H. Richards	480,347	Aug. 9	963	243	60	777
Feed-rack.	G. L. and F. Taft	473,245	Apr. 19	1939	487	59	393
Feed-regulator	L. S. Campbell	486,851	Nov. 29	2673	699 700	61	1176
Feed-regulator	W. Gribben and J. M. Gaige.	477,327	June 21	1751	428 429	59	1811
Feed-regulator	M. A. Swing	484,064	Oct. 11	810	205	61	181
Feed-regulator. Automatic	C. C. Ferguson	486,668	Nov. 22	2467	619	61	1097
Feed-roll	G. H. Marsh	477,428	June 21	1905	469	59	1840
Feed-steaming apparatus for animals	A. J. Ventzki	485,399	Nov. 1	390	195	61	652
Feed-trough	J. S. Anderson	472,971	Apr. 19	1463	375	59	305
Feed-trough	T. Doolan	487,003	Nov. 29	2951	760	61	1230
Feed-trough	G. W. Dunks	478,052	June 28	2916	729	59	2055
Feed-trough.	J. Flurey and A. O'Leary	485,580	Nov. 1	656	174	61	708
Feed-trough.	E. B. French	473,735	Apr. 26	2760	694	59	572
Feed-trough.	J. Hurdle	483,925	Oct. 4	603	152	61	124
Feed-trough.	W. A. Leech	471,868	Mar. 29	3428	875	58	1795
Feed-trough.	J. A. Mitchell and C. T. Deal	477,139	June 14	1419	346	59	1734
Feed-trough.	G. F. Robinson	476,071	May 31	3433	878	59	1370
Feed-trough.	C. B. and J. Snellenberger.	474,867	May 17	1582	403	59	967
Feed-trough.	I. S. Sweetland	485,022	Oct. 25	2370	609	61	516
Feed-trough.	J. A. Whitmore	477,724	June 28	2395	598	59	1956
Feed trough and rack. Combined.	J. W. Moore	484,037	Oct. 11	778	195	61	174
Feed-water. Device for separating oil from	J. Reilly	473,591	Apr. 26	2537	640	59	531
Feed-water. Filtering or purifying	J. B. Edmiston	481,109	Aug. 16	2175	539	60	1027
Feed-water heater	W. J. Austin	487,549	Dec. 6	516	134	61	1423
Feed-water heater.	J. Bell	470,972	Mar. 15	2071	530	58	1517
Feed-water heater.	J. Bell	477,491	June 21	2009	498	59	1861
Feed-water heater.	J. De Vries	478,315	July 5	309	96	60	80
Feed-water heater.	C. Jacobs	472,671	Apr. 12	1021	263 264	59	206
Feed-water heater	T. Lyman	469,405	Feb. 23	2342	602	58	1008
Feed-water heater	A. M. Rowe	468,181	Feb. 2	414	103	58	605
Feed-water heater.	E. R. Stilwell	476,089	May 31	3511	885	59	1375
Feed-water heater.	W. Webster	475,092	May 31	3366	849	59	1344
Feed-water heater.	J. J. Wilson	482,069	Sept. 6	237	58	60	1382
Feed-water heater and boiler. Combination	A. T. Brewer	478,395	July 5	516	126	60	102
Feed-water heater and circulating system.	S. C. Despres	483,905	Oct. 4	574	144	61	119
Feed-water heater and condenser	E. Nelson	477,814	June 28	2540	636	59	1982
Feed-water heater and condenser	E. Nelson	477,815	June 28	2543	636	59	1983
Feed-water heater and purifier.	J. J. De Rycke	487,724	Dec. 13	797	204	61	1496
Feed-water heater and purifier.	J. MacDonald	488,524	Dec. 20	2131	527	61	1778
Feed-water heater and purifier	J. P. Warner	480,534	Aug. 9	1259	317	60	84
Feed-water heater. Locomotive	N. S. Chapman	479,348	July 19	1986	497	60	415
Feed-water heater, oil-extractor, and water-purifier. Combined	F. Bauer	468,232	Feb. 2	487	120	58	620
Feed-water heater. Sectional.	E. Nelson	477,816	June 28	2546	627	59	1983
Feed-water heating and purifying apparatus.	D. W. McCallum	471,521	Mar. 22	2894	736	58	1687
Feed-water purifier	F. J. Henderson	468,084	Feb. 2	263	64	58	575
Feed-water purifier.	W. B. Hosford	488,813	Dec. 27	2375	639	61	1853
Feed-water regulator	J. Thomas	488,619	Dec. 27	2274	564	61	1823
Feeder and band-cutter	G. N. Brintnell	467,698	Jan. 26	2269	576	58	454
Feeder. Automatic stock.	W. P. Kellogg	482,366	Sept. 13	754	182	60	1497
Feeder-lifter	S. R. Lewis	486,486	Nov. 22	2078	550	61	1041
Feeding and weighing apparatus.	S. Washington	488,101	Dec. 13	1429	357 358	61	1624
Feeding apparatus. Calf.	H. B. and E. Lingford	488,693	Dec. 27	2401	595	61	1847
Feeding apparatus. Poultry.	G. Peisier	484,453	Oct. 18	1428	364 365	61	314
Feeding cattle. Crib for	E. G. Hastings	467,973	Feb. 2	94	23	58	543
Feeding device for animals	L. M. Reed	476,310	June 7	122	30	59	1462
Feeding device. Horse.	M. I. Magoon	484,442	Oct. 18	1414	361	61	311
Feeding device. Mechanical	A. Conkling	479,630	July 26	2455	612	60	518
Feeding grain to live stock. Receptacle for	C. A. Smith	472,316	Apr. 5	484	125	59	91
Feeding mechanism	L. C. Crowell	484,141	Oct. 11	919	236 237 238	61	202
Feeding rack. Stock.	H. G. Chamberlain	478,402	July 5	529	129	60	104
Feeding salt to animals. Device for	T. B. Stephens	485,142	Oct. 25	2539	652	61	551

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.g.	Vol.	Page.
Feeding young animals. Device for artificially	W. A. Kerfoot	486,163	Nov. 15	1579	418	61	928
Felly and tire. Cushion	C. Stein	482,392	Sept. 13	798	192	60	1506
Felt boots. Machine for forming	J. Brandy	469,007	Feb. 16	1749	445	58	885
Felt-making machine	P. Le Grand	470,496	Mar. 8	1360	354	58	1367
Felt roller	J. W. Millet	473,899	Apr. 12	1346	346	59	270
Felting-machine	J. Kittel	480,592	Aug. 9	1347	335	60	851
Fence	E. W. Allis	468,381	Feb. 9	743	184	58	677
Fence	W. Arthur	487,208	Nov. 29	3266	834	61	1292
Fence	J. Baker	476,120	May 31	3567	896	59	1385
Fence	S. S. Barrett	469,532	Feb. 23	2541	653	58	1046
Fence	H. J. Beam	484,872	Oct. 25	2115	545	61	466
Fence	A. L. Bonnaffon	479,050	July 19	1515	377	60	324
Fence	A. L. Bonnaffon	486,752	Nov. 22	2501	653	61	1125
Fence	H. Carter	479,972	Aug. 2	313	77	60	641
Fence	F. A. De Land	486,632	Nov. 22	2308	603	61	1086
Fence	J. E. Dusang	471,682	Mar. 29	3133	798	58	1739
Fence	R. H. Fristoe	482,037	Sept. 6	186	45	60	1372
Fence	W. H. Gaskill	480,401	Aug. 9	1051	264	60	733
Fence	W. B. Hudson	475,865	May 31	3164	803	59	1305
Fence	W. J. Jacobs	485,197	Nov. 1	66	20	61	586
Fence	W. S. Kline	472,578	Apr. 12	882	227	59	162
Fence	A. P. Le Gros	488,823	Dec. 27	2591	643	61	1886
Fence	J. T. Lucas	484,158	Oct. 11	952	244	61	209
Fence	W. L. Marsh and J. E. Phillips	467,939	Feb. 2	123	30	58	547
Fence	E. B. Maxwell	485,641	Nov. 8	743	195	61	741
Fence	G. Merritt	474,455	May 10	930	239	59	826
Fence	D. Milliken	479,443	July 26	2160	539	60	464
Fence	R. H. Nutter	466,422	Jan. 5	181	47	58	35
Fence	R. B. Perkins	478,170	July 5	159	40	60	34
Fence	F. P. Rosback	467,836	Jan. 26	2485	630	58	496
Fence	L. S. Safford	484,245	Oct. 11	1094	277	61	236
Fence	P. Smith	484,468	Oct. 18	1454	370	61	318
Fence	W. D. and T. J. Snowden	473,092	Apr. 19	1665	423	59	342
Fence	J. Spillinger	485,304	Nov. 1	222	63	61	618
Fence	E. G. and S. M. Storm	481,980	Sept. 6	89	23	60	1352
Fence	P. Trick	483,186	Sept. 27	2060	520	60	1778
Fence	C. C. Trout	487,083	Nov. 29	3070	788	61	1254
Fence	J. Van Ness	480,154	Aug. 2	629	159	60	702
Fence	F. A. Williams	474,072	May 3	300	73	59	695
Fence. Barbed-wire	J. W. Griswold	472,496	Apr. 5	764	194	59	145
Fence. Barbed-wire	J. W. Griswold	486,179	Nov. 15	1599	424	61	932
Fence-building machine	J. M. Graham	474,009	May 3	196	46	59	676
Fence-building tool	J. W. Brenneman	485,835	Nov. 8	1025	275	61	799
Fence clamp or fastener. Wire	C. S. Rogers	476,411	June 7	290	68	59	1491
Fence construction	G. F. St. John	477,916	June 28	2710	678	59	2015
Fence. Flood	H. D. Merrill	486,349	Nov. 15	1868	492	61	925
Fence. Flood	J. H. Poulter	482,460	Sept. 13	905	220	60	1524
Fence for hay-stacks. Collapsible	S. O. Thompson	479,680	July 26	2538	632	60	534
Fence gate. Wire	H. Blankenburg	482,334	Sept. 13	697	166	60	1486
Fence gate. Wire	P. Hack	483,351	Sept. 27	2333	586	60	1829
Fence gate. Wire	J. Hult	475,867	May 31	3167	803	59	1306
Fence gate. Wire	J. M. Sailer	473,855	Apr. 26	2940	741	59	608
Fence. Hedge	M. L. Funkbouser	483,322	Sept. 27	2296	577	60	1822
Fence. Iron	R. C., Jr. and W. A. Stewart	473,028	Apr. 19	1570	399	59	825
Fence-machine	H. G. Cady	482,335	Sept. 13	697	166	60	1486
Fence-machine	T. W. Carmichael	469,539	Feb. 23	2549	655	58	1048
Fence-machine	J. Chaplin	474,794	May 10	1460	371	59	931
Fence-machine	E. Hughes	473,930	May 3	71	14	59	650
Fence-machine	C. H. Kellogg	471,979	Mar. 29	3580	913	58	1825
Fence-machine	W. H. Mason	470,581	Mar. 8	1473	383	58	1391
Fence-machine	J. H. Morris	474,179	May 3	454	110	59	725
Fence-machine. Hand	M. Hays	472,167	Apr. 5	242	64	59	46
Fence-machine. Hand	J. W. Martin and M. Cahill	466,487	Nov. 22	2079	550	61	1042
Fence-machine. Picket	F. Wright	468,719	Feb. 9	1267	322	58	782
Fence-machine. Picket-wiring	J. H. Frank	488,310	Dec. 20	1777	447	61	1708
Fence-machine. Picket-wiring	A. R. Welty	481,086	Aug. 16	2134	531	60	1020
Fence-machine tension device	C. P. Lamar	474,137	May 3	386	93	59	713
Fence-machine. Wire	J. Harper	487,184	Nov. 29	3230	827	61	1286
Fence-machine. Wire	J. J. Harris	470,047	Mar. 1	603	150	58	1216
Fence-machine. Wire	M. L. Jones	471,978	Mar. 29	3579	913	58	1824
Fence-machine. Wire	L. C. Lowden	466,499	Jan. 5	308	78	58	59
Fence-machine. Wire-and-picket	A. H. Rogers	478,173	July 5	161	42	60	34
Fence-making machine	A. Bernauer	472,663	Apr. 12	1001	259	59	204
Fence-making machine	J. E. Hoag	467,306	Jan. 19	1635	416	58	327
Fence. Metallic	S. Green	486,463	Nov. 22	2045	511	61	1034
Fence. Metallic	J. G. Lindsay	488,210	Dec. 20	1622	404	61	1679
Fence. Picket	W. S. Pickett	472,636	Apr. 12	969	251	59	198
Fence. Picket	N. W. Minton	470,270	Aug. 9	842	214	60	756
Fence. Picket	C. E. Wintrobe	478,900	July 12	1274	316	60	267
Fence-pickets. Machine for wiring	W. Callaway, Sr.	479,626	July 26	2446	610	60	517
Fence-pickets. Machine for wiring	L. H. Slagle	473,792	Apr. 26	2437	713	59	588
Fence. Plank	W. Jobe, Sr.	487,573	Dec. 6	547	141	61	1430
Fence. Portable	W. A. Neal	488,632	Dec. 27	2300	569	61	1827
Fence. Portable	J. G. Orr	488,217	Dec. 20	1632	407	61	1681
Fence. Portable	S. Winslow	471,160	Mar. 22	2365	604	58	1586
Fence-post	V. Findling	486,544	Nov. 22	2157	570	61	1057
Fence-post	L. Heiland and C. E. Bronson	472,705	Apr. 12	1079	277	59	216
Fence-post	D. Hinesley	482,637	Sept. 13	1184	237	60	1579
Fence-post	R. R. Spoor	469,322	Feb. 23	2210	567	58	982

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fence-post	G. Thomas	488,724	Dec. 27	2443	606	61	1856
Fence-post	C. L. Wilcox	486,309	Nov. 15	1806	476	61	974
Fence-post	F. S. Wood	476,912	June 14	1061	256	59	1661
Fence post and brace. Combined	P. Pearson	482,381	Sept. 13	783	188	60	1502
Fence-post and wire-stretcher. Combined	G. M. Williams	473,102	Apr. 19	1678	426	59	344
Fence-post brace	C. E. Wintrose	472,841	Apr. 12	1263	323	59	252
Fence-post for wire fencing	S. P. Babcock	466,315	Jan. 5	1	1	58	3
Fence-post. Iron	C. W. Holm	483,060	Sept. 20	1853	470	60	1726
Fence-post. Metallic	H. Fischer	488,193	Dec. 20	1583	397	61	1671
Fence-post. Metallic	H. A. Harrington	473,925	May 3	62	12	59	648
Fence-post. Metallic	B. F. Randall	476,069	May 31	3481	877	59	1369
Fence post or base. Metallic	O. M. Knox	486,973	Nov. 29	2904	749	61	1921
Fence post. Wire	B. F. Randall	467,434	Jan. 19	1830	467	58	364
Fence-post with applied bolster	G. W. Schofield	487,780	Dec. 13	889	225	61	1515
Fence-posts, &c. Device for driving	F. Stew.	480,941	Aug. 16	1890	473	60	974
Fence-rod	G. Deines	466,775	Jan. 12	755	196	58	153
Fence-staple extractor	J. T. Pomeroy	470,595	Mar. 8	1493	388	58	1395
Fence-stay	I. K. Hollinger	473,001	Apr. 19	1525	389	59	316
Fence-stay	A. A. Parker	487,374	Dec. 6	922	61	61	1364
Fence-stay. Hedge	E. J. Griffin	488,498	Dec. 20	2084	518	61	1771
Fence-stay. Wire	J. H. Brower	475,717	May 24	2906	737	59	1271
Fence-stay. Wire	W. M. Skelton	469,604	Feb. 23	2644	678	58	1067
Fence. Stock	P. M. Sparks	474,464	May 10	939	241	59	828
Fence-strands. Machine for making wire	E. F. Hathaway	471,669	Mar. 29	3107	790 792	58	1734
Fence stretcher. Wire	W. Kramer	479,817	Aug. 2	63	15	60	594
Fence stretcher. Wire	A. M. Shaw	474,068	May 3	295	72	59	694
Fence support. Wire	F. B. Weeks	469,492	Feb. 23	2478	636	58	1034
Fence-tightener	T. J. Andre	471,207	Mar. 22	2435	620	58	1599
Fence-tool. Combination	J. W. Gallant	482,827	Sept. 20	1479	368	60	1650
Fence tool. Combination wire	S. M. Forbes	479,561	July 26	2355	588	60	500
Fence. Truss-rail	B. F. Osborn	470,442	Mar. 8	1279	327	58	1352
Fence-weaving machine	W. Lowden	485,418	Nov. 1	417	112	61	658
Fence-wire	J. B. Cleaveland	475,718	May 24	2907	737	59	1242
Fence-wire	J. B. Cleaveland	475,719	May 24	2908	737	59	1242
Fence. Wire	V. Arnold and F. E. Wetmore	484,387	Oct. 18	1321	337	61	293
Fence. Wire	J. W. Buchanan	483,831	Oct. 4	467	116	61	96
Fence. Wire	M. L. Clements	474,813	May 17	1491	381	59	950
Fence. Wire	J. W. Dwiggin	474,952	May 17	1713	436	59	994
Fence. Wire	T. J. Ingraham	472,639	Apr. 12	973	252	59	198
Fence. Wire	J. R. Kline	481,551	Oct. 18	1587	403	61	345
Fence. Wire	J. McClintock	472,585	Apr. 12	83	229	59	184
Fence. Wire	I. Oaks	486,588	Nov. 22	2236	587	61	1071
Fence. Wire	R. B. Perkins	484,756	Oct. 18	1909	486	61	412
Fence. Wire	M. W. St. John	487,354	Dec. 6	191	52	61	1358
Fence. Wire-and-picket	B. F. Ingram	480,101	Aug. 2	541	137	60	686
Fence. Wire-and-picket	J. Speakman	471,831	Mar. 29	3379	861	58	1785
Fence-wire. Braided	J. B. Cleaveland	466,824	Nov. 22	2621	684	61	1150
Fence-wire. Machine for distributing and recting	J. E. Hovendick	488,563	Dec. 27	2191	541	61	1806
Fence-wire. Machine for spooling and unspooling barbed	M. M. Culver	477,185	June 14	1496	366	59	1750
Fence-wire. Manufacture of barbed	J. D. Curtis	470,746	Mar. 15	1721	443 444	58	1450
Fence-wire. Ornamental	C. W. Bridges	478,985	July 19	1413	350	60	305
Fence-wire reel	R. S. Dickinson	467,498	Jan. 26	1932	493	58	393
Fence-wire reel and tightener	W. Dulin	467,499	Jan. 26	1933	494	58	393
Fence-wire-splicing machine	J. M. Cochran	470,544	Mar. 8	1427	372	58	1381
Fence-wire tightener	B. C. Wickens	481,880	Aug. 30	3466	850	60	1303
Fence-wire twister	M. R. Yates	476,856	June 14	969	235	59	1643
Fence-wire twister. Slat	S. J. Blankenbaker	486,025	Nov. 8	1339	355	61	864
Fence-wires. Device for spooling and stretching	A. Hankel	472,047	Apr. 5	57	14, 15	59	13
Fence-wires. Wrench for twisting	A. T. Campbell	466,769	Jan. 12	741	192	58	151
Fences. Adjustable brace for slat and wire and picket	T. H. Smith	478,027	June 23	2381	720	59	2048
Fences. Barb for wire	H. Gearty	472,044	Apr. 5	54	13	59	13
Fences. Machine for attaching vertical wires in wire	E. E. and O. Cole	480,710	Aug. 16	1549	386	60	904
Fences. Stay-rod clip for wire	R. E. Poindexter	469,608	Mar. 1	230	58	53	1146
Fences. Tension device for wire	R. C. McClarran	486,385	Nov. 15	1918	508	61	997
Fences. Tool for operating on wires of	J. Heard	477,005	June 14	1208	293	59	1691
Fences. Wire-distributor for wire	H. C. Pratt	479,571	July 26	2370	591	60	503
Fences. Wire-tightener for	W. M. Skelton	469,218	Feb. 16	2052	527	58	943
Fencing bands. Machine for forming wire	H. E. Schnabel	468,696	Feb. 9	1233	314 315	58	775
Fencing-bands. Machine for making wire	J. A. Tatrow	485,723	Nov. 8	881	235 236 237	61	770
Fencing. Barbed	T. V. Allis	466,744	Jan. 5	695	179	58	132
Fencing. Barbed	T. V. Allis	466,745	Jan. 5	696	179	58	132
Fencing. Barbed	T. V. Allis	466,746	Jan. 5	697	179	58	132
Fencing. Barbed	T. V. Allis	466,747	Jan. 5	698	179	58	133
Fencing. Barbed metallic	T. V. Allis	466,748	Jan. 5	699	180	58	133
Fencing. Die for use in machines for making metallic	T. V. Allis	481,918	Aug. 30	3533	865	60	1376
Fencing machine. Slat-and-wire	J. B. and J. E. Solt	480,391	Aug. 9	1035	260 261	60	790
Fencing. Metallic	T. V. Allis	486,173	Nov. 15	1593	421	61	930
Fencing. Metallic	H. A. Harrington	485,741	Nov. 8	907	243	61	775
Fencing. Metallic	B. F. Randall	469,596	Feb. 23	2635	675	58	1065
Fencing tool. Compound wire	D. D. Stetler	484,624	Oct. 18	1797	457	61	388
Fencing. Wire	T. J. Ingraham	469,062	Feb. 16	1821	465	58	900
Fencing. Wire	T. J. Ingraham	475,116	May 17	1976	500	59	1045
Fender:							
See Car-fender.	Plow-fender.						
Plant-fender.	Vehicle-fender.						
Fender.	C. C. Shanbeck	481,065	Aug. 16	2109	524	60	1014

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Fermenting	J. Effront	478,418	July 5	551	.....	60	108
Fermenting	C. Funk	471,309	Mar. 22	2588	.....	58	1628
Fermenting process	F. W. Rueff	481,061	Aug. 16	2104	523	60	1013
Ferments. Producing	L. Meyer	467,308	Jan. 19	1638	.....	58	328
Ferrule	W. H. Gaskill	481,753	Aug. 30	3263	794	60	1263
Ferrule for whips and making the same	F. Grant and L. Veltan	469,897	Mar. 1	370	93	58	1172
Ferrule. Locking	A. G. Benson	481,462	Aug. 23	2788	686	60	1155
Ferrule. Rawhide	F. Latulip	467,979	Feb. 2	109	27	58	545
Ferrules to handles. Applying	P. T. Gates	474,061	May 3	287	69	59	693
Fertilizer and making the same. Nitrogenous.	J. J. Dunne	484,631	Oct. 18	1707	.....	61	369
Fertilizer-distributor.	T. N. L. Anderson and W. Boatner	467,074	Jan. 12	1250	316	58	246
Fertilizer-distributor.	T. R. Crane	487,719	Dec. 13	791	202	61	1494
Fertilizer-distributor.	C. D. Cutts	469,370	Feb. 23	2284	587	58	997
Fertilizer-distributor.	S. H. Everett	479,637	July 26	2465	613	60	520
Fertilizer-distributor.	J. Fraser	485,269	Nov. 1	171	51	61	607
Fertilizer-distributor.	J. T. Griffith	476,631	June 7	612	147	59	1558
Fertilizer-distributor.	G. D. Haworth	474,635	May 10	1293	307	59	879
Fertilizer-distributor.	T. A. Hightower	469,245	Feb. 23	2089	537	58	959
Fertilizer-distributor.	R. B. McLean	470,588	Mar. 8	1482	386	58	1393
Fertilizer-distributor.	C. W. Nicholson	471,884	Mar. 29	3451	881	58	1800
Fertilizer-distributor.	C. H. Ozley	473,952	May 3	110	25	59	658
Fertilizer-distributor.	B. F. Rix	488,680	Dec. 27	2321	590	61	1843
Fertilizer-distributor.	J. A. Simmons	470,324	Mar. 8	1085	277	58	1316
Fertilizer-distributor.	G. E. Sparks	468,837	Feb. 16	1451	{ 370 } { 371 }	58	828
Fertilizer-distributor.	H. C. Stahl and W. P. Johnston	481,309	Aug. 23	2352	500	60	1074
Fertilizer-distributor.	R. B. Thomas	481,315	Aug. 23	2551	626	60	1110
Fertilizer-distributor.	A. P. Williams	470,528	Mar. 8	1405	367	58	1376
Fertilizer-distributor. Hand	N. B. Barbee	466,996	Jan. 12	1119	284	58	221
Fertilizer-dropper. Hand	A. L. Johnson	468,346	Feb. 9	693	172	58	668
Fertilizer-feeder	A. H. Worrest	469,801	Mar. 1	221	56	58	1144
Fertilizers. Making	T. M. Smith	474,419	May 10	868	226	59	816
Fertilizers. Making nitrogenous	J. Ruyembeke	471,306	Mar. 22	2582	.....	58	1627
Fertilizing composition	J. D. Simmons	484,679	Oct. 18	1793	.....	61	387
Fiber-cleaning machine	J. G. Badia	469,222	Feb. 23	2058	529	58	953
Fiber-extracting machine	F. Darkin	473,826	Apr. 26	2886	{ 723 } { 724 }	59	598
Fiber-machine	L. Bacallado y Sanchez	474,714	May 10	1326	{ 338 } { 339 }	59	904
Fiber-preparing machine	J. L. Acosta	474,052	May 3	273	66, 67	59	690
Fiber-preparing machine	J. L. Acosta	485,903	Nov. 8	1138	{ 301 } { 302 }	61	822
Fiber-preparing machine	I. Villamor	482,205	Sept. 6	465	112	60	1426
Fiber tubes. Art of and apparatus for making parchmentized-	R. P. Frist	479,263	July 19	1845	462	60	386
Fiber tubes. Art of and apparatus for making parchmentized-	R. P. Frist and C. G. Rupert	479,264	July 19	1847	463	60	387
Fibers for spinning, &c. Preparing short	C. Kellner	480,588	Aug. 9	1342	{ 334 } { 335 }	60	850
Fibrous material for making pulp. Treating	J. and G. Johnston	486,339	Nov. 15	1851	487	61	983
Fibrous-material transmitter	G. Beekman	482,155	Sept. 6	384	90	60	1410
Fibrous materials. Apparatus for pressing and disintegrating	J. H. Brown	485,837	Nov. 8	1028	276	61	799
Fibrous materials. Machine for washing	E. Gundrum	468,097	Feb. 2	280	68, 69	58	578
Fibrous materials. Rotary disintegrator and separator for	B. Ziegler	469,495	Feb. 23	2481	{ 636 } { 637 }	58	1035
Fibrous plants. Machine for treating	J. L. Myers	476,160	May 31	3631	{ 918 } { 919 }	59	1399
Fibrous plants. Machine for treating	J. L. Myers	476,161	May 31	3634	920	59	1399
Fibrous stems or leaves. Machine for scutching and cleaning	E. Death	483,984	Oct. 4	695	174	61	143
Fifth-wheel	P. Andersen	480,901	Aug. 16	1837	457	60	963
Fifth-wheel	W. H. Bache	486,060	Nov. 8	1395	369	61	874
Fifth-wheel	T. L. Bosart	471,806	Mar. 29	3344	852	58	1778
Fifth-wheel	H. H. Bothe	488,110	Dec. 13	1447	363	61	1627
Fifth-wheel	L. S. Browning	474,332	May 3	717	187	59	775
Fifth-wheel	A. E. Herman	480,403	Aug. 9	1654	264	60	798
Fifth-wheel	C. F. Hinman and M. G. Bunnell	475,313	May 24	2267	584	59	1120
Fifth-wheel	E. L. Howe	488,010	Dec. 13	1271	316	61	1591
Fifth-wheel	W. J. Huber	479,563	July 26	2358	588	60	501
Fifth-wheel	P. Lugenbell	472,894	Apr. 12	1341	344	59	268
Fifth-wheel	F. McLaughlin	482,457	Sept. 13	902	219	60	1524
Fifth-wheel	H. Olsen	481,655	Aug. 30	3091	753	60	1230
Fifth-wheel	S. H. Sexton	484,378	Oct. 11	1306	334	61	278
Fifth-wheel	E. B. Smith	474,151	May 3	407	99	59	717
Fifth-wheel device for wagons	A. H. Worrest	488,237	Dec. 20	1663	415	61	1686
Fifth-wheel. Vehicle	G. R. Kent	467,279	Jan. 19	1599	408	58	320
Fifth-wheel. Vehicle	J. W. Taylor	472,834	Apr. 12	1255	321	59	250
Figs. Preparing	J. W. Williams and J. G. Capps	468,905	Feb. 16	1554	395	58	847
File	W. Reamer	474,099	May 3	343	.....	59	703
File	C. W. Cox	482,497	Sept. 13	973	236	60	1539
File	J. J. Tremble	470,223	Mar. 8	892	220	58	1281
File. Account	W. N. Brown	474,287	May 3	618	153	59	757
File and account-book. Combined	C. See	467,205	Jan. 19	1479	738	58	298
File and index. Continuous revolving	A. J. Rudolph	473,348	Apr. 19	2111	530	59	427
File and perforating appliance. Combined bill and letter	J. W. Grantland	488,939	Dec. 27	2778	686	61	1925
File and perforating appliance. Combined portable bill and letter	J. W. Grantland	485,102	Oct. 25	2481	638	61	540
File. Bill	G. W. Hall	479,908	Aug. 2	197	49	60	621
File. Bill	S. B. Meredith	479,604	July 26	2413	602	60	511
File. Bill	E. B. Putney	476,487	June 7	403	94	59	1515
File. Bill	J. Teall	483,659	Sept. 13	1211	295	60	1585
File. Bill	C. D. Then	482,660	Sept. 13	1212	296	60	1585

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
File. Bill and letter.....	J. W. Henson.....	474,776	May 10	1423	362	59	923
File. Bill or letter.....	C. H. Ahrens and W. O. Gottwals.....	471,087	Mar. 22	2245	577	58	1563
File. Bill or letter.....	J. H. Stull.....	480,862	Aug. 16	1775	444	60	951
File-binder.....	J. F. Brown.....	475,750	May 31	2967	753	59	1266
File-box.....	W. I. Ohmer.....	487,150	Nov. 29	3180	814	61	1276
File-box.....	W. I. Ohmer and T. L. Wayne.....	487,006	Nov. 29	2955	762	61	1231
File-case.....	P. J. Pauly, Jr.....	477,574	June 21	2135	531	59	1887
File-case.....	A. J. Wells.....	466,969	Jan. 12	1072	272	58	212
File. Check.....	A. L. Colton.....	486,434	Nov. 22	2007	532	61	1037
File. Check.....	F. Tremblay.....	486,993	Nov. 29	2935	757	61	1237
File. Check and bill.....	C. F. Lomb and M. R. Jewell.....	474,501	May 10	990	255	59	838
File cover. Court.....	A. E. Walkup.....	471,660	Mar. 29	3090	786	58	1731
File-cover fastener. Court.....	A. E. Walkup.....	486,962	Nov. 29	2888	746	61	1218
File-cutting machine.....	P. Heintz.....	471,219	Mar. 22	2457	624	58	1603
File. Document.....	J. A. Des Rivieres and J. P. Prud'homme.....	472,920	Apr. 12	1379	353	59	277
File. Document.....	T. W. Fowler.....	475,212	May 17	2116	{ 535 536 }	59	1073
File. Document.....	E. A. Sharp.....	481,593	Aug. 30	2993	733	60	1211
File for bills, periodicals, &c.....	A. A. Thompson.....	485,514	Nov. 1	549	146	61	685
File-holder.....	W. Lumley.....	474,478	May 10	955	246	59	831
File. Journal-page.....	J. O. Rourke.....	473,775	Apr. 26	2804	705	59	583
File. Letter.....	G. A. Baker.....	474,280	May 3	608	151	59	755
File. Letter.....	B. Brower.....	473,448	Apr. 26	292-1	576	59	482
File. Letter.....	A. Grundy.....	471,357	Mar. 22	2659	675	58	1642
File. Letter.....	C. E. Jewell.....	470,050	Mar. 1	607	151	58	1217
File. Letter.....	C. F. Lomb.....	470,062	Mar. 1	626	155	58	1221
File. Letter.....	W. I. Ohmer.....	470,440	Mar. 8	1275	327	58	1351
File. Letter.....	H. L. Sawyer.....	484,247	Oct. 11	1096	278	61	237
File. Letter and paper.....	G. Harvey and W. R. Grundy.....	478,695	July 12	954	237	60	205
File. Letter or paper.....	C. L. Page.....	470,336	Mar. 8	1101	280	58	1319
File. Newspaper.....	J. L. Deming.....	468,795	Feb. 16	1390	352	58	815
File. Newspaper.....	C. H. Jaehnig.....	479,513	July 26	228-9	572	60	487
File. Newspaper.....	S. Ray.....	473,476	Apr. 26	2332	500	59	492
File or binder. Temporary.....	H. George.....	472,018	Mar. 29	3632	929	58	1836
File or index. Continuous.....	A. J. Rudolph.....	483,312	Sept. 27	2280	573	60	1819
File. Paper.....	T. J. Gorman.....	483,609	Oct. 4	138	35	61	29
File. Paper.....	W. I. Ohmer.....	477,230	Nov. 29	3333	849	61	1303
File. Paper.....	C. E. Stone.....	472,561	Apr. 12	862	221	59	178
File. Paper.....	O. F. Westrup.....	484,267	Oct. 11	1135	{ 289 290 }	61	245
File. Paper or music.....	W. Jeschke.....	486,875	Nov. 29	2711	707	61	1183
File. Prescription.....	G. L. Goodman.....	471,856	Mar. 29	3412	870	58	1792
File. Reference.....	H. I. Talley.....	468,312	Feb. 2	631	157	58	646
File. Revolving paper.....	R. E. Ferguson.....	481,857	Aug. 30	3432	842	60	1296
File-stripping machine.....	H. J. Gosling.....	488,652	Dec. 27	2334	577	61	1834
Files. Means for and method of designating document.....	G. H. Ball.....	485,025	Oct. 25	2373	610	61	516
Files or other tools. Handle for.....	J. W. Payler.....	472,140	Apr. 5	203	55	59	38
Filing and supply case.....	P. Fraizer.....	478,584	July 12	805	198	60	175
Filing-cabinet.....	H. M. Plaisted.....	479,660	July 26	2498	622	60	526
Filing device. Paper.....	H. A. Winternight.....	483,089	Sept. 20	1898	480	60	1735
Filing physicians' prescriptions.....	W. R. Hall.....	473,552	Apr. 26	2449	620	59	513
Filter-frames. Whirl for.....	H. Allcroft.....	472,844	Apr. 12	1267	324	59	253
Film or plate carrier.....	F. A. Hetherington.....	476,203	May 31	3706	936	59	1412
Filter.....	L. N. Blessing.....	471,840	Mar. 29	3392	865	58	1788
Filter.....	E. Boeing.....	468,984	Feb. 16	1706	435	58	877
Filter.....	J. J. Curran.....	479,403	July 26	2087	523	60	448
Filter.....	S. G. Derham.....	478,093	July 5	29	9	60	9
Filter.....	W. M. Deutsch.....	471,811	Mar. 29	3352	853	58	1779
Filter.....	W. M. Deutsch.....	476,737	June 7	765	188	59	1590
Filter.....	W. M. Deutsch.....	482,436	Sept. 13	869	208	60	1518
Filter.....	W. M. Deutsch.....	481,751	Oct. 25	1964	501	61	435
Filter.....	J. H. Drake.....	468,294	Feb. 2	596	148	58	639
Filter.....	W. R. Evans.....	487,614	Dec. 6	603	155	61	1442
Filter.....	W. Hilton.....	470,620	Mar. 8	1532	399	58	1403
Filter.....	J. M. Holt.....	471,385	Mar. 22	2704	689	58	1651
Filter.....	O. H. Jewell.....	477,213	June 21	1557	383	59	1774
Filter.....	O. H. W. M. and I. H. Jewell.....	478,261	July 5	322	78	60	64
Filter.....	E. M. Knight.....	468,664	Feb. 9	1185	302	58	765
Filter.....	C. C. Lockstaedt and J. F. Gubbins.....	483,230	Sept. 27	2127	538	60	1791
Filter.....	T. T. and W. O. Luskomb.....	485,551	Nov. 1	607	162	61	697
Filter.....	V. H. McConnell.....	469,450	Feb. 23	2408	617	58	1021
Filter.....	B. M. Santurio.....	482,140	Sept. 6	347	83	60	1404
Filter.....	P. Stone.....	466,809	Jan. 12	811	209	58	164
Filter.....	J. Sutton.....	470,338	Mar. 8	1104	{ 281 282 291 }	58	1319
Filter.....	J. Sutton.....	470,355	Mar. 8	1133	{ 290 291 }	58	1325
Filter.....	J. M. Wasson.....	481,606	Aug. 30	3019	738	60	1216
Filter.....	F. C. Weir and H. B. Furness.....	471,496	Mar. 22	2866	730	58	1682
Filter.....	S. L. West.....	488,621	Dec. 27	2276	565	61	1824
Filter.....	C. E. Winterros.....	477,238	June 21	1607	{ 393 394 }	59	1783
Filter and separator. Feed-water.....	E. P. Mandigo.....	468,670	Feb. 9	1193	304	58	767
Filter. Beer.....	H. C. J. Gebrike.....	477,208	June 21	1546	379	59	1773
Filter. Beer.....	J. Moeller.....	476,671	June 7	666	162	59	1569
Filter-can.....	F. Kerrieh.....	478,365	July 5	476	115	60	95
Filter. Drive-well.....	D. Wiser.....	470,274	Mar. 8	970	240	58	1296
Filter. Fancet.....	G. F. Aishton.....	485,024	Oct. 25	2372	610	61	516
Filter. Microscopic sediment.....	P. W. Shimer.....	474,267	May 3	586	145	59	751
Filter. Oil.....	E. S. Breed.....	483,599	Oct. 4	124	31	61	26
Filter. Oil.....	J. B. Crane.....	478,251	July 5	307	74	60	61
Filter. Oil.....	J. Deuss.....	488,264	Dec. 20	1702	425	61	1694

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Filter. Oil.....	J. S. Hall.....	483,148	Sept. 27	1989	503	60	1763
Filter. Oil.....	O. Lindberg.....	487,421	Dec. 6	315	81	61	1383
Filter-presses. Plate for.....	J. P. Boettiger.....	471,741	Mar. 29	3236	824	58	1757
Filter. Tea or coffee.....	E. R. Austin.....	478,548	July 12	757	185	60	165
Filter. Water.....	J. Davis.....	486,859	Nov. 29	2690	703	61	1179
Filter. Water.....	J. Davis.....	486,860	Nov. 29	2693	703	61	1180
Filter. Water.....	O. Eastman.....	478,157	July 5	129	33	60	28
Filter. Water.....	E. A. Gross.....	470,192	Mar. 8	844	208	58	1272
Filter. Water.....	H. A. Siegrist and G. M. Bittman.....	486,413	Nov. 15	1970	523	61	1007
Filters. Collecting-tube for.....	G. H. Moore.....	473,011	Apr. 19	1539	392	59	319
Filters. Distributing feed-nozzle for.....	H. C. Thurston.....	488,297	Dec. 20	1756	442	61	1704
Filtering apparatus.....	D. Williamson.....	477,727	June 28	2397	599	59	1956
Filtering apparatus. Centrifugal.....	D. Williamson.....	468,858	Feb. 16	1486	379	58	834
Filtering material.....	F. Lascar.....	488,317	Dec. 20	1789		61	1710
Filtering system.....	R. Beyrle.....	487,467	Dec. 6	392	101 102	61	1398
Filtering-tube.....	M. Epstein.....	485,788	Nov. 8	963	258	61	787
Finger-bar.....	M. N. Laufenburg.....	475,964	May 31	3327	839	59	1336
Finger-bar.....	D. Rudd.....	466,428	Jan. 5	189	49	58	36
Finger-nail cleaner.....	C. W. Laubin.....	488,657	Dec. 27	2338	578	61	1835
Finger-ring.....	J. H. Fink.....	467,928	Feb. 2	39	9	58	533
Finger-ring.....	J. H. Fink.....	467,929	Feb. 2	40	9	58	533
Finger-ring.....	J. H. Fink.....	470,751	Mar. 15	1729	445	58	1451
Finger-ring.....	L. J. Heintz.....	484,793	Oct. 25	1985	507	61	441
Finger-ring.....	H. Huestis.....	474,638	May 10	1214	310	59	881
Finger-ring.....	I. Lehman.....	486,720	Nov. 22	2446	638	61	1114
Finger-ring.....	C. A. Russell.....	477,825	June 28	2557	640	59	1985
Finger-ring. Interchangeable-initial.....	J. H. Fink.....	480,080	Aug. 2	513	130	60	680
Finger-rings. Machine for marking or stamping.....	W. H. Peckham.....	484,918	Oct. 25	2201	567	61	483
Finger-tapering device.....	E. R. Paige.....	478,356	July 5	466	113	60	93
Fire-alarm.....	J. C. F. McGriff.....	182,379	Sept. 13	781	188	60	1502
Fire-alarm and telephone apparatus.....	E. H. Amet.....	470,231	Mar. 8	991	222	58	1283
Fire-alarm apparatus.....	A. G. Davis.....	488,388	Dec. 20	1908	477 478	61	1734
Fire-alarm apparatus.....	A. Goldstein.....	479,709	July 26	2591	645	60	543
Fire-alarm. Automatic.....	M. Martin.....	474,670	May 10	1260	322 323	59	891
Fire-alarm. Automatic.....	G. S. Tilton.....	467,212	Jan. 19	1487	381	58	300
Fire-alarm. Automatic electric.....	L. G. Woolley.....	471,929	Mar. 29	3510	896	58	1812
Fire-alarm. Detonating.....	L. Parsley.....	479,837	Aug. 2	94	24	60	600
Fire-alarm. Electric.....	J. J. d'Almeida and J. Y. da Silva.....	484,386	Oct. 18	1319	337	61	293
Fire-alarm. Electric.....	H. Cortland.....	484,140	Oct. 11	917	236	61	202
Fire-alarm. Fusible.....	G. B. Smith.....	484,469	Oct. 18	1454	370	61	318
Fire-alarm. Pneumatic.....	A. A. Lehmann.....	486,675	Nov. 22	2376	621 622	61	1099
Fire-alarm. Pneumatic.....	A. A. Lehmann.....	488,018	Dec. 13	1283	320 321 322	61	1593
Fire-alarm signal apparatus. Auxiliary.....	C. E. Scribner.....	487,095	Nov. 29	3093	794 795	61	1259
Fire-alarm system.....	H. Redding.....	469,376	Feb. 23	2296	591	58	1000
Fire-alarm system.....	L. G. Rowand.....	477,068	June 14	1308	318 319	59	1712
Fire-alarm system.....	L. G. Rowand.....	477,069	June 14	1320	320	59	1714
Fire-alarm system.....	L. G. Rowand.....	477,070	June 14	1322	320	59	1715
Fire-alarm system. Automatic.....	C. Burgher.....	475,925	May 31	3260	823	59	1323
Fire-alarm system. Auxiliary.....	J. Sachs.....	481,590	Aug. 30	2988	733	60	1211
Fire-alarm. Thermostatic.....	G. D. Mosher.....	473,669	Apr. 26	2652	669	59	553
Fire-alarms. Electric controlling apparatus for.....	G. Knowles, Jr.....	477,214	June 21	1558	383 384	59	1775
Fire and burglar alarm.....	T. J. Gordon.....	469,648	Feb. 23	2699	695	58	1079
Fire and burglar alarm connection. Electric.....	H. T. Wilson.....	481,989	Sept. 6	103	26	60	1355
Fire appliance.....	J. M. Karker and F. M. Bender.....	487,418	Dec. 6	310	80	61	1383
Firearm.....	J. W. Mullins.....	487,423	Dec. 6	318	81	61	1384
Firearm. Breech-loading.....	O. W. Bergman.....	468,127	Feb. 2	330	81, 82	58	588
Firearm. Breech-loading.....	J. M. and M. S. Browning.....	486,272	Nov. 15	1750	461 462	61	963
Firearm. Breech-loading.....	J. M. and M. S. Browning.....	486,273	Nov. 15	1754	462 463	61	964
Firearm. Breech-loading.....	A. Grouleff and H. B. Williams.....	477,410	June 21	1880	463	59	1836
Firearm. Breech-loading.....	A. A. Haines.....	469,561	Feb. 23	2589	662 663	58	1055
Firearm. Breech-loading.....	C. Röstel.....	480,627	Aug. 9	1409	351 352	60	863
Firearm. Breech-loading.....	R. Schmidt.....	471,362	Mar. 22	2668	678	58	1644
Firearm. Breech-loading.....	F. Sifuentes.....	471,904	Mar. 29	3474	888	58	1804
Firearm. Breech-loading.....	D. S. West.....	478,727	July 12	1001	248	60	215
Firearm-lock.....	L. Jonson.....	485,043	Oct. 25	2396	616	61	521
Firearm-magazine.....	J. M. Marlin.....	469,819	Mar. 1	249	63, 64	58	1149
Firearm. Magazine.....	J. M. and M. S. Browning.....	487,659	Dec. 6	679	175	61	1456
Firearm. Magazine.....	A. Burgess.....	478,220	July 5	238	59	60	49
Firearm. Magazine.....	A. Burgess.....	478,221	July 5	243	59, 60	60	50
Firearm. Magazine.....	A. Burgess.....	478,222	July 5	245	60	60	50
Firearm. Magazine.....	H. B. Forbes.....	467,069	Jan. 12	1271	322	58	250
Firearm. Magazine.....	D. S. West.....	478,729	July 12	1013	249	60	217
Firearm. Recoil-operated magazine.....	H. K. White.....	488,409	Dec. 20	1936	485 486	61	1740
Firearm. Repeating.....	L. M. R. Daudeteau.....	473,827	Apr. 26	2889	724 725	59	598
Firearm. Repeating.....	J. Laumann.....	479,284	July 19	1874	469	60	393
Firearm. Repeating.....	F. Mannlicher.....	472,795	Apr. 12	1201	308 309	59	240
Firearm. Repeating.....	F. Rees.....	473,179	Apr. 19	1829	461 462	59	371
Firearm. Revolving.....	I. N. Archbold.....	476,591	June 7	550	131	59	1545

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Firearm. Revolving	V. Bovy	473,903	May 3	9	3	59	639
Firearm. Revolving	C. von Pecker	467,558	Jan. 26	2061	521	58	415
Firearm-sight	J. W. Carver	466,599	Jan. 5	461	118	58	89
Firearm with breech operated by gases of explosion	V. and B. Clair	483,539	Oct. 4	35	9	61	10
Firearms. Device for supporting and holding cartridges in	E. Pringle	484,457	Oct. 18	1433	366	61	315
Firearms. Ejector mechanism for breech-loading	C. A. King	470,157	Mar. 1	765	190	58	1247
Firearms. Means for attaching magazines to	W. Mason	487,677	Dec. 6	712	182	61	1462
Fire-bar. Movable	H. v. Heider and J. Schuscha	471,695	Mar. 29	3151	803	58	1742
Fire-box	F. H. Bailey	486,018	Nov. 8	1329	353	61	182
Fire box and grate	J. A. Jamison	471,005	Mar. 15	2124	545	58	1527
Fire-box divider	S. L. Pakas	480,276	Aug. 9	849	216	60	757
Fire-department use. Vehicle for	C. T. Holloway	469,998	Mar. 1	536	133	58	1203
Fire-dog and grate. Combined	G. T. Glascock	484,091	Oct. 11	849	215	61	188
Fire-door openings. Covering for	W. H. Hoag	484,636	Oct. 18	1714	435	61	370
Fire-engine pump	T. S. La France	478,439	July 5	581	141	60	114
Fire-engines. Apparatus for igniting fire under steam-boilers of steam	G. Case	473,415	Apr. 19	2228	560	59	449
Fire-engines. Automatic fire-kindler for steam	S. C. Jackson	476,539	June 7	472	112	59	1531
Fire-engines. Feed-water heater for	P. Smith	473,593	Apr. 26	2540	641	59	531
Fire-engines. Fire-lighting attachment for steam	K. L. Comes	476,249	June 7	26	6	59	1444
Fire-escape	A. A. Badger	481,923	Sept. 6	4	2	60	1335
Fire-escape	C. H. Baker	480,759	Aug. 16	1615	406	60	919
Fire-escape	T. J. Bergeron and F. Bedard	481,888	Aug. 30	3481	853	60	1306
Fire-escape	G. A. Bidwell	475,175	May 17	2050	518	59	1061
Fire-escape	J. Bower	474,155	May 3	415	100	59	719
Fire-escape	A. Bowers	485,834	Nov. 8	1025	275	61	798
Fire-escape	J. D. Brainard	481,252	Aug. 23	2441	601	60	1091
Fire-escape	A. B. Cruickshank	481,849	Aug. 30	3421	830	60	1294
Fire-escape	J. F. Downes	485,914	Nov. 8	1158	306	61	825
Fire-escape	C. P. B. Ehrentraut	470,112	Mar. 1	701	173	58	1235
Fire-escape	C. F. Ekman	479,257	July 19	1837	461	60	384
Fire-escape	A. Ferguson	482,345	Sept. 13	715	170	60	1459
Fire-escape	W. J. Flowers	488,866	Dec. 27	2823	697	61	1936
Fire-escape	C. M. Fowler	481,693	Aug. 30	3148	768	60	1241
Fire-escape	P. Geurtz and M. V. Wildenberg	466,714	Jan. 5	650	167	58	124
Fire-escape	A. V. Goltermann	484,033	Oct. 11	851	216	61	189
Fire-escape	W. Gunnarson	473,572	Apr. 26	2504	632	59	525
Fire-escape	L. S. Hodgdon	486,041	Nov. 8	1363	362	61	868
Fire-escape	R. Howell	487,569	Dec. 6	543	140	61	1428
Fire-escape	J. A. Hunt	481,565	Aug. 30	2952	725	60	1204
Fire-escape	D. Knowles	472,950	Apr. 12	1422	363	59	284
Fire-escape	V. Leber	484,536	Oct. 18	1562	397	61	340
Fire-escape	L. Lester	485,954	Nov. 8	1236	323	61	840
Fire-escape	W. W. Lummus	479,436	July 26	2145	535	60	460
Fire-escape	P. Lynch, Jr	483,463	Sept. 27	2185	625	60	1859
Fire-escape	W. J. McCollom	486,493	Nov. 22	2086	552	61	1043
Fire-escape	J. Murphy and F. M. Rankin	484,042	Oct. 11	784	197	61	175
Fire-escape	E. Olin	467,690	Jan. 26	2249	572	58	450
Fire-escape	J. Pride	482,274	Sept. 6	577	137	60	1447
Fire-escape	E. Rank	485,656	Nov. 8	774	205	61	746
Fire-escape	S. T. Rawlings	476,409	June 7	287	68	59	1494
Fire-escape	C. E. Rice and L. B. McDonald	479,527	July 26	2306	576	60	491
Fire-escape	C. E. Sansousy	482,654	Sept. 13	1204	293	60	1583
Fire-escape	C. Schneider	471,145	Mar. 22	2346	600	58	1582
Fire-escape	M. Schwarz	482,813	Sept. 20	1460	362	60	1646
Fire-escape	C. A. Smith	476,965	June 14	1151	277	59	1679
Fire-escape	J. B. Stott	487,135	Nov. 29	3153	808	61	1271
Fire-escape	P. B. Sullivan	484,260	Oct. 11	1117	283	61	241
Fire-escape	W. Talbott	474,876	May 17	1594	406	59	970
Fire-escape	T. B. Woodward	479,610	July 26	2427	605	60	513
Fire-escape and fireman's ladder	W. F. Loyd	476,885	June 14	1016	246	59	1653
Fire-escape and scaling-ladder	G. W. Melvin	482,441	Sept. 13	878	210	60	1519
Fire-escape. Folding	J. Gillingham	468,722	Feb. 9	1273	323	58	783
Fire-escape. Folding safety	G. H. Lee	470,689	Mar. 15	1633	423	58	1431
Fire-escape for buildings	G. L. Roberts	480,518	Aug. 9	1230	318	60	828
Fire-escape. Friction	J. L. Gardner	469,239	Feb. 23	2023	535	58	958
Fire-escape ladder	A. J. Boden	478,559	July 12	770	189	60	168
Fire-escape ladder	E. A. Strang	467,525	Jan. 26	1988	504	58	402
Fire-escape ladder and means for raising the same	P. A. Palmer	481,967	Sept. 6	67	17, 18	60	1348
Fire-escape ladder. Flexible	S. L. Perry	471,329	Mar. 22	2611	662	58	1633
Fire-escape. Life-net	J. Ryan	480,139	Aug. 2	608	154	60	698
Fire-escape. Portable tower-platform	J. A., and H. Volz	487,039	Nov. 29	3003	773	61	1240
Fire-escape. Safety	J. Maunheim	487,395	Dec. 6	254	69	61	1371
Fire-extinguisher	O. J. Averell	483,522	Oct. 4	5	2	61	4
Fire-extinguisher	J. E. Bott	474,208	May 3	499	119	59	734
Fire-extinguisher	A. H. Durand	470,253	Mar. 8	1018	260	58	1306
Fire-extinguisher	R. J. Gilmore	488,003	Dec. 13	1258	313	61	1588
Fire-extinguisher	W. W. McKay	479,448	July 26	2165	541	60	465
Fire-extinguisher	J. M. Miller	483,632	Oct. 4	170	43	61	36
Fire-extinguisher	A. Reuemann	466,801	Jan. 12	798	206	58	162
Fire-extinguisher. Automatic	O. C. Barber	473,442	Apr. 26	2271	573	59	490
Fire-extinguisher. Automatic	J. Hill	466,414	Jan. 5	162	44	58	32
Fire-extinguisher. Automatic	O. B. Hall	467,970	Feb. 2	90	22	58	542
Fire-extinguisher. Automatic	W. S. Purifoy	488,832	Dec. 27	2603	646	61	1884

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fire-extinguisher. Automatic gravity	T. F. Handy	483,491	Sept. 27	2520	634	60	1866
Fire-extinguisher. Automatic stationary	R. L. Cummock and P. J. Marrs	466,658	Jan. 5	546	142	58	105
Fire-extinguisher can. Chemical	R. T. Van Valkenburg	467,453	Jan. 19	1857	474	58	370
Fire-extinguisher. Chemical	R. A. Ballou	475,050	May 17	1869	474	59	1024
Fire-extinguisher. Chemical	W. F. Singer	467,142	Jan. 12	1382	353	58	272
Fire-extinguisher or sprinkler. Automatic	J. H. Wilson	485,519	Nov. 1	554	148	61	686
Fire-extinguisher. Portable	H. D. Greene	474,042	May 3	255	62	59	687
Fire-extinguishers or other purposes. Vessel for	G. W. Hoglen	470,569	Mar. 8	1456	378	58	1387
Fire. Extinguishing	H. S. Mills	477,138	June 14	1419	345	59	1734
Fire-extinguishing apparatus	C. L. Fortier	468,439	Feb. 9	825	208	58	694
Fire-extinguishing apparatus. Automatic	J. E. Bott	474,209	May 3	500	120	59	734
Fire guard and screen. Adjustable	N. B. Gibson	474,239	May 3	545	134	59	743
Fire-hose. Electric signaling device for	J. C. Wharton and J. W. Braid	479,549	July 26	2324	581	60	495
Fire-indicator	M. W. Iles	477,759	June 28	2456	614	59	1967
Fire-kindler	J. W. B. Cook	478,249	July 5	304	74	60	61
Fire-kindler	S. Elsinger	486,966	Nov. 29	2894		61	1219
Fire-kindler	W. R. Frost	471,172	Mar. 22	2380	608	58	1589
Fire-kindler	E. C. Lambur and G. Burdett	475,123	May 17	1985	503	59	1947
Fire-kindler	P. Morency	485,644	Nov. 8	746	196	61	742
Fire-kindler	F. R. Mardock	468,427	Feb. 9	811		58	691
Fire-kindler	S. M. N. Rogers	488,223	Dec. 20	1643	409	61	1682
Fire-kindlers. Absorbent for	B. B. Jenkins	472,540	Apr. 12	836	213	59	172
Fire-kindling. Composition of matter for	H. W. Kling	469,086	Feb. 16	1853		58	906
Fire-ladder	L. H. Fowler	478,278	July 5	346	83, 84	60	70
Fire-lighter and receptacle	F. Sahlfeld	474,190	May 3	473	114	59	729
Fireman's respirator	T. O. Helbing	472,048	Apr. 5	58	15	59	14
Firemen. Electric signaling device for	G. L. Barnard	482,778	Sept. 20	1418	351	60	1638
Fire. Means for protecting buildings from	C. A. Palmer	466,531	Jan. 12	838	216	58	170
Fireplace attachment	C. A. Howe	470,244	Mar. 8	920	238	58	1387
Fireplace back or lining	W. E. Fitch	479,103	July 19	1594	399	60	339
Fireplace back or lining	W. E. Fitch	480,322	Aug. 9	929	236	60	771
Fireplace draft-regulator	B. W. Peel	485,772	Nov. 8	945	253	61	783
Fireplace. Gas-log	F. E. Backus	485,079	Oct. 25	2448	630	61	532
Fireplace-heater	J. J. Richardson	477,155	June 14	1441	{ 353 354 }	59	1738
Fireplace heater. Open	G. R. Scates	485,301	Nov. 1	218	62	61	617
Fire-pot	J. J., and P. Schill	466,943	Jan. 12	1031	263	58	205
Fire-pot	J. J., and P. Schill	470,509	Mar. 8	1378	360	58	1371
Fire-pot. Auxiliary	J. W. Allan	486,067	Nov. 15	1407	373	61	895
Fireproof building	C. Aikin	477,733	June 28	2409	602	59	1959
Fireproof construction	W. Orr	471,772	Mar. 29	3277	{ 836 837 }	58	1766
Fireproof garment	B. J. Martin	488,148	Dec. 13	1500	377	61	1638
Fire-shield	W. M. Herrington	482,244	S. pt. 20	1506	374	60	1656
Fire-shutter for ventilating-shafts of buildings	L. Wieland	474,890	May 17	1615	412	59	975
Fire-shutter for ventilating-shafts of buildings	L. Wieland	474,982	May 17	1766	447	59	1004
Fireworks	C. Schmidt	475,897	May 31	3221		59	1316
Firing apparatus for use with coal-dust	C. Wegener	475,715	May 24	2902	{ 735 736 }	59	1241
Firing arm. Rapid	W. D. Forbes	466,778	Jan. 12	760	{ 197 198 }	58	154
Fish and game trap	A. G. Bolling	475,845	May 31	3134	795	59	1298
Fish-bait. Artificial	E. F. Pfeuger	468,361	Feb. 9	715	177	58	672
Fish-hook	C. A. Haviland	471,548	Mar. 29	2935	747	58	1703
Fish-hook	W. H. Hunter	478,864	July 12	1223	303	60	258
Fish-hook	A. G. Mack	479,194	July 19	1743	437	60	366
Fish-hook	L. Shults	484,678	Oct. 18	1792	456	61	387
Fish-hook	J. Stretch	470,311	Mar. 8	1058	269	58	1312
Fish-hook	J. Stretch	470,312	Mar. 8	1059	269	58	1312
Fish-lines. Leader for	A. M. White	473,038	Apr. 19	1587	403	59	327
Fish net or trap	W. R. Barker	470,314	Mar. 8	1061	269	58	1312
Fish or game carrier	F. T. Verhaven	486,649	Nov. 22	2339	611	61	1092
Fish-plate	H. W. Libbey	468,881	Feb. 16	1517	387	58	840
Fish-scaler	W. Clow	481,104	Aug. 16	2170	537	60	1026
Fish scaler and dresser	E. F. Pfeuger	486,295	Nov. 15	1784	469	61	970
Fish-tank or aquarium	G. P. A. Gunther	475,082	May 17	1915	487	59	1033
Fish trap or net	M. Covel	466,489	Jan. 5	286	72, 73	58	55
Fish-wells. Circulation of water in	C. Houston and W. A. Mackie	471,501	Mar. 22	2873	731	58	1683
Fishing apparatus	I. Dunham	478,579	July 12	798	197	60	173
Fishing apparatus	P. Wiss	476,940	June 14	1108	267	59	1671
Fishing device	C. A. Künzel	467,130	Jan. 12	1346	343	58	264
Fishing device	C. A. Künzel	467,121	Jan. 12	1347	343	58	264
Fishing device	C. A. Künzel	467,122	Jan. 12	1347	343	58	264
Fishing device	C. A. Künzel	467,123	Jan. 12	1348	344	58	265
Fishing-fly	G. W. Upton	468,376	Feb. 9	735	182	58	676
Fishing-fly book	D. K. Howe	485,582	Nov. 1	658	175	61	708
Fishing-leader	G. C. Hemenway	469,015	Feb. 16	1760	449	58	888
Fishing-line-reel holder	J. Falvey	481,941	Sept. 6	33	8	60	1340
Fishing-lines. Swivel for	R. Herring, Jr	473,503	Apr. 26	2371	601	59	499
Fishing purposes. Snell and gange for	G. C. Hemenway	469,016	Feb. 16	1761	449	58	888
Fishing-reel	S. L. Bean	467,849	Jan. 26	2507	635	58	500
Fishing-reel	A. F. Boardman	467,714	Jan. 26	2298	584	58	459
Fishing-reel	A. F. Boardman	475,030	May 17	1838	466	59	1018
Fishing-reel	J. Borchardt	481,743	Aug. 30	3245	790	60	1260
Fishing-reel	H. M. Bylesby	470,178	Mar. 8	822	203	58	1268
Fishing-reel	N. J. Felix	469,687	Mar. 1	26	9	58	1103
Fishing-reel	R. E. Fenner	476,621	June 7	597	143	59	1555
Fishing-reel	T. Greason	477,751	June 28	2449	{ 611 612 }	59	1966
Fishing-reel	A. D. Hendrick	485,794	Nov. 8	970	260	61	788
Fishing-reel	A. B. Hendryx	473,605	Apr. 26	2648	668	59	552
Fishing-reel	A. B. Hendryx	473,700	Apr. 26	2704	680	59	562
Fishing-reel	A. B. Hendryx	476,536	June 7	467	111	59	1529
Fishing-reel	A. B. Hendryx	478,326	July 5	414	99	60	83

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Fishing-reel.	A. B. Hendryx	478,327	July 5	415	100	60	83
Fishing-reel.	A. B. Hendryx	487,481	Dec. 6	12	106	61	1402
Fishing-reel.	J. vom Hofe	488,408	Dec. 20	1935	485	61	1740
Fishing-reel.	E. S. Holmes	470,130	Mar. 1	727	181	58	1241
Fishing-reel.	W. King	467,482	Jan. 19	1904	487	58	379
Fishing-reel.	P. M. Leprobon	488,678	Dec. 27	2378	589	61	1843
Fishing-reel.	H. W. Martin	479,440	July 26	2152	537	60	462
Fishing-reel.	G. E. Medley	481,330	Aug. 23	2571	631	60	1114
Fishing-reel.	J. H. Mount	485,208	Nov. 1	81	26	61	589
Fishing-reel.	E. B. Porter	478,713	July 12	978	243	60	210
Fishing-reel.	O. P. Ross	468,180	Feb. 2	413	102	58	605
Fishing-reel.	C. N. Wilcox	477,196	June 14	1521	371	59	1756
Fishing-rod	J. B. Coleman and V. I. Guyer	470,473	Mar. 8	1327	345	58	1361
Fishing-rod	F. D. Divine	476,370	June 7	229	56	59	1481
Fishing-rod	H. P. Morgan	472,766	Apr. 12	1161	298	59	232
Fishing-rod	H. Whitaker	486,802	Nov. 22	2581	672	61	1141
Fishing-rod and cane combined	J. H. Edgerly	475,852	May 31	3150	799	59	1302
Fishing-rod and reel	D. C. Lockwood	484,439	Oct. 18	1412	360	61	310
Fishing-rod holder	T. Lemaire	473,073	Apr. 19	1637	417	59	337
Fishing-rod joint-clamp	J. B. Thurston	475,024	May 17	1831	464	59	1016
Fishing-rods. Handpiece for	C. G. Rutz	467,202	Jan. 19	1476	377	58	297
Fishing-rods. Slack-line attachment for	E. F. Pfeuger	468,227	Feb. 2	480	118	58	618
Fishing-tackle. Deep-water	S. C. Darrow	481,165	Aug. 23	2288	564	60	1062
Fishing-through ice. Apparatus for	G. H. Lane	479,219	July 19	1779	446	60	373
Fishway	W. H. Rogers	484,476	Oct. 18	1789	455	61	386
Fishway	S. Sanderson	474,863	May 17	1578	402	59	966
Flag-staff holder	G. W. Bert and L. Widmayer	466,960	Jan. 12	1059	269	58	210
Flags. Making	H. A. Bowman	469,595	Feb. 23	2326	597	58	1004
Flange-wrench. Adjustable	J. W. Kellam	467,331	Dec. 6	152	44	61	1351
Flanger	A. F. Priest	467,349	Jan. 19	1704	436	58	340
Flash-light apparatus	J. B. Lawson	486,831	Nov. 22	2634	687	61	1153
Flash-light burner	S. M. Williams	467,696	Jan. 26	2266	575	58	453
Flask:							
See Dental flask.	Pocket-flask.						
Molder's flask.	Shipping-flask.						
Molding-flask.							
Flat-iron	E. Stewart	471,364	Mar. 22	2670	679	58	1645
Flavoring-powder	S. E. McIntosh	477,141	June 14	1421		59	1734
Flax and hemp brake	J. T. Smith	475,819	May 31	3087	{ 781 782 }	59	1290
Flax, &c. Machine for breaking, scutching, and hackling	J. Cardon	469,679	Mar. 1	13	5, 6	58	1101
Flax, &c. Machine for hackling	J. Etskine	468,194	Feb. 2	435	108	58	609
Flax or other fiber-yielding plants. Machine for treating	E. Bosse	485,734	Nov. 8	898	{ 240 241 }	61	773
Flax-puller	J. M. Smith	472,234	Apr. 5	355	91	59	66
Flexible tube	W. I. Bunker	477,503	June 21	2027	502	59	1864
Flies, &c. Means for clearing apartments of	D. A. Jones	486,044	Nov. 8	1367	363	61	869
Floating figure	E. P. Roberts	479,530	July 26	2310	577	60	492
Floating pot	J. B. Holsten	482,638	Sept. 13	1166	287	60	1580
Flood-gate. Automatic	S. Flinn	482,668	Sept. 20	1549	386	60	1661
Floor-clamp	O. J. Graham	475,855	May 31	3152	799	59	1302
Floor-clamp	F. Martin	488,147	Dec. 13	1499	377	61	1638
Floor-clamp	J. W. McQuaid	474,180	May 3	455	110	59	726
Floor-clamp	A. Zauner	484,488	Oct. 18	1487	378	61	324
Floor-cloth or like fabrics. Manufacturing	H. W. Godfrey, C. F. Leake, and C. E. Lucas	469,240	Feb. 23	2083	536	58	958
Floor construction. Fireproof	W. Orr	481,243	Aug. 23	2412	{ 595 596 }	60	1086
Floor-jack	E. A. Bullock	481,470	Aug. 23	2796	688	60	1157
Floor-joists and apparatus therefor. Crowning	J. Friedrichs	487,406	Dec. 6	290	75	61	1378
Floor-layer	H. G. Epps	474,654	May 10	1235	315	59	885
Floor or roof for buildings	G. W. Parker	477,147	June 14	1423	348	59	1736
Floor or sidewalk. Light-transmitting	G. W. Parker	477,148	June 14	1430	349	59	1736
Floor-scraping machine	F. C. Schroeder	483,173	Sept. 27	2037	{ 514 515 }	60	1774
Floor-thimble	A. G. Anderson	469,005	Feb. 16	1745	444	58	884
Floors and other surfaces. Apparatus for the manufacture of coverings for	A. S. Oetzmann and S. J. Narracott	473,519	Apr. 26	2402	{ 608 609 }	59	504
Floors. Construction of	H. B. Seely	467,141	Jan. 12	1379	353	58	271
Flooring	J. W. See	479,126	July 19	1635	409	60	346
Flooring. Fireproof	W. R. Forbush	469,082	Feb. 16	1845	472	58	905
Flooring or roofing. Metal	G. A. Hobson	469,804	Mar. 1	225	57	58	1145
Flooring. Wood-block	T. Charteris	478,647	July 12	1205	299	60	254
Flounce and belt. Combined	A. Neuville	469,637	Feb. 23	2684	690	58	1076
Flour-bin	C. Tangenberg	476,430	June 7	320	73	59	1499
Flour bin and sieve. Combined	A. Wolff	473,543	Apr. 26	2438	617	59	511
Flour bin and sifter	J. P. Davis and G. B. Harwell	484,780	Oct. 25	1963	500	61	435
Flour bin and sifter	F. K. McCague	485,210	Nov. 1	85	26	61	590
Flour bin and sifter	S. A. Twist	466,706	Jan. 5	622	162	58	120
Flour-bolt	C. S. Fuller	479,589	July 26	2391	596	60	506
Flour-bolt	C. S. Fuller	479,775	July 26	2721	{ 676 677 }	60	569
Flour-bolt	W. D. Gray	487,004	Nov. 29	2952	{ 760 761 }	61	1220
Flour-bolt	C. A. Smith and M. W. Clark	469,752	Mar. 1	131	35	58	1125
Flour-cabinet	A. A. Tinker	468,709	Feb. 9	1256	320	58	779
Flour. Mechanism for testing and recording the properties of	J. Hogarth	474,636	May 10	1205	{ 307 308 309 }	59	880
Flour, middlings, semolina, grain, seeds, &c. Machine for dressing	R. Creaser	483,542	Oct. 4	39	10	61	11
Flour or other materials. Apparatus for mixing	J. D. Bangert	487,507	Dec. 6	450	{ 116 117 }	61	1410

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Flour-receptacle	J. Woolridge	467,218	Jan. 19	1498	383	58	302
Flour-reel machine	J. A. Wahlstrom	484,478	Oct. 18	1472	375	61	321
Flour-safe	E. J. Lemmon	486,048	Nov. 8	1374	365	61	870
Flower-holder	S. Lord	485,417	Nov. 1	416	111	61	657
Flower-pot	H. Goodacre	473,836	Apr. 26	2904	729	59	601
Flower-pot	H. H. McElhiney	470,437	Mar. 8	1272	326	58	1351
Flower-pot tray	W. Steers	469,490	Feb. 23	2476	635	58	1033
Flower-stand	J. W. Quinn	469,216	Feb. 16	2049	524	58	943
Flower-stemming device	S. J. Russell	477,704	June 23	2366	591	59	1950
Flowers. Device for preserving dried	F. T. Brown	472,980	Apr. 19	1486	380	59	310
Flue and fire-box. Steam-boiler	D. B. Morison	477,770	June 28	2472	618	59	1970
Flue-cleaner	E. T. Bell	480,653	Aug. 9	1451	361	60	871
Flue cleaner	M. J. Carbis	473,821	Apr. 26	2878	732	59	596
Flue-cleaner	J. F. McNutt and H. F. Grimmesey	475,733	May 24	2936	745	59	1246
Flue-cleaner	W. Pharr	477,957	June 28	2769	694	59	2027
Flue cleaner. Boiler	R. McDonald	466,359	Jan. 5	76	20	58	17
Flue cleaner. Boiler	W. F. Whitney	473,987	May 3	158	38	59	669
Flue-cleaners. Elastic scraper for	P. S. Kingsland	475,506	May 24	2587	658	59	1180
Flue-dust. Apparatus for condensing	H. W. Hixon	471,860	Mar. 29	3418	873	58	1793
Flue-protector and wind-guard	W. Curry	474,057	May 3	283	68	59	692
Flue-stopper	J. A. Brown	478,044	June 28	2907	726	59	2053
Flue-stopper	J. D. Hopkins	487,327	Dec. 6	148	42	61	1350
Flue-thimble	J. P. Adams	476,111	May 31	3554	894	59	1382
Flues. Cleaning boiler	J. Shostak	478,824	July 12	1178	291	60	248
Fluid-meter	F. W. Holt	479,277	July 19	1864	467	60	390
Fluid-meter	E. Spiro	476,934	June 14	1098	265	59	1669
Fluid-meter. Proportional	D. McDonald	475,596	May 24	2724	690	59	1206
Fluid-motor	C. F. Elmes	480,095	Nov. 15	1473	388	61	907
Fluid-motor	H. C. Stillwell	479,855	Aug. 2	119	29	60	606
Fluid-regulator	J. B. Anderson	468,737	Feb. 9	1296	329	58	788
Fluids. Apparatus for cooling	B. Rettenmeyer	468,919	Feb. 16	1580	401	58	853
Fluids through separate chambers. Method of and apparatus for maintaining a proportional flow of	J. Thomson	476,098	May 31	3526	887	59	1377
Flume-gate	S. M. Irvin	483,455	Sept. 27	2478	623	60	1858
Flush-tank	B. Williams and C. Poore	481,710	Aug. 30	3176	776	60	1247
Flushing apparatus. Automatic	F. Walker	468,979	Feb. 16	1696	432	58	875
Flushing apparatus. Waste-pipe	W. M. Haworth	476,012	May 31	3393	856	59	1350
Flushing device for urinals and closets	J. Shanks	473,715	Apr. 26	2721	685	59	565
Flushing-tank	H. H. Craigie	471,537	Mar. 29	2918	743	58	1700
Flushing-tank	G. W. Davis	470,782	Mar. 15	1776	457	58	1460
Flushing-tank	G. W. Keyser	473,882	Apr. 26	2983	752	59	616
Flushing-tank	L. Lipp	466,828	Jan. 12	835	215	58	169
Flushing-tank	W. B. Malcolm	468,725	Feb. 9	1278	325	58	784
Flushing-tank	E. C. Stover	487,906	Dec. 13	1101	275	61	1556
Flushing-tank	E. C. Stover	487,940	Dec. 13	1155	289	61	1567
Flushing-tank. Periodical	T. C. Beaumont	475,533	May 24	2629	669	59	1188
Flushing-tank. Siphon	T. C. Beaumont	487,464	Dec. 6	387	101	61	1397
Fly and insect escape for doors, windows, &c	J. H. Selkreg	476,025	May 31	3409	860	59	1354
Fly-frame stop-motion device	W. P. Canning	484,776	Oct. 25	1955	499	61	434
Fly-frames. Bottom-cone-lifting device for	W. P. Canning	484,845	Oct. 25	2078	534	61	458
Fly-frames. Mechanism connected with the lifting or traverse rails of	W. P. Canning	485,171	Nov. 1	18	535	61	577
Fly-paper. Book of sticky	O. and W. Thum	486,138	Nov. 15	1545	408	61	921
Fly-paper holder	W. H. Allen	487,505	Dec. 6	448	116	61	1410
Fly-paper holder	H. R. Wendel	468,273	Feb. 2	563	138	58	633
Fly-paper. Machine for making sticky	F. B. Claggett	480,071	Aug. 2	499	127	60	677
Fly-paper-making machine	F. B. Claggett	468,641	Feb. 9	1143	241	58	756
Fly-paper. Packing sticky	A. B. Trenner	487,125	Jan. 12	1350	344	58	265
Fly-paper. Sticky	J. H. Smith	469,021	Feb. 16	1766	450	58	889
Fly-paper. Sticky	J. H. Smith	476,087	May 31	3508	884	59	1375
Fly-paper. Sticky	O. and W. Thum	466,637	Jan. 5	519	135	58	100
Fly-paper. Sticky	O. and W. Thum. (Reissue)	11,276	Oct. 11	1316	336	61	280
Fly-trap	J. C. Baker	470,537	Mar. 8	1417	369	58	1379
Fly-trap. Mechanical	C. Becher	474,514	May 10	1014	260	59	843
Fly-traps. Fluid-receptacle for	E. Rathgeb	481,820	Aug. 30	3375	827	60	1284
Fly-traps. Fluid-receptacle for	C. Becher	477,618	June 21	2231	537	59	1905
Fly-wheel	B. Coburn	477,324	June 21	1747	427	59	1810
Fodder-cutter	W. F. Bates	471,250	Mar. 22	2499	633	58	1611
Fog-horn	D. H. Baker	467,885	Jan. 26	2569	650	58	511
Fog-signal	W. R. Close	472,335	Apr. 5	519	135	59	97
Fog-signal	W. R. Close	482,077	Sept. 6	254	61	60	1385
Folding boat	M. U. Loree	486,260	Nov. 15	1735	457	61	959
Folding box or crate	E. Dredge	473,730	Apr. 23	2745	691	59	570
Folding chair	R. W. Bates	479,393	July 26	2070	520	60	445
Folding chair	F. Chichester	467,340	Jan. 19	1693	433	58	338
Folding chair	J. Cornell	488,115	Dec. 13	1452	365	61	1623
Folding chair	E. E. Eldridge	479,355	July 19	1997	500	60	417
Folding chair	J. W. Hamilton	472,603	Apr. 12	921	237	59	189
Folding chair	T. J. Le Count	473,704	Apr. 26	2709	681	59	563
Folding chair	H. A. J. Rieckert	484,240	Oct. 11	1086	275	61	235
Folding chair	D. A. Sinsabaugh	481,058	Oct. 11	803	203	61	179
Folding chair. Knockdown	H. C. Scott and F. Schaaf	488,095	Dec. 13	1421	353	61	1622
Folding gate	A. H. Young	480,159	Aug. 2	640	162	60	701
Folding-machine	L. C. Crowell	472,472	Apr. 5	722	184	59	137
Folding-machine	L. C. Crowell	480,422	Aug. 9	1087	185	60	799

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volum.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Folding-machine	S. C. McKinney	485,130	Oct. 25	2518	648	61	547
Folding-machine	W. A. Tholen and W. J. Murray...	476,329	June 7	156	38 39 40	59	1467
Folding mechanism	L. C. Crowell	484,142	Oct. 11	924	238 239	61	203
Folding or knockdown box	J. Gordon and C. R. Perkins	477,051	June 14	1282	311	59	1707
Folding seat	M. H. and W. J. Hansen	475,310	May 24	2261	583	59	1119
Folding seat	J. B. Jenson	487,876	Dec. 13	1056	264	61	1547
Folding seat	J. S. Kilgore	488,436	Dec. 20	1982	495	61	1748
Folding stand	H. A. Koeller	479,073	July 19	1549	387	60	330
Folding stand or trestle	J. T. Miller	478,065	June 28	2939	734	59	2059
Folding table	E. F. Bassett	485,855	Nov. 8	1058	282	61	805
Folding table	T. Crane	468,791	Feb. 16	1384	350	58	815
Folding table	W. R. Morgan and C. S. Osborn	476,400	June 7	275	65	59	1492
Folding table	J. C. Snow	482,701	Sept. 13	1286	315	60	1600
Folding table	W. H. Washer	486,517	Nov. 22	2120	560	61	1050
Folding table	E. J. Worden	467,845	Jan. 26	2503	634	58	499
Folding table. Sectional-top	R. J. Neill	482,525	Sept. 13	1023	247	60	1549
Folding tubular fabrics. Machine for	W. B. Erskine	475,272	May 17	2203	564 565	59	1092
Folding wide fabrics. Machine for multiple	J. B. Clark	483,735	Oct. 4	314	79	61	66
Food articles. Means for packing	H. Salzer	477,849	June 28	2602	652	59	1994
Food compounds. Making	R. McKinney	468,751	Feb. 9	1314	58	791	
Food product	C. Saville	472,644	Apr. 12	980	59	199	
Food product and making the same	S. Crump	479,402	July 26	2086	60	448	
Foot. Artificial	J. H. Kane	469,348	Feb. 23	2248	577	58	990
Foot. Artificial	J. Linkert	468,352	Feb. 9	701	174	58	669
Foot-rest	E. L. Button	472,205	Apr. 5	313	81	59	59
Foot-rest	C. A. Lee	470,688	Mar. 15	1632	423	58	1431
Foot-rest	P. Ward	480,797	Aug. 16	1674	418	60	930
Foot-rest and shoe-stool	F. V. Stone and M. A. Campbell	483,403	Sept. 27	2411	606	60	1844
Force-feed lubricator	C. H. Besly and F. N. Gardner	467,273	Jan. 19	1587	405	58	318
Force-feed lubricator	W. F. Traves and M. O. Whelan	469,521	Mar. 1	253	65	58	1150
Force-feed lubricator	J. F. Vensel	470,522	Mar. 8	1397	365	58	1375
Forceps and tractor. Combined	E. J. Howe	485,039	Oct. 25	2392	614	61	520
Forge. Automatic electric	G. D. Burton and E. E. Angell	475,196	May 17	2092	529	59	1068
Forge. Blacksmith's	T. W. Lenzen and L. Heckenroth	479,286	July 19	1878	470	60	393
Forge. Blacksmith's	W. J. Ptomey	477,699	June 28	2356	559	59	1948
Forge. Electric	G. D. Burton and E. E. Angell	475,186	May 17	2078	525	59	1065
Forge. Electric	G. D. Burton and E. E. Angell	486,029	Nov. 8	1345	357	61	865
Forge. Electric	G. D. Burton and E. E. Angell	486,176	Nov. 15	1596	422 423	61	931
Forge. Electric	G. D. Burton and E. E. Angell	486,627	Nov. 22	2302	601	61	1085
Forge. Electric	G. D. Burton and E. E. Angell	488,466	Dec. 20	2029	506	61	1759
Forge. Electrical	G. D. Burton	475,178	May 17	2065	519 520	59	1062
Forge. Electrical	G. D. Burton and E. E. Angell	475,195	May 17	2091	529	59	1068
Forge-furnaces. Center piece for the grates of	G. H. Webb	478,235	Dec. 20	1660	414	61	1686
Forging apparatus. Electric	G. D. Burton and E. E. Angell	486,626	Nov. 22	2300	600 601	61	1084
Forging eye-bars. Machine for	H. W. Loss	476,155	May 31	3623	916	59	1397
Forging horseshoe-nails. Machine for	C. E. Moore	470,322	Mar. 8	1074	274	53	1314
Forging horseshoe-nails. Machine for	E. E. Pierce	486,195	Nov. 15	1617	429 430	61	936
Forging-machine gripping device	H. W. Loss	486,723	Nov. 22	2450	638 639	61	1115
Forging vehicle-clips. Machine for	A. L. Kern	486,784	Nov. 22	2552	666	61	1134
Forging wrought-metal wheels. Die for	A. A. Stevenson	469,457	Feb. 23	2419	619	58	1023
Fork							
See Hay-tedder fork. Pastry-fork.							
Mail-bag-catching Weft-fork.							
Fork.							
Forks. Apparatus for cleaning	F. Lehmann	485,048	Oct. 25	2406	619	61	523
Form. Bust	E. Donnelly	488,876	Dec. 27	2676	662	61	1904
Form. Clothing	H. H. Cummer	479,248	July 19	1826	458	60	382
Fortification. Revolving-tower	T. R. Timby	474,271	May 3	592	147 148	59	752
Fortune-wheel. Coin-controlled	W. N. Russell and T. N. Gierding	487,968	Dec. 13	1191	297	61	1574
Fountain:							
See Soda-fountain. Stock-fountain.							
Fountain	G. C. Grisier	482,244	Sept. 6	525	125	60	1437
Fountain	F. Pascal	475,146	May 17	2016	509	59	1053
Fountain. Portable lawn	W. N. Best	469,848	Mar. 1	293	76	58	1158
Fountain. Stage	C. A. Dunlap	469,683	Mar. 1	20	8	58	1102
Fracture apparatus	G. W. King	488,631	Dec. 27	2298	568 569	61	1827
Fracture apparatus	C. S. Webster	485,672	Nov. 8	798	213	61	752
Frame:							
See Awning-frame. Purse-frame.							
Bicycle-frame. Refuse-carrier frame.							
Bicycle-supporting Satchel or bag frame.							
frame. Scale-frame.							
Canopy-frame. Sewing-machine quilting-							
Car-frame. frame.							
Clover-huller frame. Slate-frame.							
Drawing-frame. Supporting-frame.							
Knitting-frame. Tile-frame.							
Leather-frame. Truck-frame.							
Mosquito-bar frame. Umbrella or parasol frame.							
Picture-frame. Varnishing-frame.							
Plant-frame. Velocipede-frame.							
Pool-ball frame. Wagon-frame.							
Pressing-frame. Window-frame.							
Frame for pictures, &c	M. Reinfeld	481,333	Aug. 23	2578	633	60	1115

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Frames. Device for securing covers to	H. Levy	467,980	Feb. 2	110	27	58	545
Franklinite and willemite. Treating	G. G. Conyers	488,471	Dec. 20	2037	.....	61	1761
Franklinite ores. Reducing	G. G. Conyers	488,470	Dec. 20	2035	.....	61	1761
Frasing-machine	A. A. Barthelmes	485,162	Nov. 1	5	2	61	574
Fraud-preventive device for slot-machines	J. Schofield	475,899	May 31	3222	815	59	1316
Freezing apparatus	C. A. Burt	477,626	June 21	2240	561	59	1907
Freight. Apparatus for handling	M. L. Dean	466,890	Jan. 12	955	244	58	191
Friction-coupling	H. P. Christie	472,432	Apr. 5	662	169	59	124
Friction device	R. C. Borchers	483,892	Oct. 4	548	138	61	114
Friction. Means for reducing	G. M. Guerrant	482,902	Sept. 20	1612	403	60	1675
Friction-roller	G. A. Crisson	471,467	Mar. 22	2825	720	52	1673
Friction-wheel	A. J. Davis	482,788	Sept. 20	1433	355	60	1611
Fringe loops on edges of fabrics. Machine for forming and cutting	F. Hofbauer	486,253	Nov. 15	1718	452 453	61	955
Frog	H. R. Luther	483,964	Oct. 4	662	166	61	137
Frog. Derailing	O. J. Travis	479,338	July 19	1953	4-8	60	408
Frog. Wrecking	D. S. Dockstader	484,703	Oct. 18	1820	463	61	393
Fruit-bleaching apparatus	E. Ireland	485,940	Nov. 8	1198	317	61	834
Fruit-box	W. R. Stokely	488,040	Dec. 15	1335	331	61	1604
Fruit-box	C. W. Weston	474,276	May 3	599	149	59	754
Fruit-can	J. Young	466,648	Jan. 5	534	139	58	103
Fruit-can or jar	J. M. Barnhart	483,415	Sept. 27	2428	610	60	1817
Fruit-carrier	G. W. Stevens	474,105	May 3	349	83	59	704
Fruit-cleaner	H. Bardsley and W. Parkinson	482,937	Sept. 20	1654	416 417	60	1685
Fruit clipping and holding shears	J. S. Dinkel	486,560	Nov. 22	2187	576	61	1062
Fruit conductor or conveyer	J. M. Settle	486,357	Nov. 15	1879	494	61	988
Fruit-cutter	J. W. Grant	466,343	Jan. 5	55	14	58	13
Fruit-cutting machine	J. Burns	466,453	Jan. 5	232	59	58	44
Fruit-cutting machine	J. Burns	484,995	Oct. 25	2322	599	61	506
Fruit-drying tray	H. H. Taylor	486,137	Nov. 15	1544	407	61	921
Fruit-evaporator	J. W. Doty	477,856	June 28	2614	655	59	1996
Fruit evaporator	W. C. Gilham	484,910	Oct. 25	2185	563	61	480
Fruit-evaporator	C. W. Soverhill	468,731	Feb. 9	1285	327	58	766
Fruit-gatherer	S. E. Ball	478,903	July 12	1277	317	60	268
Fruit-gatherer	O. L. Danforth	469,800	Mar. 1	343	88	58	1167
Fruit-gatherer	D. B. Matlock	467,687	Jan. 26	2245	571	58	449
Fruit-gatherer	W. Wasmuth	477,479	June 21	1990	494	59	1757
Fruit-gathering implement	G. F. Moors	466,785	Jan. 12	787	204	58	159
Fruit-grader	G. A. and C. F. Fleming	475,497	May 24	2569	654	59	1176
Fruit-jar	G. L. Pfeiffer	488,614	Dec. 27	2268	563	61	1822
Fruit-jar	F. A. Potter	470,366	Mar. 8	1155	205	58	1329
Fruit-jar	D. Rylands	472,401	Apr. 5	619	158	59	116
Fruit-jar	C. D. Thomas	478,659	July 12	906	224	60	195
Fruit-jar	A. Vogt	473,100	Apr. 19	1676	425	59	344
Fruit-jar	C. L. Wight	480,537	Aug. 9	1264	317	60	835
Fruit or vegetable cutter or grater	E. Samson	477,826	June 28	2558	640	59	1985
Fruit-packages. Shearing-machine for	J. H. Schumacher	487,781	Dec. 13	890	226	61	1516
Fruit-packer	A. J. Longenecker	479,650	July 26	2423	618	60	523
Fruit packing and shipping case	C. H. Treat	469,986	Mar. 1	521	129 130	58	1199
Fruit-picker	J. W. Cain	469,125	Feb. 16	1897	485	58	915
Fruit-picker	A. Hogg	488,243	Dec. 20	1671	417	61	1688
Fruit-picker	R. Mays	487,931	Dec. 13	1144	286	61	1564
Fruit-pitter	A. G. Carter	474,901	May 17	1632	417	59	978
Fruit-pitter	G. C. Howell	484,154	Oct. 11	948	243	61	207
Fruit pitting and spreading machine	J. D. and E. E. Thomas	482,284	Sept. 6	594	141	60	1451
Fruit-pitting machine	T. Harding	473,838	Apr. 26	2905	730	59	601
Fruit-pitting machine	F. C. Philips	482,272	Sept. 6	573	136	60	1446
Fruit-pitting machine	F. C. Staniford	475,048	May 17	1865	473	59	1023
Fruit-press	S. Grossman	475,856	May 31	3153	800	59	1303
Fruit-receptacle ventilator	J. P. Smith	469,983	Mar. 1	517	129	58	1198
Fruit-sizer	A. C. Burke	482,294	Sept. 6	614	146	60	1455
Fruit-slicing machine	A. J. Barber	483,731	Oct. 4	309	77, 78	61	65
Fruit squeezer and strainer. Combined	G. Gamlen	473,220	Apr. 19	1900	479	59	385
Fruit-transporting package	J. Y. Mott	486,618	Nov. 22	2258	597	61	1081
Frying-pan	E. L. T. Robertson	471,227	Mar. 22	2468	627	58	1605
Frying-pan or skillet	B. F. Fowler	482,630	Sept. 13	1177	284	60	1578
Fuel. Artificial	H. Zahn	478,039	June 28	2899	.....	59	2052
Fuel binder. Artificial	E. K. Baeyerlin and F. E. Heinig	480,243	Aug. 9	788	.....	60	743
Fuel-bricks. Machine for forming	J. P. Schmidt	474,412	May 10	855	224	59	814
Fuel burner. Liquid	E. Squire, G. H. Cobb, and F. M. Towl	478,295	July 5	368	89	60	74
Fuel-feeder	H. L. Day	482,424	Sept. 13	850	203 204	60	1515
Fuel feeder. Fluid	E. T. Williams	486,998	Nov. 29	2943	758	61	1229
Fuel-feeding apparatus for straw. Pneumatic	B. Jackson	479,644	July 26	2475	615 616	60	522
Fuel-feeding device	G. H. Colton	475,203	May 17	2104	531	59	1071
Fuel. Method of and apparatus for heating with fluid	W. A. Konemau	469,857	Mar. 1	307	79	58	1161
Fuel press and cutter	G. Frank	473,834	Apr. 26	2901	728	59	600
Fuel. Storage-tank for liquid	C. A. King	471,615	Mar. 29	3027	770	58	1719
Fulling-mill	J. W. Millet	472,900	Apr. 12	1347	346 347	59	270
Fulling-stock	J. H. and I. Mitchell	479,605	July 26	2414	602	60	511
Fume-arrester	M. W. Iles and D. Sheedy	484,016	Oct. 11	749	188	61	168
Fume. Bag-room for the collection of	F. L. Bartlett	470,970	Mar. 15	2069	530	58	1517
Fume. Refining	F. L. Bartlett	480,686	Aug. 9	1509	375	60	882
Fumes. Apparatus for condensing	A. F. Schneider	487,971	Dec. 13	1195	298	61	1574
Fumes. Bag for catching metallic	D. Sheedy	480,834	Aug. 16	1733	433	60	942
Fumes. Device for collecting metallic	D. Sheedy and M. W. Iles	483,176	Sept. 27	2041	516	60	1775
Fumes from metallurgical furnaces. Device for catching and saving	M. W. Iles	484,017	Oct. 11	750	188 189	61	168
Fumes. Screen for metallic	M. W. Iles	485,797	Nov. 8	973	261	61	789

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Fumigator	R. Campbell	457,173	Nov. 29	3216	823	61	1283
Fumigator	F. A. Hoffman	483,484	Sept. 27	2510	632	60	1864
Fumigator	H. F. Loepere	473,631	Apr. 26	2599	654	59	542
Fumigator	J. T. Phelan	470,624	Aug. 9	1405	{ 349 } 350	60	862
Funeral decoration. Apparatus for	F. X. Gartland	467,405	Jan. 19	1783	454	58	355
Funnel	K. Kiefer	482,578	Sept. 13	1100	267	60	1564
Funnel	L. Kirehner	477,011	June 14	1217	295	59	1694
Funnel	R. Rahn	473,081	Apr. 19	1648	419	59	338
Funnel	A. P. Wood	474,036	May 3	241	58	59	684
Funnel cut-off. Automatic	J. H. Driller	469,639	Feb. 23	2686	691	58	1076
Funnel for filling lamps	T. W. Griffin	477,002	June 14	1203	292	59	1690
Funnel. Indicating	I. W. Lord	475,875	May 31	3179	806	59	1309
Funnel. Measuring	F. E. Butts	474,575	May 10	1117	286	59	863
Funnel. Measuring	T. F. Scolley	477,072	June 14	1325	321	59	1715
Funnel. Packer's	J. H. J. Haiues	471,382	May 10	805	210	59	803
Funnel. Valved	T. Miller	471,674	May 10	1275	325	59	893
Fur-carrotting machine	J. H. Sanders and J. E. Carlin	478,470	July 5	626	152	60	124
Fur-dags. Machine for opening	Edward, Sr., Ellis, Jr., and Edward Beesley, Jr.	472,025	Apr. 5	9	3	59	4
Furnace:							
See Alloying-furnace. Heating and puddling furnace.							
Annealing-furnace. furnace.							
Basic-lined furnace. Hot-air furnace.							
Blast-furnace. Hot-water furnace.							
Boiler-furnace. Incinerating-furnace.							
Boiler or other furnace. Melting-furnace.							
Brick-kiln furnace. Metallurgical furnace.							
Chloridizing muffle-furnace. Open-hearth furnace.							
Cupola-furnace. Ore-roasting furnace.							
Electrical furnace. Puddling-furnace.							
Garbage-burning furnace. Regenerative furnace.							
Gas-furnace. Retort-furnace.							
Gas-engine exhaust-furnace. Rotary furnace.							
Glass-furnace. Smelting-furnace.							
Glass-furnace. Smoke-consuming furnace.							
Glass-melting furnace. Smoke consuming or pre-venting furnace.							
Glass tank-furnace. Tempering-furnace.							
Glory-hole furnace. Tire-furnace.							
Heating-furnace. Ventilating-furnace.							
Zinc-furnace.							
Furnace	S. Bunn	472,697	Apr. 12	1066	275	59	215
Furnace	W. Decker and J. P. Bell	472,738	Apr. 12	1105	284	59	232
Furnace	J. S. Ecker	476,704	Nov. 22	2429	633	61	1110
Furnace	E. F. Edgar	478,319	July 5	405	98	60	81
Furnace	T. R. Freeman	480,086	Aug. 2	521	133	60	681
Furnace	M. C. Hawley	488,493	Dec. 27	2698	668	61	1908
Furnace	F. L. Higgins	482,741	Sept. 20	1357	336	60	1625
Furnace	J. Hinstin	468,875	Feb. 16	1507	{ 384 } 385	58	838
Furnace	W. H. Hodgson	476,270	June 7	62	13	59	1450
Furnace	A. I. Howland	480,769	Aug. 16	1636	409	60	923
Furnace	C. B. Hughes	469,664	Feb. 23	2729	702	58	1086
Furnace	W. S. Hutchinson	480,327	Aug. 9	934	237	60	772
Furnace	J. H. Johnson and J. Moran	485,762	Nov. 8	933	250	61	781
Furnace	J. Keenan	487,675	Dec. 6	708	180	61	1461
Furnace	F. Kernan, Jr., and W. H. Landers	468,401	Feb. 9	780	194	58	685
Furnace	P. Kiefer, Jr.	474,173	May 3	447	108	59	724
Furnace	S. J. and J. B. Loughran	468,482	Feb. 9	904	230	58	709
Furnace	T. P. Mahon	488,171	Dec. 13	1548	{ 388 } 389	61	1647
Furnace	J. Marshall	475,984	May 31	3357	846	59	1342
Furnace	T. E. Martiu	484,600	Oct. 18	1652	419	61	359
Furnace	D. J. McKenzie	477,263	June 21	1650	403	59	1791
Furnace	L. Metesser	483,570	Oct. 4	81	20, 21	61	19
Furnace	S. J. Miles	468,814	Feb. 16	1416	359	58	820
Furnace	G. T. Moe	485,966	Nov. 8	1244	328	61	843
Furnace	E. F. Paddon	475,603	May 24	2733	692	59	1208
Furnace	V. J. Pannell	482,458	Sept. 13	903	219	60	1524
Furnace	H. C. Platts	483,863	Oct. 4	509	{ 127 } 128	61	106
Furnace	H. Schoenwaelder	480,969	Aug. 16	1947	487	60	983
Furnace	W. Sloan	473,268	Apr. 19	1975	495	59	400
Furnace	S. R. Smythe	478,767	July 12	1074	{ 266 } 267	60	229
Furnace	W. Stubblebine	487,103	Nov. 29	3107	{ 797 } 798	61	1262
Furnace	H. K. Tallmage	486,990	Nov. 29	2931	756	61	1227
Furnace	F. F. Thedens	472,183	Apr. 5	272	71	59	51
Furnace	W. Walters	479,771	July 26	2704	674	60	565
Furnace	R. R. Zell	480,378	Aug. 9	1014	254	60	786
Furnace air-feeding device	H. H. E. Schomburg	479,022	July 19	1472	366	60	315
Furnace and attachment therefor	W. S. Hutchinson	480,328	Aug. 9	935	297	60	772
Furnace attachment	T. Clifford	467,157	Jan. 19	1411	362	58	285
Furnace attachment	E. Waugh	469,677	Mar. 1	340	87	58	1167
Furnace-boiler	E. B. Parkhurst	482,188	Sept. 6	440	106	60	1421
Furnace-buckstave	M. W. Hes	476,275	June 7	70	15	59	1451
Furnace-charging machine	J. F. Lundahl	479,437	July 26	2148	536	60	461
Furnacc. Combined radiating and hot water or air heating	J. H. Keyser	480,103	Aug. 2	545	138	60	686
Furnace-door	T. H. Chadwick	469,894	Mar. 1	365	92	58	1171

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & g.	Vol.	Page.
Furnace-door	A. Graf.....	485,189	Nov. 1	53	16	61	583
Furnace-door and boiler-front	J. Fea	471,667	Mar. 29	3104	{ 789 790 }	58	1734
Furnace-door opener	D. Curry.....	477,888	June 28	2668	{ 667 668 }	59	2006
Furnace-door opener	C. H. Oliver	475,338	May 24	2317	{ 594 595 }	59	1130
Furnace. Downdraft.....	O. D. and O. D. Orvis.....	486,122	Nov. 15	1518	{ 401 402 }	61	915
Furnace. Downward-draft.....	J. F. Bliss	479,697	July 26	2565	638	60	539
Furnace drawing and charging apparatus.....	T. James.....	479,883	Aug. 2	164	41	60	614
Furnace for burning cement, &c. Rotary.....	J. F. de Navarro. (Reissue).....	11,224	Feb. 9	1362	343	58	801
Furnace for burning garbage	G. H. Warner	468,851	Feb. 16	1471	{ 375 376 }	58	832
Furnace for burning garbage, &c.....	G. H. Warner	468,852	Feb. 16	1473	376	58	832
Furnace for burning granular fuel	C. R. Penfield	469,749	Mar. 1	127	33, 34	58	1124
Furnace for burning liquid fuel.....	S. Cox, Jr.....	470,420	Mar. 8	1240	317	58	1344
Furnace for burning liquid fuel.....	S. Cox, Jr.....	473,252	Apr. 19	1946	459	59	334
Furnace for iron-working	W. Heckert, W. J. Thomas, and F. L. Heckert.....	475,398	May 24	2408	614	59	1146
Furnace for metallurgical operations	J. N. Lauth.....	484,329	Oct. 11	1234	314	61	263
Furnace for metallurgical purposes	J. N. Lauth.....	484,328	Oct. 11	1233	314	61	263
Furnace for reducing metals	H. S. Blackmore.....	478,908	July 12	1285	{ 319 320 }	60	269
Furnace for the incineration of garbage.....	J. Wilson.....	474,933	May 17	1677	429	59	988
Furnace for treating and reducing ores and for refining the resulting metals. Combined.....	A. Chabaud, L. L. Van Heers, and L. A. Allard.....	487,605	Dec. 6	591	{ 151 152 }	61	1439
Furnace for treating steel.....	J. Pedder.....	483,577	Oct. 4	92	24	61	21
Furnace for treating steel.....	J. Pedder.....	483,578	Oct. 4	96	24	61	21
Furnace-grate.....	E. J. Gordon.....	484,497	Oct. 18	1500	382	61	328
Furnace-grate.....	L. W. Jernberg	469,816	Mar. 1	243	62	58	1148
Furnace-grate.....	J. L. Mason.....	480,951	Aug. 16	1916	{ 479 480 }	60	978
Furnace-grate.....	J. L. Mason.....	480,952	Aug. 16	1918	480	60	978
Furnace-grate.....	W. R. Roney	474,346	May 3	743	194	59	779
Furnace-grate.....	R. Rose. (Reissue).....	11,291	Nov. 29	3352	853	61	1307
Furnace-grate.....	E. C. Sooy	481,596	Aug. 30	2998	{ 734 735 }	60	1212
Furnace-grate.....	J. Thurell.....	487,648	Dec. 6	661	170	61	1452
Furnace-grate.....	R. and R. A. Whelan.....	474,931	May 17	1673	{ 427 428 }	59	987
Furnace-grate.....	A. Wilkinson.....	480,538	Aug. 9	1265	317	60	835
Furnace-grate-bar.....	E. Boileau.....	485,527	Nov. 1	567	152	61	689
Furnace-grate. Rocking.....	J. R. Reed	469,978	Mar. 1	511	127	58	1198
Furnace-grate support.....	H. D. Babcock.....	472,780	Apr. 12	1182	302	59	236
Furnace. Liquid-fuel.....	G. Rose.....	482,834	Sept. 20	1492	371	60	1653
Furnace plant.....	J. H. Welch.....	486,310	Nov. 15	1807	476	61	974
Furnace-platform. Open-hearth.....	E. L. Ford.....	468,532	Feb. 9	987	252	58	725
Furnace regulator. Steam.....	J. Levey.....	472,373	Apr. 5	575	148	59	108
Furnace-tap.....	E. P. Mathewson.....	483,936	Oct. 4	615	155	61	127
Furnace top. Blast.....	M. W. Iles.....	484,018	Oct. 11	752	189	61	168
Furnace-valve casing.....	J. D. Swindell.....	478,769	July 12	1076	{ 267 268 }	60	229
Furnace water-cooling device.....	J. Kennedy.....	479,430	July 26	2135	533	60	458
Furnaces. Air-supply for boiler.....	I. V. Scholfield, Jr.....	481,831	Aug. 30	3393	833	60	1288
Furnaces. Apparatus for conducting and screening gases from metallurgical.....	M. W. Iles.....	475,774	May 31	3004	762	59	1274
Furnaces. Device for increasing the draft in steam-boiler.....	P. E. Williams.....	469,620	Feb. 23	2602	{ 684 685 }	58	1071
Furnaces. Draft-regulator for heating.....	R. A. May.....	472,305	Apr. 5	468	120	59	88
Furnaces. Gas-burner for.....	J. S. Rogers.....	471,275	Mar. 22	2535	644	58	1618
Furnaces. Grate-bar and shaker attachment for.....	G. W. Walker.....	476,584	June 7	536	{ 127 128 }	59	1543
Furnaces. Hot-air-pipe attachment for.....	C. L. Beers.....	470,829	Mar. 15	1864	478	58	1476
Furnaces. Hydrocarbon-oil burner for.....	J. Wilson.....	475,478	May 24	2539	646	59	1171
Furnaces. Method of and apparatus for treating the smoke and fumes of metallurgical.....	W. H. James.....	488,245	Dec. 20	1673	418	61	1688
Furnaces. Smoke-consuming apparatus for boiler and other.....	W. Smith.....	479,767	July 26	2698	672	60	563
Furnaces. Steam-jet blower for.....	W. McClave.....	467,427	Jan. 19	1816	{ 463 464 }	58	361
Furnaces. Superheating steam-coil for smoke-consuming.....	C. A. Tinkham.....	468,313	Feb. 2	632	158	58	646
Furnaces. Water-heating attachment for hot-air.....	H. A. Tinkham.....	470,267	Mar. 8	950	236	58	1292
Furnaces. Working open-hearth.....	C. Siemens.....	470,713	Mar. 15	1674	433	58	1440
Furniture.....	D. W. Cannon.....	468,052	Feb. 2	213	54	58	567
Furniture attachment.....	C. Seiler.....	472,200	Apr. 5	298	78	59	56
Furniture-beater.....	S. J. Shaw.....	477,388	June 21	1849	455	59	1830
Furniture-brace tightener.....	H. L. Freeman.....	488,333	Dec. 20	1817	455	61	1716
Furniture. Convertible.....	H. O. Atwood.....	486,749	Nov. 22	2492	651	61	1124
Furniture-drawer.....	O. A. Norman.....	468,684	Feb. 9	1215	{ 308 309 }	58	771
Furniture-fastening.....	C. Liebe.....	470,246	Mar. 8	923	228	58	1287
Furniture-leg fastening.....	H. M. Hanson.....	479,363	July 19	2012	503	60	420
Furniture. Library.....	L. C. Taylor.....	477,190	June 14	1506	369	59	1752
Furniture. School.....	W. B. Cogger.....	478,786	July 12	1112	{ 274 275 }	60	235
Furrower and coverer.....	H. W. Doughten.....	484,581	Oct. 18	1625	412	61	353
Fuse.....	H. P. Merriam.....	475,786	May 31	3019	{ 765 766 }	59	1276
Fuse and file holder. Combined.....	J. Lobangh.....	482,642	Sept. 13	1191	288	60	1581
Fuse box. Electric.....	G. W. Baumhoff.....	480,651	Aug. 9	1448	360	60	871
Fuse box. Electric.....	W. Stanley, Jr., and J. H. Kelman.....	484,545	Oct. 18	1575	400	61	343
Fuse. Electric.....	O. T. Blathy.....	480,802	Aug. 16	1686	420	60	932
Fuse for explosive projectiles or shells.....	J. C. Thompson.....	482,533	Sept. 13	1032	250	60	1551

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Fuse-ignitor	W. J. C. Doyle	481,012	Aug. 16	2007	501	60	995
Fuse or detonator. Electric	P. Ward and E. M. Gregory	466,856	Jan. 12	887	227	58	178
Fuse. Percussion	H. P. Merriam	469,886	Mar. 1	352	90	58	1169
Fuse. Percussion	H. P. Merriam	469,887	Mar. 1	355	90	58	1169
Gaff-hook	A. G. Benson	481,463	Aug. 23	2789	686	60	1155
Gaff-hook and landing-net. Combined	A. G. Benson	481,464	Aug. 23	2789	686	60	1156
Gag-runner	E. Felsberg and F. S. Dill	475,392	May 24	2401	613	59	1145
Gage:							
See Axle-gage. Pressure-gage.							
Bracelet-gage. Printing-press feed-gage.							
Draw-gage. Railway-track gage.							
Feed-gage. Saw-gage.							
Hat-gage. Shingle-gage.							
Lamp oil-gage. Sirup-gage.							
Leather-gage. Sliding gage.							
Liquid-gage. Sugar-gage.							
Marking-gage. Surface-gage.							
Micrometer-gage. Track-gage.							
Miter-gage. Watchmaker's gage.							
Paper-cutting-machine gage. Water-gage.							
Perspective-gage. Water and steam gage.							
Pocket-gage. Weather-board gage.							
Wire-gage.							
Gage	S. F. Brown	473,290	Apr. 19	2011	505	59	408
Gage	W. F. Haffner and S. P. Kirkpatrick	467,005	Jan. 12	1128	286	58	222
Gage-knife	A. B. Schofield	474,532	May 10	1042	267	59	848
Gage-line holder	E. N. Hyser	468,660	Feb. 9	1173	299	58	763
Gaging and sorting spherical rollers or balls. Means or apparatus for	W. Hillman	482,636	Sept. 13	1183	286	60	1579
Galley-lock	J. Phelan	479,840	Aug. 2	99	25	60	601
Galley. Self-locking job	N. G. Duffy	483,434	Sept. 27	2453	617	60	1852
Galvanic battery	W. Burnley	471,945	Mar. 29	3533	903	58	1816
Galvanic battery	M. M. Clark	476,733	June 7	758	187	59	1588
Galvanic battery	M. M. Clark	479,786	Aug. 2	20	5	60	586
Galvanic battery	W. A. Crowds	485,319	Nov. 1	256	69	61	624
Galvanic battery	J. H. Davis	470,552	Mar. 8	1435	374	58	1383
Galvanic battery	H. H. Dow	480,384	Aug. 9	1025	257	60	788
Galvanic battery	T. T. Eckert	482,425	Sept. 13	852	204	60	1515
Galvanic battery	W. J. Engledue	481,664	Aug. 30	3103	757	60	1932
Galvanic battery	F. Gendron	467,372	Jan. 19	1734	443	58	346
Galvanic battery	J. L. Gethins	487,324	Dec. 6	145	42	61	1349
Galvanic battery	J. W. Hoffman	484,096	Oct. 11	855	217	61	189
Galvanic battery	H. T. Johnson	483,654	Oct. 4	202	50	61	42
Galvanic battery	H. T. Johnson	487,839	Dec. 13	988	243	61	1535
Galvanic battery	F. de Lalande	479,887	Aug. 2	171	42, 43	60	615
Galvanic battery	F. H. Root	470,792	Mar. 15	1790	460	58	1462
Galvanic body-battery	J. W. Shults	486,902	Nov. 29	2792	724	61	1900
Galvanizing metal tubes or bars	T. L. Thomas and J. B. Hillman	469,925	Mar. 1	411	103	58	1180
Galvanometer	S. Bergmann and G. A. Scott	472,026	Apr. 5	11	3	59	5
Gambrel	H. Garwick	482,633	Sept. 13	1180	285	60	1578
Game	H. A. Doty	471,666	Mar. 29	3102	789	58	1733
Game	E. H. Hyde	484,432	Oct. 18	1398	357	61	307
Game apparatus	F. H. Adams	480,056	Aug. 2	4	122	60	674
Game apparatus	C. P. Blinn	469,928	Mar. 1	416	104	58	1181
Game apparatus	J. W. Buck	481,548	Aug. 30	2922	719	60	1198
Game apparatus	A. P. Buckley	483,895	Oct. 4	552	139	61	114
Game apparatus	E. Dungey	484,950	Oct. 25	2246	579	61	492
Game apparatus	J. S. Eacker	466,868	Jan. 12	914	234	58	183
Game apparatus	J. A. Eno	472,289	Apr. 5	440	114	59	83
Game apparatus	D. L. Falardeau	479,638	July 26	2467	614	60	521
Game apparatus	P. S. Faulkner	478,100	July 5	36	12	60	10
Game apparatus	M. E. Favor	469,554	Feb. 23	2578	661	58	1053
Game apparatus	F. L. Fithian	473,218	Apr. 19	1897	478	59	384
Game apparatus	W. Fuld	479,266	July 19	1849	463	60	387
Game apparatus	G. G. G. Gist	488,762	Dec. 27	2496	621	61	1866
Game apparatus	M. H. Gleason	480,662	Aug. 9	1469	366	60	875
Game apparatus	J. Green	483,109	Sept. 20	1928	488	60	1741
Game apparatus	J. W. Hale	473,114	Apr. 19	1712	433	59	349
Game apparatus	W. F. Hood	475,561	May 24	2675	679	59	1196
Game apparatus	E. D. Howell	483,062	Sept. 20	1855	470	60	1726
Game apparatus	O. von Hunersdorff	476,146	May 31	3606	911	59	1393
Game apparatus	A. C. Hunshberger	486,471	Nov. 22	2056	545	61	1036
Game apparatus	S. N. Johnson	483,115	Sept. 20	1936	490	60	1742
Game apparatus	F. E. Knight	483,324	Sept. 27	2299	578	60	1822
Game apparatus	T. J. Loveland	469,578	Feb. 23	2611	669	58	1060
Game apparatus	C. N. and N. H. Maxwell	479,195	July 19	1744	438	60	306
Game apparatus	A. W. McArthur	470,765	Mar. 15	1747	450	58	1454
Game apparatus	J. C. Meem	470,691	Mar. 15	1635	424	58	1432
Game apparatus	M. V. Miller	482,685	Sept. 13	1256	306	60	1504
Game apparatus	G. B. Nichols	471,883	Mar. 29	3449	307	58	1799
Game apparatus	G. S. Parker	469,089	Feb. 16	1855	474	58	907
Game apparatus	R. and E. Rabiger	474,188	May 3	469	113	59	728
Game apparatus	W. H. Reiff	477,452	June 21	1946	482	59	1848
Game apparatus	E. Reisky	473,265	Apr. 19	1972	494	59	399
Game apparatus	G. L. Reynolds	475,469	May 24	2525	643	59	1168
Game apparatus	H. C. Risdon	475,067	May 17	1895	481	59	1029
Game apparatus	H. J. Saxton	484,115	Oct. 11	876	223	61	104
Game apparatus	C. Schneider	467,676	Jan. 26	2227	567	58	446

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Game apparatus	A. Scholz	481,830	Aug. 30	3393	833	60	1288
Game apparatus	J. Schuman	474,102	May 3	347	83	59	704
Game apparatus	F. S. Siller	482,488	Sept. 13	949	231	60	1533
Game apparatus	A. E. Smolley	467,124	Jan. 12	1349	344	58	265
Game apparatus	S. T. F. Sterick	474,310	May 3	674	174	59	767
Game apparatus	E. H. Truman	479,683	July 26	2543	633	60	534
Game apparatus	C. Zimmerling	475,653	May 24	2808	712	59	1234
Game apparatus	C. Zimmerling	477,287	June 21	1689	414	59	1798
Game apparatus	F. H. Smith	472,408	Apr. 5	626	160	59	117
Game apparatus and sample-exhibitor	M. G. Imbach, Jr.	476,384	June 7	246	60	59	1484
Game apparatus. Coin-controlled	W. R. Pope	479,459	July 26	2190	549	60	469
Game apparatus. Coin-operated	C. G. F. Hanke and E. Riebtter	484,589	Oct. 18	1632	414	61	354
Game apparatus. Musical	F. L. Fithian	473,217	Apr. 19	1896	478	59	384
Game apparatus or puzzle	M. Ullman	476,334	June 7	170	41, 42	59	1469
Game. Base-ball	P. O'Carroll	483,788	Oct. 4	403	100	61	84
Game-board	I. L. Conkling	485,029	Oct. 25	2380	{ 611 612 }	61	518
Game-board	W. Fuld	476,046	May 31	3441	869	59	1360
Game-board	C. Garrett	466,891	Jan. 12	958	244	58	191
Game-board	J. R. Harrison	467,972	Feb. 2	93	23	58	542
Game-board	J. M. Henriquez	467,373	Jan. 19	1738	444	58	346
Game-board	E. L. McConaughy	479,569	July 26	2367	590	60	502
Game-board	E. P. McLane	487,447	Dec. 6	364	95	61	1393
Game-board	W. R. Negley	484,558	Oct. 18	1593	404	61	346
Game-board	D. W. Randall	472,816	Apr. 12	1230	315	59	245
Game-board	W. S. Reed	469,948	Mar. 1	456	114	58	1187
Game-board	G. Stackhouse	475,624	May 24	2769	701	59	1216
Game-board	N. O. Starks	476,324	June 7	150	37	59	1466
Game-board	A. C. G. Williams-Foote	473,992	May 3	167	40	59	670
Game-board	E. L. Williams	468,214	Feb. 2	460	114	58	615
Game-board	J. S. Williams	487,976	Dec. 13	1204	301	61	1577
Game-board. Parlor bowling	P. H. Colell	484,087	Oct. 11	844	214	61	187
Game-box	B. H. Colby	467,770	Jan. 26	2381	605	58	476
Game-counter	S. G. Frost and R. J. Bolt	471,354	Mar. 22	2655	674	58	1642
Game-counter	F. A. Gilbert	482,961	Sept. 20	1700	429	60	1693
Game-counter	P. Hale, Jr.	480,815	Aug. 16	1704	425	60	936
Game-counter	W. B. Herbert	482,575	Sept. 13	1087	266	60	1563
Game-counter	P. H. Hillard	481,947	Sept. 6	42	9, 10	60	1342
Game-counter	J. J. and F. B. Schnell	470,604	Mar. 8	1504	{ 392 393 }	58	1398
Game-counter	A. Smith	475,162	May 17	2046	514	59	1057
Game-counter	S. D. Sturges, Jr., and F. P. Peck	481,657	Aug. 30	3094	754	60	1230
Game-counter	E. S. Thornton	472,744	Apr. 12	1131	290	59	226
Game-counter	W. C. and F. N. Weis	486,918	Nov. 29	2821	730	61	1205
Game-counter	A. J. Youlin	471,593	Mar. 29	3002	764	58	1715
Game-counter. Card	G. H. Fisher	483,715	Oct. 4	286	71	61	60
Game-counters, &c. Making	J. A. Devantery	469,344	Feb. 23	2242	575	58	989
Game-counters. Mold for forming	J. A. Devantery	469,345	Feb. 23	2244	575	58	989
Game for amusement	J. S. Malin, I. D. and J. H. Wiest	482,747	Sept. 20	1368	338	60	1627
Game-marker	R. F. Foster	478,694	July 12	953	237	60	205
Game. Mechanical ball	G. S. Curtis, Jr., and J. M. Hallorwell	487,825	Dec. 13	966	{ 243 244 }	61	1531
Game or puzzle	E. Kemble	480,872	Aug. 16	1789	448	60	954
Game. Parlor	S. George	481,839	Aug. 30	3434	843	60	1297
Gang-plank. Warehouse	O. J. B. Boeselager	476,601	June 7	567	135	59	1540
Garbage and fecal matter. Apparatus for drying or cremating	J. H. Parko	481,147	Aug. 16	2249	554	60	1040
Garbage-box	J. Harbolzheimer	483,492	Sept. 27	2522	635	60	1866
Garbage-burning furnace	J. C. Kessler	488,168	Dec. 13	1544	387	61	1646
Garbage drier and burner	F. Cain	484,774	Oct. 25	1950	{ 497 498 }	61	433
Garbage. Process of and apparatus for treating	C. F. and I. M. Simonin	466,579	Jan. 5	431	111	58	83
Garbage-receptacle	E. B. Merritt	468,046	Feb. 2	212	52	58	566
Garbage-receptacle	E. B. Merritt	478,702	July 12	963	229	60	207
Garbage-receptacle	W. B. Rose	477,576	June 21	2138	531	59	1887
Garbage-receptacle	W. T. Rossell and H. F. Hayden	486,619	Nov. 22	2290	597	61	1082
Garbage-receptacle	P. Scanlan	469,000	Feb. 16	1734	441	58	883
Gardening implement	T. W. Breen	467,364	Jan. 19	1723	440	58	343
Garment-catches. Making	E. S. Smith	488,135	Dec. 13	1482	373	61	1635
Garment cutting and marking machine	S. A. Cooke	478,988	July 19	1415	{ 350 351 }	60	305
Garment-fastener	F. E. Bennett	483,988	Oct. 11	705	177	61	159
Garment-fastener	F. E. Bennett	488,178	Dec. 20	1565	392	61	1618
Garment-fastener	G. Bradshaw	479,163	July 19	1689	422	60	357
Garment-fastening	H. A. Francis	488,068	Dec. 13	1386	344	61	1615
Garment-fastening. Invisible	E. Kempshall	466,689	Jan. 5	596	155	58	115
Garment-hanger	J. C. Hasse	477,412	June 21	1884	463	59	1836
Garment-hanger	C. W. Lanbin	478,062	June 28	2935	733	59	2058
Garment-hook	J. Killinger	485,389	Nov. 1	373	100	61	649
Garment. Skirt-protecting	L. Sittig	476,761	June 7	799	196	59	1597
Garment-stay	D. Grotta	478,961	July 12	1366	337	60	285
Garment-supporter	G. E. Adams	487,689	Dec. 6	735	188	61	1466
Garment-supporter	G. J. Cline	481,256	Aug. 23	2447	603	60	1092
Garment-supporter	S. B. Ferris	474,379	May 10	803	209	59	803
Garment-supporter	E. C. Long	473,232	Apr. 19	1921	483	59	389
Garment-supporter	T. Manning	480,820	Aug. 16	1715	428	60	938
Garment-supporter	J. C. Pettibone	488,088	Dec. 13	1412	351	61	1621
Garment-supporter catch	J. M. Rabitte	484,819	Oct. 25	2026	519	61	449
Garment-supporting loop	L. G. Abbott	474,313	May 3	679	176	59	768
Garment. Suspensory	C. C. Taylor	484,065	Oct. 11	812	205	61	181
Garments. Adjusting-strap for	J. A. Phillips	475,515	May 24	2601	661	59	1182
Garments. Safety-pocket for	J. E. Replogle	469,721	Mar. 1	81	23	58	1114
Garter	I. Altman	470,031	Mar. 1	579	144	58	1211
Garter attachment	P. H. Flynn	482,629	Sept. 13	1177	284	60	1578

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Gas and air mixer	A. L. Avery	477,258	June 21	1690	414	59	1799
Gas and air mixer	R. W. Clark	470,862	Mar. 15	1904	487	58	1484
Gas and burning the same. Apparatus for converting petroleum, &c., into	G. F. Randolph	476,554	June 7	491	117	59	1535
Gas and electric-light bracket. Combined	J. Fitzgerald	473,661	Apr. 26	2643	666	59	551
Gas and electric-light fixture. Combined	A. T. Enos	480,813	Aug. 16	1701	424	60	936
Gas and other products given off during the process of fermentation. Method of and appliance for the collection and utilization of carbonic-acid	C. R. C. Tichenborne, A. E. Darley, M. F. Purcell, and S. Geoghegan	472,085	Apr. 5	111	30	59	22
Gas and petroleum motor	B. Stein	478,651	July 12	895	232	60	193
Gas apparatus	G. R. Waite	469,180	Feb. 16	1975	505	58	931
Gas. Apparatus for charging magazines with liquefied	P. Giffard	475,728	May 24	2931	744	59	1245
Gas. Apparatus for consumption of sewer-	J. Eckhardt	481,108	Aug. 16	2174	538	60	1027
Gas. Apparatus for making illuminating-	T. H. Paul	470,629	Mar. 8	1544	402	58	1405
Gas. Apparatus for manufacturing	J. H. Collins, Jr., and I. N. Knapp	480,248	Aug. 9	793	{ 202 203 204 }	60	744
Gas. Apparatus for manufacturing	W. P. Elliott	480,919	Aug. 16	1859	{ 463 464 465 }	60	968
Gas. Apparatus for manufacturing	J. Gray	487,616	Dec. 6	606	{ 155 156 }	61	1442
Gas. Apparatus for separating oil and water from	C. L. Stock	468,138	Feb. 2	350	86	58	592
Gas. Apparatus for the manufacture of	A. L. Allen	484,624	Oct. 18	1692	{ 429 430 }	61	367
Gas. Apparatus for the manufacture of	J. Askins	480,161	Aug. 2	642	163	60	704
Gas. Apparatus for the manufacture of	A. Coze and A. Lencachez	478,571	July 12	784	192	60	170
Gas. Apparatus for the manufacture of	J. A. Dubbs	470,040	Mar. 1	594	147	58	1214
Gas. Apparatus for the manufacture of	J. R. Kendall	469,574	Feb. 23	2605	668	58	1059
Gas. Apparatus for the manufacture of	T. McBride and E. Fisher	483,005	Sept. 20	1769	{ 447 448 }	60	1708
Gas. Apparatus for the manufacture of	L. C. Parker	480,211	Aug. 2	732	185	60	720
Gas. Apparatus for the manufacture of	H. C. Rew	473,077	Apr. 5	100	27, 28	59	21
Gas. Apparatus for the manufacture of	J. S. Rogers and J. H. Baker	471,398	Mar. 22	2720	694	58	1654
Gas. Apparatus for the manufacture of	G. Scharfe	473,350	Apr. 19	2115	531	59	428
Gas. Apparatus for the manufacture of water-	J. Askins	478,305	July 5	385	93	60	77
Gas. Apparatus for turning on and off and lighting. Gas apparatus. Fuel-	E. N. Dickerson, Jr	468,131	Feb. 2	339	84	58	590
Gas-black machine. Hydrocarbon-	J. M. Bailey	478,549	July 12	758	185	60	165
Gas-burner	L. J. McNutt	481,240	Aug. 23	2404	{ 593 594 }	60	1085
Gas-burner	J. Barrow	468,635	Feb. 9	1135	289	58	755
Gas-burner	C. S. Dean	485,910	Nov. 8	1150	305	61	824
Gas-burner	G. I. Ewers	475,012	May 17	1812	460	59	1012
Gas-burner	H. Kennedy	469,824	Mar. 1	256	65	58	1151
Gas-burner	F. Leibman	471,799	Mar. 29	3335	849	58	1776
Gas-burner	B. McGregor	472,385	Apr. 5	595	151	59	112
Gas-burner	F. Rhind	475,800	May 31	3046	771	59	1281
Gas-burner	H. F. Smith	476,694	June 7	701	171	59	1576
Gas-burner	B. C. Wilson	479,128	July 19	1638	410	60	346
Gas-burner. Atmospheric	C. M. Lungren	474,063	May 3	229	70	59	693
Gas-burner attachment	G. Le Vesconte	482,580	Sept. 13	1103	267	60	1564
Gas-burner for heating purposes	P. H. Nelson	472,198	Apr. 5	293	77	59	55
Gas burner. Natural-	T. A. Little	478,117	July 5	61	16	60	14
Gas burner. Safety-	B. E. Taylor	486,991	Nov. 29	2933	756	61	1227
Gas-burner safety attachment	G. L. Thunen	471,914	Mar. 29	3491	892	58	1809
Gas-burner. Self-closing	W. M. Roberts	474,695	May 10	1304	333	59	899
Gas-burner. Self-lighting	A. P. Jacob	487,744	Dec. 13	833	212	61	1504
Gas-burners. Automatic cut-off for	J. E. Hogan	407,287	Jan. 19	1609	410	58	322
Gas-burners. Automatic cut-off for	F. W. Merchant	488,082	Dec. 13	1404	349	61	1619
Gas-burners. Automatic cut-off for	C. Rath	488,948	Dec. 27	2797	690	61	1929
Gas-burners in their holders. Machine for securing incandescing bodies for	O. B. Fahnehjelm and C. Dellwik	485,321	Nov. 1	259	70	61	625
Gas-burners. Machine for manufacturing lamellæ or needles for incandescing	O. B. Fahnehjelm and C. Dellwik	485,322	Nov. 1	260	70	61	625
Gas-burning heater	C. W. Watson	474,895	May 17	1625	415	59	977
Gas-cap	J. D. Williams and D. E. Davies	476,852	June 14	961	233	59	1642
Gas-compressor	J. D. Ambrose	467,909	Feb. 2	5	2, 3	58	528
Gas-compressor	G. F. Knox	466,791	Jan. 12	782	203	58	158
Gas-compressor	A. Siebert	483,268	Sept. 27	2215	556	60	1807
Gas cooling and washing apparatus	C. H. Wilder	486,150	Nov. 15	1563	414	61	924
Gas-engine	D. Best	484,727	Oct. 18	1856	472	61	400
Gas-engine	J. Charter	472,106	Apr. 5	149	40	59	28
Gas-engine	J. A. Charter	473,293	Apr. 19	2014	506	59	408
Gas-engine	J. A. Charter	477,295	June 21	1699	416	59	1800
Gas-engine	H. T. Dawson	466,331	Jan. 5	33	{ 8 9 10 }	58	9
Gas-engine	E. W. Evans	488,165	Dec. 13	1539	386	61	1645
Gas-engine	J. W. Raymond	488,483	Dec. 20	2059	512	61	1765
Gas-engine	H. Warden	486,143	Nov. 15	1550	{ 409 410 411 }	61	922
Gas-engine	J. Wehrschmidt	484,168	Oct. 11	966	{ 248 249 }	61	211
Gas-engine	C. W. Weiss	473,685	Apr. 26	2676	674	59	557
Gas-engine	S. Withers and D. S. Covert	487,313	Dec. 6	118	36	61	1345
Gas-engine exhaust-furnace	H. J. Seigneuret	485,988	Nov. 8	1278	339	61	851
Gas-engine igniting apparatus	H. Schumm	482,093	Dec. 13	1416	372	61	1621
Gas-engines. Ignitor for	E. I. Nichols	480,272	Aug. 9	845	215	60	756
Gas-extinguisher. Automatic	F. H. Root	476,412	June 7	290	69	59	1495
Gas from gas-mains. Means for detecting the escape of	A. Guéguen	478,424	July 5	562	136	60	110
Gas from oil, water, &c. Apparatus for separating natural	W. Moore	473,013	Apr. 19	1541	393	59	320

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Gas-furnace.....	F. Siemens.....	486,540	Nov. 22	2150	{ 568 569 }	61	1055
Gas furnace and producer. Regenerative.....	F. Siemens.....	468,834	Feb. 16	1446	369	58	827
Gas-furnace. Regenerative.....	F. Danner.....	482,117	Sept. 6	318	75, 76	60	1395
Gas-furnaces and gas-producers. Working regener- ative.....	F. Siemens.....	468,835	Feb. 16	1448	{ 369 370 }	58	827
Gas. Generating.....	W. H. Harris.....	478,425	July 5	564	136	60	110
Gas-generating apparatus.....	C. W. Isbell.....	485,009	Oct. 25	2344	604	61	511
Gas-generating apparatus.....	O. Langberg.....	488,208	Dec. 20	1614	{ 403 404 }	61	1677
Gas-generating apparatus.....	W. H. Morgans.....	474,178	May 3	452	{ 109 110 }	59	725
Gas-generator.....	J. M. Goldsmith.....	476,261	June 7	50	61	59	1447
Gas-generator.....	J. J. Kirkham.....	479,647	July 26	2480	617	60	523
Gas generator and burner.....	J. S. Rogers.....	471,361	Mar. 22	2666	677	58	1644
Gas generator and burner. Carbureted-hydrogen- generator and heater. Combined.....	J. W. Blake and J. T. Sackett.....	475,381	May 24	2385	610	59	1142
Gas generator. Carbonic-acid- generator. Carbonic-acid- generator. Water.....	P. H. Nelson.....	480,436	Aug. 9	1106	277	60	802
Gas generator. Carbonic-acid- generator. Water.....	P. J. Maguire.....	467,673	Jan. 26	2224	566	58	446
Gas-generator. Carbonic-acid- generator. Water.....	P. J. Maguire.....	478,198	July 5	202	51	60	41
Gas-generator. Water.....	R. Boeklen.....	484,730	Oct. 18	1863	474	61	401
Gas-governor.....	S. G. Cabell.....	479,553	July 26	2346	585	60	498
Gas governor and burner.....	H. Schrader.....	481,771	Aug. 30	3294	802	60	1270
Gas-governors. Manufacture of.....	C. H. Dickson and M. S. Hopkins.....	473,063	Apr. 19	1623	414	59	334
Gas-governor. Mercurial.....	V. H. Higgins and W. D. Smith.....	483,517	Sept. 27	2579	646	60	1877
Gas-heater.....	H. C. Earle.....	471,211	Mar. 22	2443	621	58	1600
Gas heater and lighter. Domestic.....	M. F. Hamley.....	466,412	Jan. 5	159	43	58	32
Gas heater or radiator.....	A. Wolff.....	466,958	Jan. 12	1057	628	58	209
Gas heater or radiator.....	A. Wolff.....	481,742	Aug. 30	3244	789	60	1259
Gas heating and lighting device. Combined.....	O. H. P. Cornell.....	481,139	Aug. 16	2234	{ 550 551 }	60	1037
Gas-holder.....	K. G. Barkhausen.....	482,891	Sept. 20	1590	399	60	1671
Gas-lighter. Electric.....	L. M. Kilburn and S. Van Etten.....	488,012	Dec. 13	1273	317	61	1591
Gas-lighter. Electrical.....	J. E. Hamilton.....	482,172	Sept. 6	415	99	60	1416
Gas-lighting attachment.....	T. R. Bishop.....	488,804	Dec. 27	2565	637	61	1881
Gas-lighting burner. Automatic electric.....	R. C. Nourse and T. W. Lane.....	469,408	Feb. 23	2346	603	58	1009
Gas-lighting burner. Electric.....	H. A. Pinkham.....	470,256	Mar. 8	936	232	58	1289
Gas-lighting device.....	D. J. Quinn and P. W. Hoffmann.....	478,522	July 5	708	171	60	140
Gas-machine.....	L. J. Phelps.....	485,134	Oct. 25	2524	649	61	548
Gas-machines. Air-supplying device for.....	E. B. Badlam.....	479,238	July 19	1807	{ 452 453 }	60	379
Gas-main safety-coupling.....	A. Garretson.....	481,397	Aug. 23	2678	657	60	1133
Gas-making apparatus.....	C. R. Collins.....	472,785	Apr. 12	1187	304	59	237
Gas-making apparatus.....	I. S. Elkins and R. Boeklen.....	483,107	Sept. 20	1924	{ 487 488 }	60	1740
Gas-making apparatus.....	A. Noteman.....	485,877	Nov. 8	1091	290	61	812
Gas-making apparatus.....	J. Williams, Jr., and E. O. Peoples.....	477,725	June 28	2396	{ 598 599 }	59	1956
Gas-making apparatus.....	P. A. N. Winand.....	474,201	May 3	487	117	59	732
Gas. Manufacture of.....	R. M. Bidelman.....	483,489	Sept. 27	2517	634	60	1865
Gas. Manufacturing.....	F. D. Moses.....	479,293	July 19	1887	473	60	395
Gas. Manufacturing.....	H. M. Pierson.....	478,459	July 5	608	{ 148 149 }	60	120
Gas. Manufacturing.....	J. H. W. Stringfellow.....	467,266	Jan. 19	1578	{ 402 403 }	58	317
Gas-manufacturing apparatus.....	C. W. Isbell.....	472,191	Apr. 5	282	74, 75	59	54
Gas. Manufacturing fuel.....	W. A. Koneman.....	469,858	Mar. 1	309	79	58	1161
Gas. Manufacturing water.....	W. Clark.....	466,323	Jan. 5	25	5	58	8
Gas-meter.....	J. B. Knickerbocker.....	468,008	Feb. 2	155	37, 38	58	554
Gas-meter.....	W. N. Milsted.....	477,910	June 28	2698	{ 675 676 }	59	2012
Gas-meter.....	H. A. Tobey.....	487,907	Dec. 13	1103	276	61	1557
Gas-meter. Coin-freed.....	W. Cowan.....	474,219	May 3	513	{ 123 124 125 126 }	59	737
Gas-meter diaphragm.....	A. Henning.....	487,051	Nov. 29	3022	776	61	1244
Gas-meter register.....	H. A. Tobey.....	487,908	Dec. 13	1106	276	61	1557
Gas-mixer.....	J. G. Stephens and H. W. Holmes.....	474,781	May 10	1435	364	59	926
Gas-mixer.....	S. K. Wagner.....	481,604	Aug. 30	3017	737	60	1215
Gas or lamp lighter.....	R. J. G. Corner.....	478,953	July 12	1350	334	60	282
Gas or oil motor engine.....	H. Schumm.....	482,202	Sept. 6	458	{ 110 111 }	60	1425
Gas or petroleum motor.....	A. Niemczyk.....	480,737	Aug. 16	1589	397	60	913
Gas or steam generator.....	J. M. Goldsmith.....	476,260	June 7	47	11	59	1447
Gas-pressure regulator. Automatic.....	J. G. Strub.....	471,657	Mar. 29	3088	785	58	1730
Gas. Process of and apparatus for generating fuel.....	J. W. Culmer.....	477,354	June 21	1793	{ 439 440 }	59	1819
Gas. Process of and apparatus for making.....	J. Leede.....	471,671	Mar. 29	3113	{ 792 793 }	58	1735
Gas. Process of and apparatus for purifying.....	F. Bredel.....	467,605	Jan. 26	2125	{ 539 540 }	58	427
Gas. Process of and apparatus for the manufacture of.....	J. L. Janeway and F. Logan.....	483,981	Oct. 4	690	{ 172 173 }	61	143
Gas. Process of and apparatus for the manufacture of illuminating- Gas-producer.....	C. B. de Lamarre.....	468,747	Feb. 9	1307	332	58	790
Gas-producer.....	C. Fiesse.....	466,603	Jan. 5	469	121	58	90
Gas-producer.....	W. A. Koneman.....	484,596	Oct. 18	1646	{ 417 418 }	61	357
Gas-producer.....	W. A. Koneman.....	485,391	Nov. 1	376	101	61	649
Gas-producer.....	A. K. Murray.....	486,491	Nov. 22	2083	552	61	1043
Gas-producer.....	P. A. N. Winand.....	474,202	May 3	490	118	59	732
Gas-producers. Automatic steam-regulator for.....	E. Rnud.....	482,320	Sept. 6	668	159	60	1466
Gas. Producing.....	A. W. Putman-Cramer.....	470,007	Mar. 1	545	135	58	1204

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gas-producing apparatus	J. H. Collins, Jr., and I. N. Knapp	480,249	Aug. 9	798	{ 204 205	{ 60	745
Gas-pump	L. Allen	474,512	May 10	1007	259	59	842
Gas-pump. Hydraulic	C. M. Bennett	474,053	May 3	275	67	59	691
Gas purifier and condenser	G. Scharfe	482,141	Sept. 6	348	83, 84	60	1404
Gas. Purifying illuminating	J. Wiesender	469,847	Mar. 1	292	76	58	1157
Gas. Purifying water	H. S. Blackmore	470,974	Mar. 15	2075	531	58	1518
Gas-regulator	B. F. Day	469,464	Feb. 23	2430	623	58	1025
Gas-regulator	M. O'Gorman	474,481	May 10	959	{ 247 248	{ 59	833
Gas-regulator	J. M. Sweeny	478,480	July 5	641	156	60	128
Gas-retort	A. Coze	477,834	June 28	2579	{ 645 646	{ 59	1989
Gas-retort	A. Coze and A. Lencauchez	473,145	Apr. 19	1763	{ 445 446	{ 59	359
Gas-retort charger	A. Coze	473,143	Apr. 19	1760	444	59	358
Gas-retorts. Apparatus for charging	A. Coze and A. Lencauchez	473,144	Apr. 19	1761	{ 444 445	{ 59	359
Gas-retorts. Apparatus for charging	J. Ruscoe	476,685	June 7	685	{ 166 167 168	{ 59	1573
Gas-retorts. Apparatus for charging	G. C. Trewby	468,374	Feb. 9	733	182	58	675
Gas-retorts. Apparatus for discharging	A. Coze	475,540	May 24	2640	671	59	1190
Gas-retorts. Apparatus for drawing	J. Ruscoe	476,686	June 7	688	{ 168 169	{ 59	1573
Gas to burners. Automatic governor for regulating the supply of	C. B. Bosworth	473,447	Apr. 26	2280	576	59	482
Gas-tubing. Attaching tips to flexible	A. Caldwell	480,247	Aug. 9	792	202	60	744
Gas under pressure. System for distributing	W. A. Hoeveler and T. J. McTighe. (Reissue.)	11,283	Nov. 15	1979	525	61	1008
Gas under pressure. System for distributing	W. A. Hoeveler and T. J. McTighe. (Reissue.)	11,284	Nov. 15	1981	526	61	1009
Gas-washer	F. H. Lane	487,279	Dec. 6	65	20	61	1334
Gas washer or scrubber	J. C. Chandler	486,927	Nov. 29	2833	733	61	1207
Gases. Impregnating liquids with	U. Bachmann	481,838	Aug. 30	3402	835	60	1290
Gases of combustion. Apparatus for the separation of smoke from	W. Wills	468,378	Feb. 9	737	183	58	676
Gases. Producing inflammable	A. Noteman	468,956	Feb. 16	1646	419	58	864
Gaseous fuel. Burner for burning	H. Adler	485,594	Nov. 1	673	179	61	712
Gaseous-fuel generator and burner	N. Horn	481,494	Aug. 23	2831	{ 695 696	{ 60	1164
Gasoline-heater	A. J. Parker and R. G. Hunter	487,373	Dec. 6	221	60	61	1564
Gate:							
See Automatic gate. Lattice-gate.							
Bridge-gate. Lazy-tong gate.							
Car-gate. Oscillating gate.							
Car-platform gate. Railway-gate.							
Chain gate. Railway or farm gate.							
Drive-gate. Railway safety-gate.							
Elevator-gate. Safety-gate.							
End-gate. Sewer-gate.							
Farm-gate. Sliding gate.							
Fence-gate. Swinging gate.							
Flood-gate. Tilting gate.							
Flume-gate. Valve-gate.							
Folding gate. Water-gate.							
Irrigating head-gate. Wire gate.							
Gate	H. Barker	471,935	Mar. 29	3521	899	58	1814
Gate	C. Cardwell	476,127	May 31	3578	900	59	1387
Gate	J. R. Carpenter	472,522	Apr. 12	808	208	59	166
Gate	E. A. Casper	479,702	July 26	2576	642	60	540
Gate	W. Chambers	475,198	May 17	2095	530	59	1069
Gate	O. B. Clements and J. I. Smith	474,213	May 3	504	121	59	735
Gate	C. E. Cline and C. H. Kilpatrick	487,718	Dec. 13	790	202	61	1494
Gate	W. S. Conlter	482,301	Sept. 6	623	148	60	1456
Gate	W. Curtis	469,514	Feb. 23	2511	{ 643 644	{ 58	1040
Gate	J. F. Dougherty	480,008	Aug. 2	391	97	60	656
Gate	U. Dreesman and J. Wagler	482,005	Sept. 6	134	32	60	1361
Gate	J. Elcock	471,851	Mar. 29	3406	869	58	1791
Gate	G. Ford	480,085	Aug. 2	520	132	60	681
Gate	J. M. Fross	480,460	Aug. 9	1152	288	60	811
Gate	D. Gensinger	479,498	July 26	2266	568	60	483
Gate	W. M. Grisham	476,379	June 7	240	58	59	1483
Gate	W. T. Harris	484,198	Oct. 11	1010	258	61	220
Gate	J. L. Higgins	474,250	May 3	560	138	59	747
Gate	F. Hopkins	482,792	Sept. 20	1438	356	60	1641
Gate	W. Huff	473,752	Apr. 26	2779	699	59	577
Gate	A. Ihlenfeldt	473,578	Apr. 26	2513	634	59	527
Gate	P. Johnson	482,640	Sept. 13	1188	{ 287 288	{ 60	1580
Gate	F. E. R. Malke	477,667	June 28	2311	578	59	1938
Gate	P. J. Mauger	467,771	Jan. 26	2382	605	58	476
Gate	M. McDonough	472,905	Apr. 12	1352	348	59	271
Gate	J. N. Morgan	478,451	July 5	598	146	60	118
Gate	J. A. Nelson	467,556	Jan. 26	2059	520	58	415
Gate	W. J. Pearce	473,777	Apr. 26	2815	707	59	584
Gate	A. Peterson	479,457	July 26	2186	{ 547 548	{ 60	469
Gate	F. K. Plumbly	483,367	Sept. 27	2392	601	60	1839
Gate	R. W. Reasons and M. M. Ozbirn	483,834	Dec. 27	2608	647	61	1889
Gate	J. W. Ruhl	479,665	July 26	2513	625	60	529
Gate	W. H. H. Sallee	479,532	July 26	2313	578	60	492
Gate	F. L. Sellers and J. G. Schissel	475,708	May 24	2890	731	59	1338

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drig.	Vol.	Page.
Gate	J. C. Shannon	472,080	Apr. 5	105	29	59	21
Gate	C. J. Simeral	487,336	Dec. 6	159	45	61	1352
Gate	E. E. Smith	470,264	Mar. 8	946	{ 234 235 }	58	1291
Gate	T. M. Smith	483,398	Sept. 27	2404	604	60	1842
Gate	G. W. Spidel	481,876	Aug. 30	3459	849	60	1301
Gate	C. Talbot	481,078	Aug. 16	2125	529	60	1018
Gate	J. H. Tudor	478,036	June 28	2894	723	59	2051
Gate	A. M. Tyler	470,225	Mar. 8	894	221	58	1281
Gate	S. S. White	468,712	Feb. 9	1260	320	58	780
Gate-actuating mechanism	J. F. Houston	479,278	July 19	1867	467	60	391
Gate-hanger	G. S. Welty	467,455	Jan. 19	1859	474	58	370
Gate-hooks. Manufacture of	J. H. Alker	469,621	Feb. 23	2663	685	58	1071
Gate roller and hinge	J. E. Gonser	470,045	Mar. 1	601	149	58	1216
Gates. Means for operating swinging	J. W. Rhodes	471,193	Mar. 22	2414	614	58	1594
Gauze. Separating oily inks from	J. Castañeda	471,323	Mar. 22	2604		58	1631
Gear-cutter	F. W. Clough	476,734	June 7	759	{ 187 188 }	59	1588
Gear-cutting machine	A. H. Brainard	472,519	Apr. 12	805	207	59	166
Gear. Differential	G. Cottrell	474,903	May 17	1635	417	59	979
Gear for high-speed rotary machines. Starting	J. Head	478,541	July 5	745	181	60	148
Gear. Reduction	W. M. Thomas	480,679	Aug. 9	1495	{ 372 373 }	60	879
Gear. Reversing	J. F. M. Woods	475,026	May 17	1833	{ 464 465 }	59	1017
Gear-wheel	E. W. Bliss	472,664	Apr. 12	1005	260	59	204
Gear-wheel	S. Harris	468,767	Feb. 9	1339	338	58	796
Gear-wheel	A. Walker	479,233	July 19	1800	451	60	377
Gear-wheel. Yieldable	B. C. Seaton	480,439	Aug. 9	1112	278	60	803
Gear. Worm	C. E. Albro	486,318	Nov. 15	1819	480	61	977
Gear. Worm	J. F. Welch	486,204	Nov. 15	1632	432	61	938
Gears or pinions. Machine for making	D. H. Church	476,953	June 14	1131	{ 272 273 }	59	1676
Gears. Pitch-gage for bevel	W. Holland	486,042	Nov. 8	1365	363	61	868
Gearing	F. H. Richards	480,671	Aug. 9	1481	{ 368 369 }	60	877
Gearing	H. L. Shepard	475,901	May 31	3225	816	59	1317
Gearing	J. Thomson	476,101	May 31	3534	888	59	1378
Gearing	J. E. Touch	488,373	Dec. 20	1889	473	61	1730
Gearing. Differential	G. Shaw	479,108	July 19	1608	{ 401 402 }	60	341
Gelatinous food product	R. B. Beaumont	480,687	Aug. 9	1510	375	60	882
Gem-setting	C. J. Humbert	487,623	Dec. 6	623	159	61	1445
Generator:							
See Current-generator.	Gas or steam generator.						
Electric generator.	Pyromagnetic generator.						
Electric furnace	Steam-generator.						
generator.	Steam or hot-water gener-						
Fuel-generator.	ator.						
Gas-generator.	Vapor-generator.						
Generator	W. R. Macdonald	488,824	Dec. 27	2592	643	61	1886
Geological formations. Apparatus for illustrating	D. M. Barringer	477,633	June 28	2259	565	59	1927
Gig-mill	N. H. Grosselin, Fils	485,929	Nov. 8	1175	{ 309 310 }	61	829
Gigging and shearing machine. Combined	H. S. Greene	469,502	Feb. 23	2493	639	58	1036
Gill-faller	E. Clarkson	476,785	June 14	845	208	59	1619
Gin-saw gummer	J. W. Smith	475,621	May 24	2763	700	59	1215
Girth	J. C. Covert	469,965	Mar. 1	485	121	58	1193
Girth-fastener	H. M. Tileston	485,481	Nov. 1	507	134	61	675
Girth. Saddle	R. A. Lane	481,180	Aug. 23	2305	568	60	1065
Glass:							
See Cupping-glass.	Opera or field glass.						
Opera-glass.							
Glass and bottle washer	A. Wickey	467,304	Jan. 19	1633	416	58	327
Glass-annealing leer	J. H. Lubbbers	469,790	Mar. 1	196	51, 52	58	1139
Glass-annealing oven	J. P. Whitney	477,920	June 28	2714	679	59	2016
Glass. Apparatus for rolling plate	E. Walsh, Jr	487,803	Dec. 13	936	{ 236 237 }	61	1525
Glass articles. Apparatus for molding curved hollow	L. Appert	476,772	June 14	819	202	59	1614
Glass articles. Manufacture of hollow	C. Ulfig	472,631	Apr. 12	964	250	59	197
Glass articles. Securing designs on	A. A. Graeser	487,013	Nov. 29	2966		61	1233
Glass-battery-jar mold	J. Gayner	478,792	July 12	1124	277	60	237
Glass-cutting implement	J. Urbaneck	482,601	Sept. 13	1135	274	60	1570
Glass. Decorating	J. H. Scharling	472,230	Apr. 5	349	90	59	65
Glass. Embedding wire-netting in	F. Shuman	483,021	Sept. 20	1801	454	60	1714
Glass for windows, &c. Manufacture of stained	A. R. Carter and H. C. Hughes	477,990	June 28	2816	703	59	2037
Glass from flattening-ovens. Carrier for conveying	T. A. Zellers	474,983	May 17	1768	{ 447 448 }	59	1004
Glass-furnace	R. M. Atwater	485,340	Nov. 1	288	78	61	631
Glass-furnace	W. F. Modes	469,406	Feb. 23	2343	602	58	1009
Glass-furnace	M. L. Murphy	476,672	June 7	667	162	59	1569
Glass gage-tubes. Tool for cutting	A. W. Chesterton	483,778	Oct. 4	389	96	61	82
Glass grinding and polishing apparatus	G. A. Marsh, Jr	477,303	June 21	1716	{ 420 421 }	59	1803
Glass-grinding machine	J. W. Bonta	483,527	Oct. 4	15	3, 4	61	6
Glass-grinding machine	R. Friedel	474,119	May 3	364	87	59	707
Glass-grinding machinery	R. Friedel	477,839	June 28	2589	648	59	1991
Glass grinding or polishing table	G. A. Marsh, Jr	477,305	June 21	1721	421	59	1805
Glass. Grinding, smoothing, and polishing	G. A. Marsh, Jr	488,925	Dec. 27	2756	680	61	1920
Glass-heating oven	A. O. Hurley	478,328	July 5	416	{ 100 101 }	60	83
Glass. Leer or annealing-furnace for sheet or plate	J. W. Bonta	480,230	Aug. 2	702	192	60	726
Glass-lined bend, elbow, or pipe-fitting	A. Husselbee	476,648	June 7	637	155	59	1563

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Glass, &c. Machine for decorating.....	M. Suess.....	474,701	May 10	1312	335	59	901
Glass. Machine for embedding wire-netting in.....	F. Shuman.....	483,020	Sept. 20	1799	454	60	1714
Glass. Manufacture of rose or orange stained.....	F. Welz.....	479,689	July 26	2553	60	536	
Glass-melting furnace.....	R. Gray.....	483,915	Oct. 4	590	149	61	122
Glass-melting furnace.....	J. Kitson.....	485,390	Nov. 1	374	101	61	649
Glass, metal, &c. Apparatus for molding.....	R. S. Pease.....	487,426	Dec. 6	323	82, 83	61	1385
Glass metal. Preparing.....	R. S. Pease.....	487,425	Dec. 6	321	82	61	1385
Glass-mold.....	S. Oakman.....	486,182	Nov. 15	1602	425	61	932
Glass molds. Apparatus for mechanically operating paste.....	M. J. Owens.....	482,526	Sept. 13	1024	247	60	1549
Glass-molds. Label-former for.....	J. S. Irwin.....	476,649	June 7	638	155	59	1563
Glass-molds. Supporting-holder for.....	U. S. Huggins.....	481,142	Aug. 16	2240	552	60	1639
Glass, &c. Mounting metallic ornaments upon.....	C. B. Headly and J. S. Carrow.....	479,743	July 26	2657	659	60	555
Glass on grinding and polishing tables. Apparatus for placing plate.....	G. A. Marsh, Jr.....	477,304	June 21	1720	421	59	1804
Glass plates. Machine for cutting.....	W. J. Wilson.....	477,585	June 21	2157	535 536 344 345	59	1891
Glass-polishing machine.....	F. K. Maximilian.....	477,135	June 14	1416	536	59	1733
Glass, porcelain, or other surfaces. Transferring designs to.....	A. E. Frank and E. H. Hoad.....	467,090	Jan. 12	1273	58	250	
Glass-press.....	J. A. Widmer.....	471,516	Mar. 22	2888	735	58	1686
Glass. Producing opalescent.....	J. Kemper.....	468,723	Feb. 9	1274	58	784	
Glass. Rail for securing.....	W. Henderson.....	484,590	Oct. 18	1633	415	61	355
Glass-rolling machine.....	S. Sadler.....	474,484	May 10	966	249	59	834
Glass-rolling machinery.....	E. F. Chance.....	488,114	Dec. 13	1451	365	61	1628
Glass. Table for holding plate.....	G. A. Marsh, Jr.....	477,306	June 21	1723	422	59	1805
Glass tank-furnace.....	W. F. Modes.....	487,286	Dec. 6	76	23	61	1336
Glass-tube cutter.....	R. W. Fenwick.....	467,500	Jan. 26	1934	494	58	393
Glass-tube cutter.....	J. O. Fowler, Jr.....	476,626	June 7	603	144	59	1556
Glass tube. Multiplex.....	P. J. McElroy.....	481,805	Aug. 30	3348	819	60	1280
Glass tubes. Making multiple-bore.....	P. J. McElroy.....	466,894	Jan. 12	962	245 246	58	192
Glass vessels. Apparatus for finishing the edges of.....	J. Pease.....	477,447	June 21	1938	480	59	1846
Glasses. Machine for grinding drinking.....	H. C. Schrader.....	486,591	Nov. 22	2238	587 588	61	1072
Glassware. Device for grinding and polishing.....	H. C. Wood.....	469,052	Feb. 16	1807	462	58	897
Glassware. Device for manufacturing hollow.....	T. B. Atterbury.....	484,131	Oct. 11	897	229 230	61	198
Glassware for shipment. Packing.....	C. Runyon.....	485,985	Nov. 8	1273	337	61	850
Glassware. Manufacture of.....	D. C. Ripley.....	477,336	June 21	1762	431	59	1813
Glassware. Manufacture of.....	G. Beatty.....	469,053	Feb. 16	1809	462	58	898
Glassware-mold.....	P. Blankensop, Jr.....	486,392	Nov. 15	1933	512	61	1000
Glassware. Ornamental pressed.....	J. Haley.....	485,032	Oct. 25	2385	612	61	519
Glazed structure.....	A. E. Rendle.....	488,663	Dec. 27	2350	581	61	1838
Glazing-bar for skylights.....	W. H. Heywood.....	479,275	July 19	1862	466	60	390
Globe. Geographical.....	I. and M. A. Hodgson.....	488,071	Dec. 13	1389	345	61	1616
Globe or shade holder.....	D. N. Gleason.....	473,550	Apr. 26	2447	619	59	512
Glory-hole furnace.....	H. Hagerling.....	468,657	Feb. 9	1170	298	58	762
Glove.....	L. Frank.....	468,149	Feb. 2	367	91	58	536
Glove.....	P. B. Lee.....	479,285	July 19	1877	470	60	393
Glove.....	H. H. and W. L. Smith.....	480,478	Aug. 9	1179	296	60	817
Glove.....	L. L. Tabor and A. Sedmihradsky.....	474,929	May 17	1671	427	59	986
Glove and garment fastener.....	F. E. Hall.....	484,792	Oct. 25	1984	506	61	440
Glove-cord clasp.....	A. E. McDonald.....	483,263	Sept. 27	2208	554 555	60	1805
Glove-fastener.....	W. H. Bell.....	466,319	Jan. 5	7	2	58	4
Glove-fastener.....	T. C. Booth and E. G. Ratty.....	487,822	Dec. 13	959	242	61	1529
Glove-fastener.....	C. H. Goodwin.....	477,857	June 28	2616	655	59	1996
Glove-fastener.....	E. J. Kraetzer.....	470,642	Mar. 8	1562	406	58	1409
Glove-fastener.....	F. Maisch.....	480,874	Aug. 16	1791	448	60	954
Glove-fastener.....	A. G. Mead.....	484,807	Oct. 25	2007	515	61	445
Glove-fastener.....	C. H. Reed.....	474,409	May 10	851	222	59	813
Glove-fastening.....	O. G. Alderman.....	470,170	Mar. 8	799	199	58	1263
Glove-fastening.....	G. and J. Courcel.....	487,175	Nov. 29	3218	824	61	1284
Glove-fastening.....	A. V. Demange and J. M. R. Her- vieu.....	476,736	June 7	764	188	59	1539
Glove-fastening.....	W. B. H. Dowse.....	476,255	June 7	41	9	59	1446
Glove-fastening.....	J. S. Healey.....	467,974	Feb. 2	95	23	58	543
Glove-fastening.....	J. Lye.....	479,896	Aug. 2	177	43	60	616
Glove-fastening.....	A. C. Mather.....	466,503	Jan. 5	315	79	58	60
Glove-fastening.....	P. A. Raymond.....	472,272	Apr. 5	415	106	59	78
Glove-fastening.....	F. A. Richardson.....	476,410	June 7	289	63	59	1494
Glove for base-ball catchers.....	T. A. Kennedy.....	472,482	Apr. 5	743	189	59	141
Glove or mitten.....	F. Bertheau and A. G. Hoegren.....	486,024	Nov. 8	1339	355	61	864
Glove-package holder.....	R. H. Moore.....	487,127	Nov. 29	3145	806	61	1269
Glove. Tennis.....	C. C. Obeur.....	482,647	Sept. 13	1197	290	60	1582
Glove. Voltaic.....	F. Simpson.....	478,293	July 5	366	89	60	74
Gloves, shoes, &c. Hook and fastening for.....	F. S. McKenney.....	478,520	July 5	705	171	60	140
Glue-applying apparatus.....	J. Sr. and L. Luger.....	484,031	Oct. 11	769	194	61	172
Glue cutting and spreading apparatus.....	C. Keller.....	482,042	Sept. 6	192	46, 47	60	1373
Glue-heater.....	J. Luger, Sr.....	484,032	Oct. 11	771	194	61	173
Gluing-machine.....	W. E. Brock.....	474,572	May 10	1111	284	59	862
Gluing-table.....	W. E. Brock.....	476,975	June 14	1164	281	59	1682
Gluten from slaughter-house washings. Apparatus for separating.....	E. J. Pope.....	467,312	Jan. 19	1645	418 419	58	329
Glycerine and salt from spent soap-lye. Recover- ing.....	A. Domeier and O. C. Hagemann.....	475,757	May 31	2976	59	1268	
Glycerine. Apparatus for rectifying.....	R. O. Unglaub.....	481,879	Aug. 30	3465	850	60	1303
Glycerine from spent soap-lye. Recovering crude.....	A. Domeier and O. C. Hagemann.....	475,758	May 31	2977	59	1268	
Gold and other metals from their ores. Electrolytic apparatus for separating.....	G. J. Atkins.....	473,105	Apr. 19	1684	427 428	59	345
Gold and other metals from their ores. Separating.....	G. J. Atkins.....	484,869	Oct. 25	2109	543	61	465

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Gold and silver from ores. Composition of matter for the extraction of	E. D. Kendall	482,577	Sept. 13	1100	.....	60	1564
Gold and silver from their ores. Method of and apparatus for extracting	J. W. Aylsworth and A. C. Payne	481,683	Aug. 30	3133	{ 764 765 }	60	1238
Gold and silver matte. Refining	W. Langguth	486,613	Nov. 22	2220	594	61	1079
Gold and silver ores. Treating	G. W. McGee	487,579	Dec. 6	556	.....	61	1432
Gold-concentrator	W. H. Hill	474,014	May 3	206	48	59	677
Gold from its ores. Extracting	C. Moldenhauer	483,766	Oct. 4	365	.....	61	77
Gold from pulverized ores, &c. Machine for extracting	T. C. Simonton	478,971	July 12	1384	341	60	288
Gold from sulphide ores. Extracting	T. A. Edison	474,591	May 10	1138	.....	59	807
Gold-leaf. Booking	S. Hickson	467,347	Jan. 19	1702	435	58	340
Gold-leaf. Spool for carrying and applying	G. P. Hogan	472,051	Apr. 5	62	16	59	14
Gold ores. Chloridizing	M. J. Hartung	471,423	Mar. 22	2762	.....	58	1662
Gold ores. Process of and apparatus for treating	L. C. Daumas	486,698	Nov. 22	2418	630	61	1108
Gold, silver, &c. Machine for separating	J. B. Freeman	471,731	Mar. 29	3218	819	58	1754
Gondola system. Cable-driven	M. Garland	467,346	Jan. 19	1699	435	58	339
Gong. Alarm	V. T. Lynch	466,696	Jan. 5	605	157	58	117
Gong-signal	J. C. Wells	470,025	Mar. 1	569	{ 141 142 }	58	1209
Gopher-trap	G. Moor	485,421	Nov. 1	421	112	61	658
Governor	G. G. Annable	476,356	June 7	201	48, 49	59	1475
Governor	R. Baumann	472,690	Apr. 12	1042	269	59	210
Governor	E. W. Harden	426,404	Nov. 15	1953	518	61	1004
Governor	F. Hart	472,293	Apr. 5	448	116	59	84
Governor	J. Hemphill and J. Fawell	482,448	Sept. 13	890	215	60	1521
Governor	J. Hemphill and J. Fawell	482,449	Sept. 13	891	{ 215 216 }	60	1522
Governor	J. Hemphill and J. Fawell	482,450	Sept. 13	893	216	60	1522
Governor	J. C. Henderson	487,265	Dec. 6	40	13	61	1329
Governor	P. Piccard	474,064	May 3	289	70	59	693
Governor	R. H. Plass	476,408	June 7	286	67	59	1494
Governor. Air-brake	J. D. P. Schenck	488,309	Dec. 20	1880	{ 470 471 }	61	1729
Governor and motor. Thermostatic	W. E. Eastman	476,372	June 7	231	56	59	1481
Governor. Cut-off	L. O. Harris	473,743	Apr. 26	2769	696	59	575
Governor. Electric steam-engine	F. M. Garland	466,781	Jan. 12	766	{ 199 200 }	58	155
Governor. Electrical	M. A. Replogle	476,311	June 7	123	30	59	1462
Governor. Engine	M. A. Green	480,580	Aug. 9	1329	331	60	248
Governor. Engine	W. H. Lawrence	487,224	Nov. 29	3295	840	61	1297
Governor. Engine	R. J. McIlhenny	474,678	May 10	1281	326	59	894
Governor. Engine	T. H. Nace	480,778	Aug. 16	1645	412	60	925
Governor. Engine	M. Rothfuss	473,712	Apr. 26	2718	684	59	565
Governor. Engine	D. A. Tompkins and P. Bigelow	469,105	Feb. 16	1874	480	58	911
Governor. Engine	F. J. Waters	485,361	Nov. 1	330	88	61	640
Governor for gas-engines. Speed	J. S. Connelly	475,385	May 24	2392	611	59	1143
Governor for pneumatic motors. Automatic	W. D. Parker	473,338	Apr. 19	2095	526	59	424
Governor. Group	M. G. Wilder	486,574	Nov. 22	2307	580	61	1066
Governor. Marine-engine	E. F. Wallgren	471,735	Mar. 29	3208	817	58	1752
Governor. Steam-engine	D. A. Barnes	471,048	Mar. 15	2180	561	58	1538
Governor. Steam-engine	G. F. Corliss and L. H. Wattles	466,488	Jan. 5	284	72	58	54
Governor. Steam-engine	G. F. Corliss and L. H. Wattles	483,643	Oct. 4	186	46	61	38
Governor. Steam-engine	F. C. Dietz	481,141	Aug. 16	2238	{ 551 552 }	60	1038
Governor. Steam-engine	R. G. Manifold	472,378	Apr. 5	584	149	59	110
Governor. Steam-engine	E. L. Mills	485,817	Nov. 8	996	267	61	793
Governor. Steam-engine	R. H. Payne	475,148	May 17	2018	510	59	1053
Governor. Steam-engine	W. O. Webber	466,475	Jan. 5	266	67	58	51
Governor. Steam-engine	W. O. Webber	477,344	June 21	1775	434	59	1815
Governor. Steam-radiator	W. Burnham	474,441	May 10	905	234	59	822
Governors. Safety attachment for engine	F. W. Dean	482,404	Sept. 13	813	195	60	1509
Grader and scalper	J. Desjardin and W. J. Stewart	473,500	Apr. 26	2367	600	59	498
Grader. Road	J. M. Holland	484,428	Oct. 18	1388	355	61	305
Grader. Road	H. J. Schneider	479,466	July 26	2200	552	60	471
Grades, &c. Device for ascertaining	D. C. Wolfe	478,491	July 5	655	160	60	130
Grading and sorting machine. Pneumatic	H. O. Mooney	478,516	July 5	697	{ 169 170 }	60	139
Grading-machine	W. D. Arnett	472,569	Apr. 12	872	224	59	180
Grading-machine	C. Lampitt	483,225	Sept. 27	2116	{ 536 537 }	60	1790
Grafting. Method of and device for	W. M. Rowell	471,573	Mar. 29	2966	756	58	1709
Grain-adjuster	T. H. Hendershot	475,861	May 31	3160	802	59	1304
Grain-agitator for separator-shoes	C. A. Kelley	466,526	Jan. 5	349	87	58	67
Grain and making flour. Mill for cutting	G. A. Engle	467,247	Jan. 19	1547	394	58	311
Grain-binder	W. C. Adams	474,801	May 17	1471	375	59	947
Grain-binder	M. E. Benedict	480,226	Aug. 2	755	191	60	725
Grain-binder	P. P. Coler	477,992	June 28	2819	{ 705 706 }	59	2038
Grain-binder	H. F. Crandall	478,572	July 12	785	{ 193 194 }	60	171
Grain-binder	O. S. Ellithorp	470,236	Mar. 8	911	225	58	1285
Grain-binder	G. Esterly	480,079	Aug. 2	512	130	60	680
Grain-binder	L. H. Grieser	468,295	Feb. 2	598	{ 148 149 150 }	58	639
Grain-binder	E. M. Kellogg	485,157	Oct. 25	2564	{ 658 659 }	61	556
Grain-binder	M. Kane	467,467	Jan. 19	1881	{ 479 480 }	58	374
Grain-binder	H. E. Pridmore	467,197	Jan. 19	1466	{ 374 375 376 }	58	295
Grain-binder	H. E. Pridmore	481,244	Aug. 23	2416	{ 586 587 }	60	1087

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Grain-binder	H. E. Pridmore	481,530	Aug. 23	2890	{ 709 710 711	{ 60	1176
Grain-binder	C. A. A. Rand	471,826	Mar. 29	3371	{ 858 859	{ 58	1784
Grain-binder	G. Schubert	468,552	Feb. 9	1014	{ 259 260	{ 58	731
Grain-binder	G. Schubert	472,143	Apr. 5	207	55, 56	59	39
Grain-binder	G. Schubert	481,974	Sept. 6	78	21	60	1350
Grain-binder	G. Schubert	482,758	Sept. 20	1383	343	60	1631
Grain-binder	P. D. Smith	469,279	Feb. 23	2145	{ 550 551 552	{ 58	969
Grain-binder	A. Stark	470,453	Mar. 8	1299	334	58	1355
Grain-binder bundle-carrier	A. Stark	479,677	July 26	2531	{ 630 631	{ 60	532
Grain-binder butt-board	G. Schubert	473,559	Apr. 26	2468	635	59	518
Grain-binder cord-knotter	C. Colahan	476,519	June 7	445	{ 105 106	{ 59	1524
Grain-binder cord-knotter	A. Stark	470,454	Mar. 8	1302	{ 334 335	{ 58	1356
Grain-binder cord-knotter	A. Stark	475,821	May 31	3091	{ 782 783	{ 59	1290
Grain-binder cord-knotter	A. Stark	475,822	May 31	3094	{ 783 784	{ 59	1291
Grain-binders. Compressor and discharging mechanism for	G. Schubert	473,021	Apr. 19	1556	396	59	323
Grain-binders. Mechanical movement for	B. F. Stewart	473,976	May 3	143	33	59	665
Grain-binders. Needle for	H. M. Weaver	470,852	Mar. 15	1894	485	58	1482
Grain-carrier	J. K. Karr	486,717	Nov. 22	2442	636	61	1113
Grain-carrier	W. H. Knapp	483,617	Oct. 4	152	37	61	32
Grain-cleaner	T. J. Hatfield	477,594	June 21	2170	538	59	1894
Grain-cleaner	A. Heine	485,845	Nov. 8	1041	279	61	802
Grain-cleaner	A. Heine	485,866	Nov. 8	1073	{ 285 286	{ 61	808
Grain cleaner and scourer	G. A. Smith	473,794	Apr. 26	2841	{ 713 714	{ 59	588
Grain-cleaner attachment	H. Bryan	468,069	Feb. 2	244	59	58	571
Grain-conveyer	H. M. Hastings	472,454	Apr. 5	696	178	59	131
Grain-conveyer for binders, &c	G. Schubert	470,213	Mar. 8	875	216	58	1278
Grain-conveyer for binders, &c	G. Schubert	479,467	July 26	2202	553	60	472
Grain-conveyers. Delivery apparatus for pneumatic	F. E. Duckham	470,555	Mar. 8	1440	374	58	1384
Grain cut-off	P. D. Thompson	481,080	Aug. 16	2127	529	60	1018
Grain-drier	H. T. Hopkins	487,738	Dec. 13	822	210	61	1501
Grain-drier	W. McKee	488,770	Dec. 27	2509	624	61	1869
Grain drier and ventilator	W. R. Vanderveer and C. F. Shedd	470,607	Mar. 8	1507	393	58	1399
Grain-drier conveyer	E. M. Parker	481,672	Aug. 30	3115	760	60	1234
Grain drier or moistener	J. C. Weller	474,568	May 10	1105	282	59	861
Grain-drill	J. L. Ashurst	475,532	May 24	2627	{ 668 669	{ 59	1187
Grain-drill	T. R. Crane	484,630	Oct. 18	1706	433	61	369
Grain-drill	W. H. Davis	477,520	June 21	2055	512	59	1871
Grain-drill	J. R. M. Day and L. Moore	487,258	Dec. 6	30	9, 10	61	1327
Grain-drill	J. C. Fuller and W. A. Lee	486,035	Nov. 8	1353	360	61	866
Grain-drill	P. M. and J. P. Gundlach	466,523	Jan. 5	343	85, 86	58	66
Grain-drill	P. Kesling	476,391	June 7	260	62	59	1488
Grain-drill	G. W. Kirkpatrick	486,343	Nov. 15	1356	428	61	983
Grain-drill	W. G. Munn and E. Christman	473,234	Apr. 19	1923	484	59	390
Grain-drill	W. A. and D. C. Van Brunt	466,544	Jan. 5	372	93, 94	58	72
Grain-drill cleaner	C. H. Johnson	467,417	Jan. 19	1800	460	58	358
Grain-dump	J. P. Peterson	483,011	Sept. 20	1787	451	60	1712
Grain elevating and measuring machine	S. P. Ford	471,965	Mar. 29	3563	910	58	1821
Grain elevating and moving apparatus	D. B. Taylor	475,635	May 24	2783	705	59	1219
Grain-elevator	A. Marangos	483,566	Oct. 4	74	18, 19	61	17
Grain-elevator	J. A. L. Wilson	485,520	Nov. 1	555	149	61	686
Grain-elevators. Power-transmission for	E. L. Heidenreich	469,421	Feb. 23	2367	607	58	1013
Grain-meter	A. N. Calkins	476,608	June 7	575	137	59	1550
Grain-meter	M. Cowan and J. G. Ragains	477,245	June 21	1622	396	59	1786
Grain-meter	C. D. Sprague	471,034	Mar. 15	2163	556	58	1534
Grain-meter. Oscillating	H. H. Boenker	483,417	Sept. 27	2430	611	60	1848
Grain-meter. Rotating	G. E. Wilson	484,691	Oct. 18	1807	459	61	390
Grain or coffee cleaner	T. A. Seip	471,901	Mar. 29	3471	{ 886 887	{ 58	1804
Grain or straw binding machines. Automatic tension and take-up lever in	A. Tschop	467,550	Jan. 26	2047	517	58	412
Grain preparatory to grinding. Process of and apparatus for dampening	B. Meier and L. E. Fritsche	477,909	June 28	2796	675	59	2012
Grain-purifier	F. P. Manning	477,668	June 28	2312	578	59	1938
Grain-sampling machine	J. Bigelow	480,054	Aug. 9	1453	362	60	872
Grain-scourer	H. A. Barnard	485,525	Nov. 1	563	151	61	688
Grain-scourer	W. A. Cockrell	485,488	Nov. 1	517	137	61	677
Grain-scourer	F. M. Drake	487,259	Dec. 6	31	10, 11	61	1327
Grain-scouring machine	R. W. Welch	480,942	Aug. 16	1891	473	60	974
Grain scouring, polishing, and separating machine	G. E. Russell	470,077	Mar. 1	650	161	58	1225
Grain-screen	C. and J. Closz	471,073	Mar. 15	2223	570	58	1546
Grain-separator	J. M. King	475,779	May 31	3010	763	59	1275
Grain-separator	J. Menge	481,366	Aug. 23	2618	644	60	1122
Grain-separator	G. A. Schrand	477,783	June 28	2487	622	59	1973
Grain-separator	W. H. Schulte	469,827	Mar. 1	260	67	58	1152
Grain-separator	J. E. Smith	486,414	Nov. 15	1971	523	61	1007
Grain separator and cleaner	C. R. Redel	467,198	Jan. 19	1471	376	58	296
Grain-shocking machine	W. Russell	475,612	May 24	2748	697	59	1212
Grain-treating apparatus	F. B. Giesler	482,790	Sept. 20	1435	355	60	1641
Graining mechanism	J. Madden	474,093	May 3	335	80	59	702

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gramophones. Coin-controlled apparatus for.....	E. L. Wilson	472,417	Apr. 5	637	163	59	119
Granite and marble. Manufacturing artificial.....	C. George	477,326	June 21	1750	.....	59	1811
Granite, &c. Device for polishing.....	G. L. Badger	481,341	Aug. 23	2588	636	60	1117
Grape-picker.....	G. L. Moore and C. Jory	477,952	June 28	2763	692	59	2026
Grape-vine clamp.....	W. H. Mills	475,5-9	May 24	2713	688	59	1205
Graphite or like substances from crushed rock. Method of and apparatus for separating.....	A. W. Nibelius	486,495	Nov. 22	2091	553	61	1044
Graphoscope.....	F. E. Housh	482,793	Sept. 20	1439	356	60	1642
Grapple.....	R. Jones	485,944	Nov. 8	1204	318	61	836
Grapple-hook.....	C. W. Abbott.....	479,871	Aug. 2	147	36	60	611
Grass-cutting implement.....	C. Stewart	488,667	Dec. 27	2359	583	61	1839
Grass-shears.....	L. L. Barnes	488,647	Dec. 27	2322	574	61	1832
Grate.....	F. Carel and W. F. Davidson	474,292	May 3	635	160	59	760
Grate.....	F. Carel and W. F. Davidson	485,450	Nov. 1	463	{ 123 } 124	61	667
Grate.....	W. L. Carter	468,033	Feb. 2	192	47	58	561
Grate.....	E. Fales	485,684	Nov. 8	813	217	61	756
Grate.....	J. W. Greene	472,171	Apr. 5	251	66	59	47
Grate.....	T. Henderson	482,556	Sept. 13	1074	260	60	1558
Grate.....	A. J. Hull	475,866	May 31	3165	803	59	1305
Grate.....	J. A. Price	476,963	June 14	1148	277	59	1679
Grate.....	W. R. Roney	473,963	May 3	126	29	59	662
Grate.....	W. R. Roney and J. T. Arnold	474,345	May 3	740	193	59	779
Grate.....	A. A. Shepardson	474,462	May 10	937	241	59	828
Grate.....	W. W. Sweetland	479,728	July 26	2632	653	60	550
Grate.....	W. and J. C. Swindell	469,070	Feb. 16	1829	468	58	902
Grate.....	J. F. Wagner	466,640	Jan. 5	523	136	58	101
Grate.....	W. Whitworth	478,775	July 12	1087	269	60	232
Grate and mantel. Portable.....	F. L. Hart	474,655	May 10	1235	{ 315 } 316	59	886
Grate-bar.....	J. A. Duncan	474,116	May 3	362	86	59	707
Grate-bar.....	J. Montgomery	478,013	June 28	2858	{ 715 } 716	59	2044
Grate-bar and feed-water heater. Combined.....	H. D. Wendt	478,726	July 12	999	248	60	215
Grate-bar. Hollow.....	W. W. Sutcliffe	483,797	Oct. 4	413	{ 102 } 103	61	86
Grate-bar. Sectional.....	B. A. Ellison	480,568	Aug. 9	1306	327	60	844
Grate-cleaner and cinder and ash separator.....	T. Ruddell	470,212	Mar. 8	874	216	58	1277
Grate. Fire.....	M. N. Forney	472,039	Apr. 5	41	9	59	10
Grate. Fire.....	R. Gilchrist	479,089	July 19	1575	{ 394 } 395	60	335
Grate. Fire.....	O. A. Kyser	472,058	Apr. 5	71	19	59	16
Grate. Fire.....	J. H. Mehtrens	481,237	Aug. 23	2400	592	60	1084
Grate fire-guard.....	J. J. Mitchell	474,562	May 10	1099	281	59	860
Grate. Fireplace.....	W. E. Fitch	470,855	Mar. 15	1897	486	58	1493
Grate. Open fire.....	J. H. McIlvain	479,916	Aug. 2	207	52	60	623
Grate. Portable.....	D. H. Watts	483,410	Sept. 27	2422	609	60	1816
Grate. Rocker-tooth.....	G. Downing, Jr., and W. F. Hall	488,548	Dec. 27	2161	534	61	1800
Grate. Shaking.....	L. E. Jordan	486,045	Nov. 8	1368	364	61	869
Grate. Shaking.....	C. E. Mark	482,452	Sept. 13	895	217	60	1523
Grate-shelf.....	J. W. Miller	487,422	Dec. 6	317	81	61	1384
Grate. Tubular water.....	R. MacFarlane	488,170	Dec. 13	1547	328	61	1647
Grate. Ventilating.....	S. Shaw	471,575	Mar. 29	2968	{ 756 } 757	58	1709
Grater.....	E. J. Blueber	471,937	Mar. 29	3524	900	58	1814
Grater.....	I. S. Lauback	470,807	Mar. 15	1821	468	58	1468
Grater.....	I. S. Lauback	470,808	Mar. 15	1823	468	58	1468
Grater.....	G. Thorn	477,083	June 14	1341	325	59	1718
Grater and slicer. Culinary.....	B. H. Cook	469,354	Feb. 23	2257	580	58	992
Grater for culinary purposes.....	J. Wich	486,058	Nov. 8	1393	369	61	873
Grater. Nutmeg.....	F. E. Abbott	473,051	Apr. 19	1606	409	59	331
Grater. Nutmeg.....	H. G. Gilbert	484,880	Oct. 25	2126	546	61	468
Grating for jails, vaults, &c. Metallic.....	P. Hale	469,520	Feb. 23	2521	647	58	1042
Grating. Jail.....	G. L. Norrman	481,915	Aug. 30	3530	864	60	1315
Grating. Metallic.....	P. Hale	469,519	Feb. 23	2520	647	58	1042
Grave-box cover.....	I. Scott	486,943	Nov. 29	2864	739	61	1213
Grave-marker.....	J. A. Coffey	473,296	Apr. 19	2020	507	59	409
Gravel, &c. Apparatus for washing and grading.....	N. Jewett	470,681	Mar. 15	1622	421	58	1430
Gravel, ore, &c. Apparatus for cleaning and grading.....	N. Jewett	475,568	May 24	2685	681	59	1198
Gravel paths, &c. Machine for keeping in order.....	H. A. Ahner	469,382	Feb. 23	2304	593	58	1001
Gravel-screen.....	F. J. Hoyt	474,662	May 10	1250	319	59	829
Gravel-screening machine.....	F. T. Gilbert	468,134	Feb. 2	343	85	58	591
Gravel-screening machine.....	F. T. Gilbert	468,197	Feb. 2	439	109	58	610
Gravel-trains. Means for unloading.....	W. D. Stratton and J. H. Drake	482,951	Sept. 20	1686	424	60	1690
Gravel washing and grading machine.....	N. Jewett	468,247	Feb. 2	509	126	58	624
Gravity-motor.....	J. E. Carver	487,715	Dec. 13	776	199	61	1492
Gravity-motor.....	A. F. Drake and W. Wonn	483,645	Oct. 4	190	47, 48	61	39
Grease and stains. Compound for removing.....	G. S. Cox and G. M. Lewis	468,866	Feb. 16	1496	.....	58	836
Grease-extractor.....	L. Hussey and E. McCann	468,345	Feb. 9	692	{ 171 } 172	58	667
Grease, &c., from wool-washings. Recovering.....	R. B. Griffin	475,395	May 24	2403	.....	59	1146
Griddle. Cake.....	R. A. Wheeler	484,482	Oct. 18	1479	377	61	323
Gridiron.....	M. and M. Griswold, Jr.	472,537	Apr. 12	832	212	59	171
Grill-work.....	W. H. Winslow	471,161	Mar. 22	2366	605	58	1586
Grinder.....	C. Koegel	468,350	Feb. 9	697	173	58	669
Grinder.....	J. E. Trawick	482,400	Sept. 13	810	{ 194 } 195	60	1508
Grinder. Circular-knife.....	J. Mallon	468,535	Feb. 9	992	254	58	727
Grinder. Cutlery.....	D. Reed	480,035	Aug. 2	445	113	60	666
Grinder. Sickle.....	G. J. Cline	487,552	Dec. 6	520	135	61	1423
Grinder. Sickle.....	A. J. Neff	485,973	Nov. 8	1255	331	61	846
Grinder. Tool.....	J. M. Clock	476,872	June 14	991	240	59	1648
Grinder. Universal tool.....	C. M. Conradson	467,857	Jan. 26	2521	{ 639 } 640	58	502
Grinding and polishing gear-wheels. Mechanism for.....	J. Gardner, Sr., and J. A. Coburn	468,400	Feb. 9	779	193	58	685

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Grinding and polishing machine	A. Manecke	479,822	Aug. 2	72	17	60	596
Grinding attachment	P. Forg.	471,380	Mar. 22	2692	686	58	1649
Grinding cutlery and other handles. Machine for	F. C. Feicker	481,259	Aug. 23	2451	603	60	1093
Grinding cutlery or other tempered steel articles	A. Johnston	485,697	Nov. 8	831	223	61	759
Grinding-fixture	W. W. Tucker	482,212	Sept. 6	477	114	60	1428
Grinding flint, stone, bone, glaze, &c. Construction of mills for	H. Cotton	470,833	Mar. 15	1872	479	58	1478
Grinding-machine	R. J. Christy	469,772	Mar. 1	164	43, 44	58	1132
Grinding-machine	A. Fryer	483,249	Sept. 27	2153	545	60	1796
Grinding-machine	A. B. Landis	483,288	Sept. 27	2242	564	60	1812
Grinding-machine	J. Rogers	483,749	Oct. 4	340	55	61	71
Grinding-machine	W. Ross	477,067	June 14	1306	317	59	1711
Grinding-machine	D. Sweeney	466,729	Jan. 5	674	173	58	128
Grinding-machine	O. S. Walker	481,380	Aug. 23	2647	649	60	1128
Grinding machine. Tool	E. F. Ternan	467,961	Feb. 2	82	20	58	540
Grinding-machine tool-rest	D. L. Brown	483,042	Sept. 20	1828	464	60	1720
Grinding-mill	N. P. Bowsher	477,498	June 21	2019	500	59	1862
Grinding-mill	G. R. Cullingworth	478,252	July 5	308	75	60	62
Grinding-mill	L. D. Harding	475,859	May 31	3156	800	59	1303
Grinding-mill	S. Hughes	469,145	Feb. 16	1925	493	58	921
Grinding-mill	C. C. L. Lucht	482,873	Sept. 20	1554	388	60	1666
Grinding-mill	I. E. Overpeck	483,363	Sept. 27	2346	590	60	1832
Grinding-mill	A. J. Robinson	470,601	Mar. 8	1500	391	58	1397
Grinding-mill	G. Schock	484,684	Oct. 25	2131	548	61	469
Grinding-mill	D. C. Stover	471,345	Mar. 22	2633	669	58	1638
Grinding-mill	A. S. Tragethon	486,003	Nov. 8	1307	348	61	857
Grinding-mill. Roller	J. B. Allfree	467,713	Jan. 26	2296	583	58	459
Grinding-mill. Roller	D. A. Scallen	488,455	Dec. 20	2013	502	61	1756
Grinding mower-knives. Machine for	R. Dutton	481,275	Aug. 23	2477	610	60	1098
Grinding mowing-machine knives. Machine for	M. Balmes	481,886	Aug. 30	3477	852	60	1305
Grinding-pan	A. J. Taylor	485,069	Oct. 25	2432	625	61	529
Grinding the blades of rotary cylinders. Device for	A. E. Whitney	476,938	June 14	1106	267	59	1670
Grinding the teeth of harvester-sickles	D. Carrier	485,607	Nov. 8	695	183	61	731
Grinding tools. Tool-holder for	C. J. Jacobson and J. H. Stein	470,196	Mar. 8	851	209	58	1273
Grinding twist-drills. Holder for	J. H. Bergstrom	488,054	Dec. 13	1360	337	61	1609
Grinding-wheel attachment	J. H. Gütsche	478,854	July 12	1212	301	60	255
Grindstone-hanger	O. H. Peterson	486,217	Nov. 15	1655	437	61	942
Grip device for machinery. Intermittent	T. J. Reamy	485,058	Oct. 25	2417	621	61	525
Grip-tester. Pocket	C. W. McClure	468,154	Feb. 2	372	92	58	597
Grits, &c. Apparatus for purifying or sorting	C. Haggenmacher	467,987	Feb. 2	122	29, 30	58	547
Grinding-machine	J. Hope	482,947	Sept. 20	1682	423	60	1689
Grubbing-machine	C. A. King	473,191	Apr. 19	1852	466	59	375
Grubbing-machine	J. Starks	472,279	Apr. 5	423	109	59	79
Guano-distributor	C. J. Peterson	468,826	Feb. 16	1434	365	58	825
Guard:							
See Axle dust-guard. Loom shuttle-guard.							
Bedstead folding guard. Railway cattle-guard.							
Book-guard. Railway stock and cattle guard.							
Bridge-guard. Railway-surface guard.							
Car-guard. Railway-track guard.							
Car-wheel guard. Railway-track cattle-guard.							
Carriage mud-guard. Rand-guard.							
Cattle-guard. Razor-guard.							
Chimney-tiltble guard. Rein-guard.							
Door-guard. Shaft-guard.							
Dress-guard. Sidewalk-hole guard.							
Eyeglass-guard. Snow-guard.							
Fire-guard. Stallion-guard.							
Grate fire-guard. Stock-guard.							
Hub dust-guard. Telephone-guard.							
Keyhole-guard. Trousers-guard.							
Ladder-guard. Wheel-guard.							
Lamp-guard. Window-guard.							
Guard-finger	J. H. Jones	475,118	May 17	1979	502	59	1045
Guard-rail	F. W. Barrett	486,541	Nov. 22	2153	569	61	1056
Guest-call. Automatic	W. H. Perry	471,686	Mar. 29	3139	800	58	1740
Guest-call. Electric	F. Benner	481,919	Aug. 30	3535	865	60	1316
Guide-lubricator	T. W. Heermans	467,168	Jan. 19	1426	364	58	287
Guitar-bridge	T. Wolfram	474,432	May 10	886	231	59	820
Gully-trap	G. Couzens	486,177	Nov. 15	1598	423	61	931
Gum-moistener	A. Gartner	472,017	Mar. 29	3631	928	58	1836
Gum. Treatment of	G. H. Smith	468,366	Feb. 9	720	178	58	673
Gumming-machine	H. Mooney	469,583	Feb. 23	2619	672	58	1061
Gun	F. E. D. Acland and C. Holmström	472,244	Apr. 5	369	95	59	69
Gun	G. F. Fogerty	482,305	Sept. 6	629	150	60	1458
Gun	A. W. Livingston and S. E. Starrett	477,946	June 28	2756	690	59	2024

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gun.....	R. A. Steinert.....	427,586	Dec. 6	564	{ 144 145 }	61	1433
Gun. Air.....	J. C. Howe.....	483,651	Oct. 4	197	49	61	41
Gun. Automatic magazine.....	J. M. and M. S. Browning.....	471,782	Mar. 29	3302	842	58	1770
Gun-barrels. Manufacture of.....	F. Meixner.....	477,763	June 28	2461	615	59	1968
Gun-barrels to the stocks. Means for separably attaching.....	W. Mason.....	487,487	Dec. 6	420	108	61	1404
Gun-barrels to the stocks. Means for separably attaching.....	W. Mason.....	487,488	Dec. 6	422	109	61	1404
Gun-barrels to the stocks. Means for separably attaching.....	W. Mason.....	487,489	Dec. 6	424	109	61	1405
Gun-barrels to the stocks. Means for separably uniting.....	T. G. Bennett.....	487,465	Dec. 6	389	101	61	1397
Gun-barrels to the stocks. Means for separably uniting.....	T. G. Bennett.....	487,466	Dec. 6	390	101	61	1398
Gun-barrels to the stocks. Means for separably uniting.....	W. Mason.....	487,486	Dec. 6	418	108	61	1404
Gun barrels. Uniting air.....	C. J. Hamilton. (Reissue).....	11,247	June 21	2249	563	59	1908
Gun. Blow.....	W. M. Bunsen.....	477,322	June 21	1745	427	59	1809
Gun. Breakdown.....	F. A. Hollenbeck.....	481,327	Aug. 23	2567	630	60	1113
Gun. Breakdown.....	T. Woodward.....	481,290	Aug. 23	2510	617	60	1102
Gun. Breech-loading.....	J. B. G. A. Canet.....	470,284	Mar. 8	991	245	58	1301
Gun. Breech-loading.....	J. B. G. A. Canet.....	474,288	May 3	619	{ 153 154 }	59	757
Gun. Breech-loading.....	D. E. Grant.....	480,259	Aug. 9	820	{ 210 211 }	60	750
Gun. Breech-loading.....	A. C. Koerner.....	466,567	Jan. 5	415	{ 106 107 }	58	80
Gun. Breech-loading.....	C. B. Withington.....	467,217	Jan. 19	1495	383	58	301
Gun. Breech-loading bolt.....	W. D. Forbes.....	466,779	Jan. 12	763	198	58	155
Gun. Breech-loading magazine.....	A. Burgess.....	476,246	June 7	21	5	59	1443
Gun. Breech-loading quick-firing.....	C. Holmström.....	469,814	Mar. 1	239	60, 61	58	1148
Gun carriage or mounting.....	J. B. G. A. Canet.....	467,855	Jan. 26	2518	638	58	501
Gun carriage or mounting.....	J. B. G. A. Canet.....	470,036	Mar. 1	586	146	58	1212
Gun carriage or mounting.....	J. B. G. A. Canet.....	470,287	Mar. 8	1007	257	58	1304
Gun carriage or mounting.....	J. H. R. Whinfield and J. Horne.....	478,899	July 12	1269	{ 314 315 316 }	60	266
Gun-cleaner.....	W. H. Ferris.....	481,858	Aug. 30	3433	843	60	1296
Gun-cleaner.....	C. W. Wunderlich.....	484,487	Oct. 18	1485	378	61	324
Gun-cleaning device.....	G. H. Garrison.....	471,477	Mar. 22	2843	724	58	1677
Gun-cotton. Apparatus for making.....	J. Beck and O. A. Nenninger.....	483,709	Oct. 4	279	69	61	59
Gun indicating device.....	H. Elbe.....	477,187	June 14	1501	{ 307 308 246 247 248 249 }	59	1751
Gun-loading apparatus.....	J. B. G. A. Canet.....	470,285	Mar. 8	994	{ 250 251 252 253 254 255 }	58	1302
Gun-lock.....	T. J. Lockwood.....	468,002	Feb. 2	144	35	58	552
Gun-lock.....	T. J. Lockwood.....	468,003	Feb. 2	147	35	58	552
Gun-lock.....	T. J. Lockwood.....	468,004	Feb. 2	150	36	58	553
Gun-lock.....	H. Pieper.....	488,366	Dec. 20	1872	{ 468 469 }	61	1727
Gun-lock.....	G. W. Werner.....	468,853	Feb. 16	1475	377	58	832
Gun. Machine.....	I. N. Archbold.....	476,590	June 7	516	130	59	1545
Gun. Machine.....	J. M. and M. S. Browning.....	471,783	Mar. 29	3304	{ 842 843 }	58	1770
Gun. Machine.....	J. M. and M. S. Browning.....	471,784	Mar. 29	3309	843	58	1772
Gun. Machine.....	F. M. Garland.....	475,276	May 17	2214	{ 566 567 568 }	59	1093
Gun. Machine.....	F. M. Garland.....	479,799	Aug. 2	37	9, 10	60	589
Gun. Magazine.....	J. M. Browning.....	486,274	Nov. 15	1759	463	61	965
Gun. Magazine.....	K. Krnka.....	475,061	May 17	1884	{ 478 479 }	59	1027
Gun. Magazine.....	F. W. Lantz.....	477,128	June 14	1401	{ 340 341 }	59	1730
Gun. Magazine.....	A. Lindner.....	483,229	Sept. 27	2125	538	60	1791
Gun. Magazine.....	W. E. Loomis.....	477,666	June 28	2308	577	59	1937
Gun. Magazine.....	A. Mercer.....	477,764	June 28	2462	{ 615 616 }	59	1968
Gun. Magazine.....	T. J. Thorp.....	473,370	Apr. 19	2147	{ 538 539 }	59	434
Gun. Magazine air.....	H. F. Hubbard.....	471,176	Mar. 22	2388	609	58	1590
Gun. Magazine breech-loading.....	A. A. Clive.....	472,251	Apr. 5	382	100	59	71
Gun. Magazine breech-loading.....	D. S. West.....	478,728	July 12	1007	349	60	216
Gun. Magazine spring.....	O. H. Arno.....	473,808	Apr. 26	2861	718	59	593
Gun. Multicharge.....	J. R. Haskell.....	484,007	Oct. 11	735	184	61	165
Gun. Multicharge.....	J. R. Haskell.....	484,010	Oct. 11	740	{ 185 186 }	61	166
Gun. Multicharge.....	J. R. Haskell.....	484,011	Oct. 11	742	186	61	167
Gun. Multicharge or accelerating.....	J. R. Haskell.....	484,009	Oct. 11	737	{ 184 185 }	61	166
Gun. Quick-fire.....	A. Odokolek.....	486,938	Nov. 29	2848	{ 737 738 }	61	1210
Gun. Rapid-firing.....	R. Bowers.....	476,242	June 7	11	2, 3	59	1440
Gun. Recoil-operated magazine.....	O. H. Bennett.....	478,214	July 5	222	56	60	46
Gun. Recoil-operated magazine.....	R. Mallen.....	472,377	Apr. 5	581	149	59	109

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Gun. Repeating air.	E. E. Bailey	487,169	Nov. 29	3210	822	61	1282
Gun. Repeating breech-loading.	W. H. Ostrander. (Reissue)	11,295	Dec. 13	1554	390	61	1649
Gun-rest	C. W. Unger	475,640	May 24	2790	707	59	1920
Gun. Revolving magazine.	T. Wilson	481,452	Aug. 23	2761	679	60	1150
Gun-rod coupling	W. N. Beardsley and A. D. Moulton	468,530	Feb. 9	984	252	58	725
Gun-rod. Jointed	W. N. Beardsley	468,529	Feb. 9	983	251	58	725
Gun-rod. Veneered	A. Sandberg	480,746	Aug. 16	1597	400	60	915
Gun-sight	W. W. Harris	468,803	Feb. 16	1400	355	58	818
Gun. Spring.	J. W. Atkinson	477,982	June 28	2799	701	59	2034
Gun. Spring air.	W. F. Markham	473,633	Apr. 26	2601	654	59	542
Gun. Spring air.	W. F. Markham	483,159	Sept. 27	2016	509	60	850
Gun. Spring air.	G. W. Sage	477,385	June 21	1845	454	59	1829
Gun-stock and cushion-plate. Extension	E. Jones and R. Townsend	480,587	Aug. 9	1340	334	60	1769
Gun-stock recoil attachment	E. Townsend	488,855	Dec. 27	2648	656	61	1897
Gun-swab	G. H. Garrison	466,331	Nov. 15	1837	483	61	980
Guns. Apparatus for moderating the recoil of.	L. Dénoyelle.	481,647	Aug. 30	3075	750 751	60	1227
Guns. Apparatus for pointing	C. Martin	472,895	Apr. 12	1342	344 345 330	59	269
Guns. Apparatus for working disappearing.	A. Noble and C. H. Murray	484,374	Oct. 11	1295	331 332	61	276
Guns. Appliance for sighting	L. M. von Markhof	470,942	Mar. 15	2022	518	58	1507
Guns. Automatic ejector mechanism for breakdown.	C. B. Withington	485,313	Nov. 1	236	65	61	620
Guns. Automatic shell-ejector for breech-loading	M. A. Keller	488,316	Dec. 20	1788	449 450	61	1710
Guns. Cartridge-holder for magazine	P. Mauser	482,376	Sept. 13	778	187	60	1501
Guns. Cartridge-stop for magazine	P. Mauser	476,290	June 7	91	21	59	1456
Guns. Charge-indicator for gas	J. S. Wallace	480,156	Aug. 2	631	160	60	703
Guns. Ejector mechanism for breakdown	T. Perkes	467,300	Jan. 19	1629	414	58	326
Guns. Ejector mechanism for breakdown	T. Perkes	467,301	Jan. 19	1630	415	58	326
Guns. Ejector mechanism for breech-loading	T. Perkes	476,485	June 7	401	93	59	1515
Guns. Feed mechanism for machine	J. G. Aocles	487,238	Dec. 6	1	2	61	1321
Guns. Lock and ejector mechanism for breakdown	D. M. Lefever	475,873	May 31	3174	805 806	59	1307
Guns. Mechanism for quick-firing	H. Schneider	470,449	Mar. 8	1291	330 331	58	1354
Guns. Mounting for turret and other.	J. B. G. A. Canet	474,290	May 3	628	157 158 159	59	759
Guns. Obturator for breech-loading.	L. V. Benét	466,320	Jan. 5	8	3	58	4
Guns. Operating submarine	H. Berdan	478,215	July 5	226	56, 57	60	47
Guns. Safety-lock for hammerless.	R. L. Palmer	476,064	May 31	3473	876	59	1368
Guns. Safety-trigger for breech-loading	A. Storer	467,524	Jan. 26	1986	504	58	402
Guns. Safety-trigger for breech-loading bolt.	P. Mauser	488,694	Dec. 27	2402	595	61	1847
Guns. Shell-extractor for bolt.	P. Mauser	467,180	Jan. 19	1443	368	58	290
Guns. Shell-extractor for bolt.	P. Mauser	477,671	June 28	2317	579	59	1939
Gunner's shield	J. E. Emerson and T. Midgley	478,506	July 5	684	166	60	135
Gunnery. Instrument for determining the angle of lead in	L. M. von Markof	467,256	Jan. 19	1558	397	58	313
Gutter-former	M. C. Hungerford	475,318	May 24	2376	586	59	1122
Gutter-protector	J. Gogerty	486,868	Nov. 29	2703	705	61	1182
Gutter. Stable	A. G. Wilber, Jr.	487,548	Dec. 6	515	134	61	1423
Gymnasium-locker.	T. Peterson	471,138	Mar. 22	2325	598	58	1579
Gymnastic apparatus	C. C. Neily	481,807	Aug. 30	3352	820	60	1281
Gymnastic apparatus	R. Wright	478,833	July 12	1188	294 295	60	250
Gypsum. Composition for retarding the solidification of calcined	E. Watson	472,322	Apr. 5	493	.....	59	93
Gypsum. Hardening objects made of crude	C. Reimer	479,019	July 19	1467	.....	60	315
Habit. Riding	W. Shingleton	488,776	Dec. 27	2517	626	61	1871
Hair-clipper	C. Carleton	481,254	Aug. 23	2444	602	60	1092
Hair-clipper	J. K. Priest	470,597	Mar. 8	1494	389	58	1396
Hair-clipper	J. W. Smith	481,977	Sept. 6	85	22	60	1351
Hair clipper and shears	J. K. Priest	478,461	July 5	614	149	60	121
Hair-clipper handle	W. Clark	486,083	Nov. 15	1434	379	61	900
Hair-curler	J. S. Wertsbaugher	473,101	Apr. 19	1677	425	59	344
Hair-curling machine	J. A. Murphy	480,605	Aug. 9	1369	340	60	855
Hair-dressing device	J. M. Sooshny	469,191	Feb. 16	1998	510	58	935
Hair for combing. Machine for preparing	J. A. Murphy	467,043	Jan. 12	1196	302 303	58	235
Hair. Manufacturing curled	P. Voll, Jr.	486,593	Nov. 22	2242	588	61	1073
Hair-pin	J. F. Chase	483,832	Oct. 4	468	117	61	96
Hair-waver	M. L. Scelley	476,824	June 14	916	224	59	1633
Hair waving or crimping device	E. Gaudin	472,449	Apr. 5	691	176	59	130
Halter	J. C. Averill	483,594	Oct. 4	117	29	61	25
Halter	A. E. Chambers, Jr.	477,644	June 28	2275	570	59	1930
Halter	N. Gibbons	487,145	Nov. 29	3172	813	61	1274
Halter	H. F. Hutton	485,278	Nov. 1	184	54	61	611
Hame	A. M. Brown and D. S. King	466,768	Jan. 12	740	192	58	151
Hame	O. Devoll	470,993	Mar. 15	2108	542	58	1524
Hame	E. L. Howe	475,863	May 31	3162	802	59	1305
Hame	W. H. Johnson and O. J. Smith	480,663	Aug. 9	1470	366	60	875
Hame	J. H. Kuisley	470,939	Mar. 15	2019	517	58	1507
Hame	F. X. Perry	472,270	Apr. 5	411	106	59	77
Hame	J. F. Pre	487,157	Nov. 29	3192	817	61	1278
Hame	W. H. Simmons	482,656	Sept. 13	1206	294	60	1584
Hame	J. Swigert	485,996	Nov. 8	1296	344	61	855
Hame and trace connector	W. B. Nichols	471,188	Mar. 22	2406	612	58	1593
Hame-clip	J. Scott	484,053	Oct. 11	793	201	61	178
Hame-clip section	E. D. Cole	478,569	July 12	782	191	60	170
Hame-fastener	R. G. Armstrong	481,725	Aug. 30	3210	784	60	1253
Hame-fastener	E. Beaubien	484,283	Oct. 11	1159	295	61	249
Hame-fastener	J. Jagells	470,049	Mar. 1	606	151	58	1217

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hammer-fastener	R. Lambert	484,327	Oct. 11	1232	314	61	262
Hammer-fastener	G. M. Roat	485,751	Nov. 8	918	246	61	778
Hammer-fastener	C. A. Smith	486,903	Nov. 29	2794	725	61	1200
Hammer-fastener	J. H. Snyder	489,633	Aug. 9	1419	354	60	866
Hammer-fastener	J. Stretch and T. M. Blackwell	475,353	May 31	3308	834	59	1333
Hammer-staple. Adjustable	J. G. and W. H. Haglock	483,111	Sept. 20	1931	489	60	1742
Hammer	A. Chambers	468,191	Feb. 2	432	107	58	609
Hammer	J. H. Fredericks	470,889	Mar. 15	1944	497	58	1493
Hammer	G. H. McGown	487,635	Dec. 6	640	164	61	1448
Hammer. Brush	C. Holden	470,570	Mar. 8	1457	378	58	1387
Hammer. Drop	F. W. Thompson	488,620	Dec. 27	2275	564	61	1823
Hammer for forging car-wheel	J. Parkinson	478,631	July 12	869	214	60	188
Hammer. Granite	P. Denham	469,040	Feb. 16	1790	{ 457 458 }	58	894
Hammer-handles. Locking means for	H. A. Brinton	468,784	Feb. 16	1375	347	58	813
Hammer. Magazine tack	A. T. Lewis	472,374	Apr. 5	576	148	59	108
Hammer. Pneumatic	G. Glossop	485,498	Nov. 1	529	140	61	680
Hammer. Power	A. Beaudry	487,692	Dec. 6	738	189	61	1466
Hammer. Power	F. C. Brooksbank	485,168	Nov. 1	14	4	61	576
Hammer. Power	F. C. Brooksbank	485,169	Nov. 1	16	5	61	576
Hammer. Power	J. Canning	484,775	Oct. 25	1952	498	61	433
Hammer. Power	J. Evans	486,772	Nov. 22	2535	{ 661 662 }	61	1131
Hammer. Power	W. R. Jenkins	466,790	Jan. 12	780	203	58	158
Hammer. Power	W. H. Law	477,559	June 21	2116	526	59	1883
Hammer. Power	J. B. Sweeney and R. W. Laird	477,159	June 14	1451	356	59	1740
Hammer. Power	S. Trethewey	482,988	Sept. 20	1743	440	60	1702
Hammer. Power	G. E. Tuffley	467,565	Jan. 26	2068	522	58	416
Hammer. Stone-dressing	G. McDonald	477,017	June 14	1224	297	59	1695
Hammer. Tack	W. Jacoby	470,156	Mar. 1	762	190	58	1247
Hammers. Nail or tack holding attachment for	J. F. Munn and J. P. W. Rowe	469,770	Mar. 1	59	17	58	1110
Hammock-bodies. Producing	A. O. Rood	487,857	Dec. 13	1026	257	61	1542
Hammock-frame. Folding	H. G. Else	488,272	Dec. 20	1716	432	61	1697
Hammock-spreader	I. E. Palmer	468,576	Feb. 9	1055	268	58	739
Hammock-spreader	I. E. Palmer	469,869	Mar. 1	328	84	58	1165
Hammock-stretcher	A. C. Knight	483,930	Oct. 4	609	154	61	126
Hammock-swinging apparatus	C. Washburn	483,753	Oct. 4	345	86	61	72
Hammocks. Woven valance for	I. E. Palmer	474,997	May 17	1789	453	59	1008
Hand-elevator	H. G. Zoschnick	482,054	Sept. 6	215	51	60	1377
Hand-holr cover	A. F. Hall	471,051	Mar. 15	2184	562	58	1539
Hand-press. Domestic	J. W. Condon	468,023	Feb. 2	181	44	58	559
Hand-rake	T. Coldwell	481,895	Aug. 30	3495	856	60	1308
Hand-rest	E. A. Castellaw	468,082	Feb. 2	260	63	58	575
Hand-rest	E. E. Frederick	467,991	Feb. 2	128	31	58	548
Hand-sprinkler	D. Stevens	466,633	Jan. 5	511	132	58	99
Handoff	H. W. Kahle	470,869	Mar. 15	1915	490	58	1487
Handkerchief-holder. Lady's	H. C. Kennedy	486,673	Nov. 22	2374	621	61	1099
Handle:							
See Adjustable handle. Implement-handle.							
Auger-handle. Knife-handle.							
Basket-handle. Latch-handle.							
Bell-handle. Pan-handle.							
Bicycle-handle. Pick-handle.							
Brake-handle. Pump-handle.							
Brush-handle. Saw-handle.							
Casket-handle. Tea-pot and coffee-pot handle.							
Coffin-handle. Tool-handle.							
Crank-handle. Tool-handle.							
Handle	C. H. Maschmeyer	485,846	Nov. 8	1044	279	61	803
Handle	D. A. and H. C. Moore	483,466	Sept. 27	2487	626	60	1860
Handle	N. H. Prouty	488,679	Dec. 27	2380	589	61	1843
Handle	J. B. Schroder	479,176	July 19	1715	430	60	361
Handle attachment for shovels, hoes, &c	L. Gayon	474,121	May 3	366	88	59	708
Handle for brooms, umbrellas, dippers, &c	D. N. Bryant	468,639	Feb. 9	1140	291	58	755
Handle for tools and other implements	C. H. Gurney	466,678	Jan. 5	582	150	58	113
Handle for utensils	F. W. Wood and J. F. Bingham	487,688	Dec. 6	734	188	61	1466
Handle for washboilers, &c	J. I. Flanagan	470,888	Mar. 15	1944	497	58	1492
Handle for washboilers	J. I. Flanagan	479,588	July 26	2390	596	60	506
Handle for wrenches or other tools	F. W. Simmons	472,556	Apr. 12	855	219	59	177
Handle protector. Pick	G. M. Newton	485,977	Nov. 8	1260	332	61	847
Handle. Vessel	F. Haberman and E. Sifferlen	475,216	May 17	2121	537	59	1074
Handles. Device for forming the ends of	J. A. Aiken	476,220	May 31	3743	{ 945 946 }	59	1419
Handles. Form for holding shovel	W. H. Johnson	483,114	Sept. 20	1935	490	60	1742
Hanger:							
See Arc-light hanger. Gate-hanger.							
Cable-hanger. Grindstone-hanger.							
Coat-hanger. Lamp-hanger.							
Cloak-hanger. Mail-bag hanger.							
Curtain-hanger. Pipe-hanger.							
Door-hanger. Picture-hanger.							
Eaves-trough hang-er. Pipe-hanger.							
Electric-light hang-er. Shafting-hanger.							
Electric-light hang-er. Tobacco-hanger.							
Electric-wire hanger. Trolley-wire hanger.							
Electric-wire hanger. Trousers-hanger.							
Garment-hanger.							
Hanger	J. G. Duke	479,254	July 19	1832	460	60	384
Harbor	R. H. F. and N. H. Sewall	479,309	July 19	1911	{ 477 478 }	60	399
Harmonica	L. G. Lawrence	478,514	July 5	696	168	60	138
Harmonica	O. Meinel	483,160	Sept. 27	2017	510	60	1770
Harness	B. F. Baker	487,900	Dec. 13	1090	{ 272 273 }	61	1554

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Harness.	R. Condon	485,258	Nov. 1	157	45, 46	61	605
Harness.	J. C. Connell	483,540	Oct. 4	37	9	61	10
Harness.	P. D. Derickx	468,796	Feb. 16	1391	352	58	816
Harness.	W. A. Hunter	476,797	June 14	869	214	59	1623
Harness.	T. J. Magruder	467,037	Jan. 12	1183	299	58	233
Harness.	A. Mendel	477,378	June 21	1834	450	59	1826
Harness.	W. H. Violet	468,213	Feb. 2	460	114	58	615
Harness.	O. A. Willyard	475,911	May 31	3242	819	59	1320
Harness.	O. A. Willyard	475,912	May 31	3243	819	59	1320
Harness attachment.	J. W. McNeill	478,124	July 5	68	18	60	15
Harness attachment.	T. S. Moodie	475,282	May 17	2225	571	59	1096
Harness. Back-band hook for	E. C. Lelie	468,666	Feb. 9	1188	303	58	765
Harness-check safety-loop	T. B. Mayell	474,845	May 17	1549	395	59	960
Harness-girth	I. B. Ingle	471,554	Mar. 29	2941	748	58	1704
Harness. Hanger for swinging	R. G. Armstrong	481,627	Aug. 30	3048	744	60	1222
Harness-hook	Q. V. P. Day	472,263	Apr. 12	1292	332	59	258
Harness-loop	H. H. Baker, Jr.	468,932	Feb. 16	1602	406	58	857
Harness-machine	C. J. Cooper	485,260	Nov. 1	159	46	61	606
Harness-machine	G. Steinbach and H. Shafer	485,065	Oct. 25	2427	624	61	527
Harness ornament	J. Paffner and J. Kriebs	473,079	Apr. 19	1645	419	59	338
Harness-pad	E. L. McClain	466,796	Jan. 12	788	204	58	160
Harness-pad	E. L. McClain	486,679	Nov. 22	2322	623	61	1101
Harness-pad	J. S. Powell	470,917	Mar. 15	1966	508	58	1500
Harness-pad	E. A. Stephens	485,305	Nov. 1	223	63	61	618
Harness-pad	W. D. Underwood	481,289	Aug. 23	2509	617	60	1102
Harness. Pad-screw for	C. B. Waterhouse	466,389	Jan. 5	124	35	58	26
Harness. Plow	A. G. and J. C. Cox and J. B. Carroll	470,549	Mar. 8	1431	373	58	1382
Harness. Safety	J. T. Smith	486,238	Nov. 15	1688	447	61	949
Harness-snap	T. V. Wallace	489,885	Sept. 20	1584	398	60	1670
Harness. Strap-attaching device for	T. J. Magruder	478,876	July 12	1235	306	60	260
Harness-support	J. Leiminger	479,947	Aug. 2	268	66	60	633
Harness-suspending device	L. Townsend	488,854	Dec. 27	2647	655	61	1897
Harp	G. B. Durkee and D. Lanterman	485,737	Nov. 8	903	242	61	774
Harp	J. Rath	485,354	Nov. 1	317	85	61	637
Harp. Orchestral pedal	G. W. Ellsworth	471,470	Mar. 22	2834	721	58	1675
Harrow	N. Anderson	485,677	Nov. 8	804	214	61	754
Harrow	C. A. Anderson, A. W. and F. D. England.	483,317	Sept. 27	2229	575	60	1820
Harrow	P. Blaker	486,925	Nov. 29	2830	732	61	1207
Harrow	A. F. Brown	486,207	Nov. 15	1638	433	61	939
Harrow	J. W. Cason	482,425	Dec. 20	1969	492	61	1746
Harrow	O. J. Childs	486,082	Nov. 15	1432	378	61	900
Harrow	G. M. Clark	466,771	Jan. 12	744	193	58	151
Harrow	L. S. Flatau	471,379	Mar. 22	2690	666	58	1649
Harrow	E. P. Ford and A. B. Moffitt	485,623	Nov. 8	718	188	61	735
Harrow	R. B. Graves and D. F. Merritt	478,960	July 12	1365	336	60	284
Harrow	W. W. Green	478,259	July 5	319	77	60	64
Harrow	J. M. Grisham	469,060	Feb. 16	1818	464	58	899
Harrow	J. W. Hays	477,541	June 21	2090	520	59	1878
Harrow	W. K. Hoagland	471,384	Mar. 22	2702	679	58	1651
Harrow	J. I. Hoke	473,155	Apr. 19	1778	449	59	362
Harrow	W. J. Hyde	473,754	Apr. 26	2781	699	59	577
Harrow	G. Jernberg	466,497	Jan. 5	306	77	58	58
Harrow	C. H. Kading	472,129	Apr. 5	191	51	59	35
Harrow	C. La Dow	482,942	Dec. 27	2787	687	61	1927
Harrow	C. La Dow	488,943	Dec. 27	2790	688	61	1927
Harrow	F. C. Merrill	471,719	Mar. 29	3195	814	58	1750
Harrow	A. Mestayer	476,020	May 31	3403	859	59	1352
Harrow	V. E. Randall	484,047	Oct. 11	789	199	61	176
Harrow	J. S. Rayl	474,692	May 10	1301	333	59	899
Harrow	W. Richards, W. Garwood, and H. N. Rosebrook.	482,501	Sept. 27	2540	638	60	1870
Harrow	J. H. Richmond	470,401	Mar. 8	1211	310	58	1339
Harrow	J. H. Rouse	468,551	Feb. 9	1013	259	58	731
Harrow	W. Sobey	471,032	Mar. 15	2160	555	58	1534
Harrow	W. Sobey	485,020	Oct. 25	2368	609	61	515
Harrow	G. T. Songer	478,649	July 12	894	221	60	193
Harrow	W. Strait	473,786	Apr. 26	2845	714	59	589
Harrow	A. H. and P. E. Teschner	479,476	July 26	2230	560	60	476
Harrow	A. C. Wickham	468,081	Feb. 2	259	63	58	574
Harrow	A. Wilfert	473,041	Apr. 19	1593	405	59	329
Harrow and corn-planter. Combined	F. B. Harvey and B. F. Hartman	476,141	May 31	3599	909	59	1392
Harrow and cultivator	L. S. Flatau	471,378	Mar. 22	2687	685	58	1649
Harrow and cultivator	T. J. Hubbell	484,739	Oct. 18	1883	480	61	406
Harrow and cultivator. Combined	J. C. Burruss	469,123	Feb. 16	1895	485	58	915
Harrow and cultivator. Combined	N. P. Lewis	487,848	Dec. 13	1005	253	61	1538
Harrow and cultivator. Side	T. J. Croft	480,174	Aug. 2	602	169	60	708
Harrow and cultivator. Wheel	O. R. Baldwin	488,597	Dec. 27	2246	557	61	1818
Harrow and pulverizer blade	R. L. Lukens	484,969	Oct. 25	2275	587	61	498
Harrow and roller	F. B. Harvey	473,746	Apr. 26	2772	697	59	575
Harrow and roller. Combined	F. B. Harvey	471,341	Mar. 22	2626	667	58	1636
Harrow and seeder. Combined	W. H. Nauman	477,441	June 21	1927	475	59	1844
Harrow and seeder. Disk	G. W. Packer	470,363	Mar. 8	1148	294	58	1328
Harrow attachment. Disk	W. E. Moffitt	467,182	Jan. 19	1447	369	58	291
Harrow cleaner. Disk	C. Merrick	467,862	Jan. 26	2532	642	58	504

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Harrow-disk	E. D. Arnold	488,514	Dec. 20	2106	523	61	1775
Harrow. Disk	R. W. Hardie	473,115	Apr. 19	1712	434	59	349
Harrow. Disk	R. W. Hardie	478,596	July 12	822	203	60	179
Harrow. Disk	A. G. Hill	487,622	Dec. 6	621	159	61	1445
Harrow. Disk	R. P. Howard	472,656	Apr. 12	994	257	59	202
Harrow. Disk	A. Kaburick	470,760	Mar. 15	1742	449	58	1453
Harrow. Disk	F. Kaburick	470,761	Mar. 15	1743	449	58	1454
Harrow. Disk	T. Maxon	472,710	Apr. 12	1085	278	59	218
Harrow. Disk	M. C. Moore	468,395	Feb. 9	769	191	58	683
Harrow. Disk	C. S. Sharp	485,666	Nov. 8	788	210	61	750
Harrow. Disk	H. Wiard and H. M. Burdick	476,435	June 7	325	74	59	1500
Harrow for listed corn	R. Lyons	481,634	Aug. 30	3058	746	60	1224
Harrow or cultivator	W. H. Baker and B. A. Oborn	478,072	June 28	2950	737	59	2061
Harrow. Riding	R. L. Kirby	473,933	May 3	81	16	59	652
Harrow. Sod-cutting	F. H. Long	484,440	Oct. 18	1412	360	61	310
Harrow. Spade	J. Drader and A. B. McKay	487,322	Dec. 6	139	40, 41	61	1349
Harrow-spreader	L. C. Evans	488,352	Dec. 20	1851	463	61	1723
Harrow. Spring-tooth	A. Bostick	470,330	Mar. 8	1197	306	58	1336
Harrow. Spring-tooth	J. W. Brant	480,705	Aug. 16	1541	334	60	902
Harrow. Spring-tooth	H. W. Eisenhart	485,493	Nov. 1	522	138	61	678
Harrow. Spring-tooth	F. H. Ferris	485,324	Nov. 1	265	72	61	626
Harrow. Spring-tooth	D. C. Markham	488,714	Dec. 27	2428	602	61	1852
Harrow. Spring-tooth	W. E. Smith	486,796	Nov. 22	2572	671	61	1139
Harrow. Spring-tooth	F. Van Patten	472,185	Apr. 5	275	72	59	52
Harrow. Sulky spring-tooth	T. G. Cook	473,141	Apr. 19	1756	443	59	358
Harrow-teeth. Machine for bending	H. M. Brinkman	472,960	Apr. 12	1445	369	59	288
Harrow-tooth fastening	A. O. Bement	486,072	Nov. 15	1418	375	61	897
Harrow-tooth fastenlog	E. S. Brooks	468,446	Feb. 9	838	212	58	697
Harrow-tooth. Spring	A. V. Ryder	474,461	May 10	936	240	59	828
Harrows. Fastening for spring-tooth	A. F. Molitor	483,852	Oct. 4	496	123	61	103
Harrows. Planter attachment for disk	J. E. Gallup	482,638	Sept. 13	1179	285	60	1578
Harvester	E. C. Banker	467,222	Jan. 19	1504	385	58	303
Harvester	J. E. Deering	473,300	Apr. 19	2025	508	59	410
Harvester	J. M. Doddridge	476,226	May 31	3754	948	59	1421
Harvester	M. Kimberlin	482,924	Sept. 20	1640	412	60	1681
Harvester	M. H. Melrose	482,968	Sept. 20	1711	432	60	1696
Harvester	J. T. Mider	481,410	Aug. 23	2696	662	60	1137
Harvester	J. F. Steward	476,326	June 7	152	37	59	1467
Harvester	J. F. Steward	477,709	June 28	2374	593	59	1952
Harvester and binder	J. M. Trier	481,706	Aug. 30	3170	774	60	1245
Harvester and feed-cutter. Corn	C. C. Fenno	473,111	Apr. 19	1709	432	59	348
Harvester and shocker. Corn	G. G. Kimmell	481,036	Aug. 16	2039	508	60	1002
Harvester attachment	P. H. Botof	475,434	May 24	2466	628	59	1156
Harvester. Bean	J. F. King and S. B. Stokely	479,600	July 26	2406	599	60	509
Harvester. Bean	W. H. Wilder	479,480	July 26	2242	562	60	478
Harvester-binder	J. Lund	485,956	Nov. 8	1229	324	61	840
Harvester-binder sheaf-carrier	L. M. Jones and J. K. Wedlake	480,468	Aug. 9	1163	292	60	814
Harvester. Broom-corn	G. W. Peterson	485,711	Nov. 8	859	230	61	765
Harvester bundle-carrier	L. W. Ellis	480,944	Aug. 16	1894	474	60	975
Harvester bundle-carrier	B. F. Stewart	471,737	Mar. 29	3228	821	58	1755
Harvester conveyer-gearing	G. Schubert	486,900	Nov. 29	2787	723	61	1199
Harvester-conveyers. Gear-shifting mechanism for	G. Schubert	469,275	Feb. 23	2137	549	58	968
Harvester. Corn	W. G. Atwood	471,632	Mar. 29	3053	777	58	1724
Harvester. Corn	R. J. Aultman	476,595	June 7	558	133	59	1546
Harvester. Corn	J. Bardill	485,522	Nov. 1	559	149	61	687
Harvester. Corn	E. W. Belf and J. W. Moser	466,765	Jan. 12	734	150	58	150
Harvester. Corn	E. B. Bowen	474,359	May 10	774	191	59	797
Harvester. Corn	A. B. Clippinger	479,916	Apr. 12	1373	352	59	276
Harvester. Corn	C. D. Courtwright and C. A. Powell	473,298	Apr. 19	2022	508	59	410
Harvester. Corn	R. W. Ermeling	478,849	July 12	1207	300	60	254
Harvester. Corn	G. A. Farrall	482,551	Sept. 13	1062	258	60	1556
Harvester. Corn	I. N. Fickes	487,558	Dec. 6	528	136	61	1425
Harvester. Corn	P. J. Garber	471,475	Mar. 22	2841	723	58	1676
Harvester. Corn	M. C. Gates	474,007	May 3	192	45	59	675
Harvester. Corn	D. H. Glidden	477,050	June 14	1280	311	59	1703
Harvester. Corn	D. W. Hanson and J. S. Farnham	482,945	Sept. 20	1675	421	60	1688
Harvester. Corn	C. P. Haskell	473,926	May 3	63	13	59	648
Harvester. Corn	J. T. Hess	479,165	July 19	1691	423	60	357
Harvester. Corn	W. C. Houser	473,840	Apr. 26	2911	731	59	603
Harvester. Corn	P. Kesling	469,920	Mar. 1	404	101	58	1179
Harvester. Corn	A. V. Kiser	486,255	Nov. 15	1723	454	61	956
Harvester. Corn	L. V. Lewis and S. S. Allen	477,132	June 14	1409	342	59	1732
Harvester. Corn	G. W. Long	467,110	Jan. 12	1320	334	58	260
Harvester. Corn	J. W. Miller	470,069	Mar. 1	637	335	58	1222

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & C.	Vol.	Page.
Harvester. Corn.....	H. Morrison	482,186	Sept. 6	438	105	60	1421
Harvester. Corn.....	J. W. Parker	471,889	Mar. 29	3457	882	55	1801
Harvester. Corn.....	A. S. Peck	466,512	Jan. 5	328	82	55	63
Harvester. Corn.....	G. and M. C. Pendleton	469,174	Feb. 16	1963	502	58	929
Harvester. Corn.....	H. C. and A. E. Peoples	482,065	Sept. 6	229	55, 56	60	1380
Harvester. Corn.....	W. M. Piatt	474,761	May 10	1400	{ 354 355 }	59	919
Harvester. Corn.....	G. W. Quinn	471,139	Mar. 22	2327	{ 598 599 }	58	1579
Harvester. Corn.....	J. N. Reimers and W. M. Schneekloth.	470,598	Mar. 8	1496	{ 389 390 }	58	1396
Harvester. Corn.....	R. S. Rinker	481,059	Aug. 16	2090	{ 521 522 }	60	1012
Harvester. Corn.....	J. F. Seiberling	468,832	Feb. 16	1441	{ 367 368 }	58	826
Harvester. Corn.....	J. J. Singley	486,132	Nov. 15	1536	{ 405 406 }	61	919
Harvester. Corn.....	A. Stark	480,975	Aug. 16	1955	{ 489 490 }	60	986
Harvester. Corn.....	F. Stoffen	473,095	Apr. 19	1668	424	59	342
Harvester. Corn.....	J. F. Steward	484,561	Oct. 18	1596	{ 405 406 }	61	347
Harvester. Corn.....	C. F. Stubblefield	475,223	May 17	2129	538	59	1076
Harvester. Corn.....	J. B. Tosh	477,317	June 21	1738	426	59	1808
Harvester. Corn.....	E. E. Witter	470,609	Mar. 8	1510	{ 394 395 396 }	58	1400
Harvester. Corn.....	G. M. Woodruff	483,755	Oct. 4	347	87	61	72
Harvester. Corn.....	W. A. Young	486,014	Nov. 8	1324	{ 351 352 }	61	860
Harvester. Corn and cane.....	M. M. Reeves	466,835	Jan. 12	847	{ 217 218 }	58	171
Harvester. Corn or cane.....	R. B. Robbins	475,418	May 24	2441	{ 622 623 }	59	1152
Harvester. Cornstalk.....	W. F. Williams	476,849	June 14	954	{ 232 233 }	59	1641
Harvester. Cotton.....	G. Beekman	482,156	Sept. 6	386	91	60	1411
Harvester. Cotton.....	J. F. Cunningham, Sr., and W. W. Dingle.	471,074	Mar. 15	2225	{ 570 571 }	58	1547
Harvester. Cotton.....	W. E. Foote	475,979	May 31	3348	844	59	1340
Harvester. Cotton.....	W. Hodge	469,568	Feb. 23	2598	666	58	1057
Harvester. Cotton.....	A. G. Perry	480,131	Aug. 2	593	{ 151 152 }	60	695
Harvester. Cotton.....	G. N. Todd	468,373	Feb. 9	730	181	58	674
Harvester. Cotton.....	G. H. Zempfer, R. A. Manning, and G. W. Overall.	483,824	Oct. 4	457	114	61	94
Harvester cutting apparatus.....	G. Mischler	479,568	July 26	2365	590	60	502
Harvester discharge mechanism.....	W. N. Stroud and R. H. Corey	484,923	Oct. 25	2210	509	61	485
Harvester-elevator.....	M. Kane	487,223	Nov. 29	3293	840	61	1297
Harvester-elevator.....	J. H. Pitkin	476,302	June 7	113	27	59	1460
Harvester. Flax.....	W. Morrow	480,434	Aug. 9	1105	276	60	802
Harvester gear-shifting mechanism.....	G. Schubert	481,202	Aug. 23	2338	576	60	1072
Harvester-gearing.....	M. Kane	466,740	Jan. 5	687	177	58	131
Harvester-gearing.....	A. Stark	477,077	June 14	1331	{ 322 323 }	59	1717
Harvester. Grain.....	M. Kane	466,722	Jan. 5	665	{ 170 171 }	58	126
Harvester. Grain.....	J. F. Steward	474,700	May 10	1310	334	59	901
Harvester. Grain-binding.....	L. Miller	470,250	Mar. 8	926	230	58	1288
Harvester. Grain-binding.....	L. Miller	480,113	Aug. 2	558	{ 140 141 }	60	688
Harvester. Grain-binding.....	L. Miller	480,114	Aug. 2	561	{ 141 142 }	60	689
Harvester. Grain-binding.....	L. Miller	480,115	Aug. 2	564	143	60	690
Harvester. Grain-binding.....	L. Miller	480,116	Aug. 2	567	144	60	690
Harvester. Grain-binding.....	L. Miller.....	488,398	Dec. 20	1920	{ 480 481 482 }	61	1736
Harvester grain-butter.....	W. W. Barbour	471,165	Mar. 22	2369	605	58	1586
Harvester knot-tying mechanism.....	W. H. Gaskill	483,914	Oct. 4	588	{ 148 149 }	61	122
Harvester-knotter.....	E. C. Fulcher.....	468,244	Feb. 2	505	{ 124 125 }	58	624
Harvester picker. Cotton.....	G. Beekman	487,509	Dec. 6	452	{ 117 118 }	61	1411
Harvester pitman-rod connection.....	L. C. Sweet	475,358	May 24	2345	601	59	1135
Harvester-platforms. Apparatus for raising and lowering.....	W. M. Holmes	475,662	May 31	3161	802	59	1304
Harvester. Potato.....	T. Head	470,126	Mar. 1	721	179	58	1239
Harvester. Potato.....	G. B. Irwin	473,317	Apr. 19	2049	514	59	415
Harvester. Potato.....	F. W. Lee	472,370	Apr. 5	567	146	59	106
Harvester. Potato.....	P. H. Munroe	480,776	Aug. 16	1643	411	60	924
Harvester. Potato.....	J. Radermacher	488,948	Dec. 27	2795	{ 689 690 }	61	1928
Harvester-reel.....	O. Knutson	473,072	Apr. 19	1637	417	59	337
Harvester-reel mechanism.....	G. Schubert	479,848	Aug. 2	109	27	60	603
Harvester-reel support.....	J. F. Appleby	481,218	Aug. 23	2371	583	60	1079
Harvester-reel support.....	C. A. A. Rand	481,191	Aug. 23	2321	{ 571 572 }	60	1068
Harvester-reels. Means for raising and lowering.....	W. F. Stimpson	476,027	May 31	3411	861	59	1354
Harvester-seat.....	C. A. Bauer	476,238	June 7	3	1	59	1439
Harvester. Traveling.....	D. Best	480,006	Aug. 2	380	94	60	653
Harvester. Traveling.....	B. Holt	483,449	Sept. 27	2470	{ 621 622 }	60	1856

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & G.	Vol.	Page.
Harvesters. Adjustable reel for	O. Soderstrom	467,625	Jan. 26	2149	546	58	432
Harvesters and binders. Grain-conveyer for	G. Schubert	474,416	May 10	862	225	59	815
Harvesters and binders. Vertical gearing for	G. Schubert	476,901	June 14	1037	252	59	1657
Harvesters. Binder attachment for self-binding	J. G. Martin	466,528	Jan. 5	351	87 88 89	58	68
Harvesters. Device for adjusting the tension of canvas aprons in	G. H. Carver	469,293	Feb. 23	2171	557	58	974
Harvesters. Gear-shifting mechanism for conveyers for	G. Schubert	471,197	Mar. 22	2419	616	58	1596
Harvesters. Raising and lowering mechanism for	G. Schubert	476,902	June 14	1041	253	59	1658
Harvesters. Raising and lowering mechanism for	G. Schubert	478,717	July 12	985	245	60	212
Harvesters. Sheaf-carrier for self-binding	A. Jewell	478,885	Apr. 12	1325	340 341 342	59	265
Harvesters. Sheaf-carrier for self-binding	J. F. Steward	482,931	Sept. 20	1647	414 415 416	60	1683
Harvesting and reaping machines. Reel attachment for	Z. M. Lindley	470,061	Mar. 1	625	155	58	1220
Harvesting cotton. Process of and apparatus for	W. P. Groom	477,177	June 14	1484	364	59	1747
Harvesting machine. Corn-	J. and J. Clements and F. H. Rollins	477,169	June 14	1471	360 361 362	59	1745
Harvesting machine. Corn-	J. I. Hoke	471,119	Mar. 22	2300	590 591 592	58	1574
Harvesting machine. Grain-	W. J. Randolph	488,833	Dec. 27	2604	646 647 648	61	1889
Hasp-lock	G. Campbell	469,126	Feb. 16	1898	485	58	916
Hasp-lock	F. B. Houser	475,962	May 31	3233	838	59	1335
Hasp-lock	C. C. Linindoll	474,021	May 3	218	52	59	680
Hat	S. Cohen	478,952	July 12	1349	334	60	282
Hat, &c.	E. Haege	470,618	Mar. 8	1530	399	58	1403
Hat	D. Schlesinger	480,041	Aug. 2	454	116	60	668
Hat and brush therefor	A. Manser	485,640	Nov. 8	742	195	61	640
Hat and coat hanger and cigar-cutter. Combined	W. R. Cole	481,929	Sept. 6	14	4	60	1337
Hat blocking and banding machine	G. E. Brush	475,662	May 24	2832	715	59	1226
Hat blocking and pressing machine	M. Quinn	478,441	Apr. 26	2613	658	59	545
Hat-blocking machine	F. D. Fry	487,442	Dec. 6	357	91, 92	61	1392
Hat-blocking machine	J. Marshall	485,349	Nov. 1	310	82, 83	61	635
Hat-bodies. Seam for securing sweat-bands to	W. P. Gammons, Jr	477,751	June 28	2446	610	59	1965
Hat-box	H. J. Newman	484,812	Oct. 25	2016	518	61	447
Hat-brim-ironing machine	W. J. McGall	483,746	Oct. 4	336	84	61	70
Hat-brim-stretching machine	W. Simmonds and C. Linegar	469,489	Feb. 23	2475	635	58	1033
Hat-brims. Machine for curling	T. E. Avery	472,974	Apr. 19	1467	376 377	59	305
Hat-brushing machine. Felt-	J. and O. Oldham	471,018	Mar. 15	2143	551	58	1531
Hat, cap, &c.	A. Rosenthal	482,950	Sept. 20	1686	424	60	1690
Hat-case	A. Gronleff	486,828	Nov. 22	2630	686	61	1152
Hat-case	N. F. Hurdle	479,643	July 26	2474	615	60	522
Hat-case. Revolving	D. H. Sanders	466,626	Jan. 5	504	130	58	97
Hat-curling machine	W. J. McGall	480,877	Aug. 16	1794	449	60	955
Hat-gage	I. Shrier	478,291	July 5	364	88	60	73
Hat holder and case	H. Stevenson	477,969	June 28	2782	697	59	2030
Hat-hook	T. Corscaden	479,058	July 19	1526	381	60	327
Hat-ironing implement	A. E. McDonald	476,403	June 7	280	66	59	1493
Hat or bonnet stand	S. E. L. Wilson	486,654	Nov. 22	2345	613	61	1093
Hat packing-case	J. S. Abrams and J. Langsdorf	477,981	June 28	2798	701	59	2034
Hat packing ring	S. T. Newman	477,868	June 28	2638	659	59	2000
Hat polishing and cleaning machine	C. Simis	477,965	June 28	2777	696	59	2029
Hat-pouncing machine	J. B. Howe	470,008	Aug. 2	535	136	60	64
Hat-rack	A. L. Van Benschoten	484,886	Oct. 25	2133	548	61	469
Hat-rounding machine	A. T. Clason	477,991	June 28	2818	705	59	2037
Hat-rounding machine	C. H. Reid	471,751	Mar. 29	3247	827	58	1759
Hat-rounding machine	C. H. Reid	473,238	Apr. 19	1931	485 486	59	391
Hat-stiffening machine	W. H. Barnum	476,890	June 14	973	236	59	1644
Hat-stiffening machine	W. H. Barnum	485,601	Nov. 8	687	181	61	729
Hat-supporter	W. Applegath	481,155	Aug. 23	2275	561	60	1059
Hat sweat-band	H. E. Ward	474,540	May 10	1056	270	59	850
Hat-sweats. Machine for fitting	K. L. Comes	487,252	Dec. 6	21	6	61	1325
Hat-sweats. Machine for joining the meeting ends of	K. L. Comes	487,253	Dec. 6	22	7	61	1325
Hat-trimming machine	L. Bulasky	482,541	Sept. 13	1045	252	60	1553
Hat-ventilating device	E. J. Sharp	487,786	Dec. 13	903	228 229	61	1518
Hat-ventilator	M. F. W. Kochner	477,553	June 21	2110	524	59	1882
Hat-ventilator	W. P. O'Connor	482,429	Sept. 13	858	206	60	1516
Hat-wringing machine	G. Yule and W. A. Baglin	483,823	Oct. 4	455	113	61	94
Hats. Name-plate for	J. G. Ward	476,937	June 14	1104	266	59	1670
Hats. Machine for stitching sweat-bands for	T. W. Bracher and S. W. Balch	488,934	Dec. 27	2768	683	61	1923
Hatch-door	C. Kibele	480,341	Nov. 15	1853	487	61	983
Hatch. Elevator-	C. P. Stanford	478,029	June 28	2883	720 721	59	2049
Hatchet	M. O. Heckman	474,908	May 17	1640	419	59	980
Hatchet	I. J. Palmer	468,892	Feb. 16	1533	390	58	843
Hatchway-door mechanism	W. Bardsley and W. K. Crofford	469,224	Feb. 23	2061	530	58	954
Hatchway-door-operating device	J. J. McBride	469,317	Feb. 23	2302	564 565	58	980
Hatchway-door-releasing device. Automatic	C. F. Banks	466,819	Jan. 12	824	212	58	167
Hatchway-doors. Device for operating	S. G. Tufts	478,297	July 5	371	90	60	74
Hatchway. Elevator-	J. J. McBride	468,820	Feb. 16	1424	362	58	822
Hawser-clamp	R. Ashworth	479,777	Aug. 2	6	2	60	553
Hay and grain loader	F. J. Lovell	481,699	Aug. 30	3160	771 772	60	1243
Hay and stock rack. Convertible	E. N. Avery and C. A. Slayton	482,705	Oct. 4	275	68	61	58
Hay-boom	W. R. Dillion and A. C. Carr	486,438	Nov. 22	2012	534	61	1028
Hay-cap	J. H. Henn and H. M. Fulwider	468,276	Feb. 2	365	139	58	633

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Hay-carrier	H. H. Durr	488,330	Dec. 20	1813	454	61	1716
Hay-carrier	R. Gregg	477,001	June 14	1202	292	59	1690
Hay-carrier	J. L. Hoffman	479,423	July 26	2126	532	60	456
Hay-carrier	N. Isachson	483,845	Oct. 4	485	120	61	100
Hay-carrier	J. Law	486,164	Nov. 15	1581	419	61	928
Hay-carrier	W. Loudon	472,175	Apr. 5	255	67, 68	59	48
Hay-carrier	W. G. Ricker	487,856	Dec. 13	1023	{ 256 257 }	61	1541
Hay carrier and elevator track	J. E. Porter	487,966	Dec. 13	1189	297	61	1573
Hay-carrier and track	P. A. Myers	466,616	Jan. 5	489	126	58	94
Hay-carrier and track	J. E. Porter	482,412	Sept. 13	826	198	60	1510
Hay-carrier track	H. L. Ferris	481,349	Aug. 23	2600	639	60	1119
Hay-carrier track	C. A. Gutenkunst	486,711	Nov. 22	2436	634	61	1112
Hay-carrier track	B. Taylor	486,819	Nov. 22	2598	676	61	1145
Hay-drag	R. Gregg	466,522	Jan. 5	342	85	58	66
Hay-elevator	P. Burrell	486,848	Nov. 29	2669	698	61	1175
Hay-elevator	J. C. Culbertson	473,915	May 3	46	8	59	645
Hay elevator and carrier	E. J. Gilpin	463,614	Feb. 9	1105	281	58	749
Hay gathering and baling machine	J. E. St. John	483,678	Oct. 4	233	58, 59	61	48
Hay-loader	H. Briscoe	467,366	Jan. 19	1726	441	58	344
Hay-loader	G. A. Dieckman and J. P. Ellacott	479,353	July 19	1993	499	60	416
Hay-loader	S. Ferguson	488,732	Dec. 27	2453	610	61	1858
Hay-loader	C. A. Henry	488,561	Dec. 27	2186	540	61	1805
Hay-loader	T. C. Lippitt	474,476	May 10	953	245	59	831
Hay-loader	J. L. McCreary	485,769	Nov. 8	941	252	61	782
Hay-loader	P. D. Miller and W. N. De Vault	480,269	Aug. 9	841	214	60	755
Hay or grain ricks. Cover for	J. G. Wiegand	470,527	Mar. 8	1404	367	58	1376
Hay-press	H. Copeland	480,917	Aug. 16	1855	463	60	967
Hay-press	J. J. Corley	488,400	Dec. 20	1924	482	61	1737
Hay-press	T. J. Finch	474,498	May 10	986	254	59	838
Hay-press	U. Gibeault	471,113	Mar. 22	2291	{ 588 589 }	58	1572
Hay-press	J. A. Hayes	470,488	Mar. 8	1352	352	58	1365
Hay-press	J. A. Hayes	472,349	Apr. 5	540	{ 139 140 }	59	101
Hay-press	J. A. Mealer	484,504	Oct. 18	1512	384	61	330
Hay-press	L. G. Peel	466,623	Jan. 5	500	128	58	96
Hay-press	J. T. Russell and J. D. Williams	484,757	Oct. 18	1910	{ 487 488 }	61	412
Hay-press. Hand	W. H. Carse, W. T. Blackburn, and R. P. Owens	480,382	Aug. 9	1022	257	60	788
Hay-rack	S. R. Carson	468,190	Feb. 2	430	107	58	609
Hay-rack	J. E. and C. B. Haynes	479,878	Aug. 2	159	39	60	613
Hay-rack	H. S. Hoy	481,175	Aug. 23	2299	567	60	1064
Hay-rack	J. F. Moore	479,826	Aug. 2	83	21	60	598
Hay-rack	S. H. Plomberg	481,420	Aug. 23	2713	668	60	1141
Hay-rack	H. M. Prather	470,145	Mar. 1	745	185	58	1244
Hay-rack	L. A. Swan	486,978	Nov. 29	2911	752	61	1223
Hay-rack	W. T. Wallace	477,161	June 14	1455	357	59	1741
Hay-rack for farm-wagons	A. Miller	487,333	Dec. 6	155	44	61	1351
Hay. Rack for hauling	B. G. Harris	466,537	Jan. 5	365	91	58	70
Hay-rake	J. B. Engstrom	473,416	Apr. 19	2230	560	59	450
Hay-rake	T. G. Lee	488,713	Dec. 27	2427	602	61	1852
Hay-rake	J. H. Thomas	482,532	Sept. 13	1031	249	60	1550
Hay rake and loader	D. C. Chaddock	475,752	May 31	2970	{ 753 754 }	59	1267
Hay rake and loader. Combined	J. W. Harmon	483,917	Oct. 4	591	150	61	122
Hay rake and loader. Combined	P. Hopp	468,035	Feb. 2	194	47, 48	58	562
Hay rake and loader. Combined	A. Puntenev and E. C. Sooy	487,640	Dec. 6	651	{ 167 168 }	61	1450
Hay-rake. Horse	A. F. Brown and W. R. Knaub	478,083	July 5	13	4	60	5
Hay-rake. Horse	A. F. Brown and W. R. Knaub	478,084	July 5	15	5	60	6
Hay-rake. Horse	G. H. Carver	474,496	Apr. 26	2362	599	59	497
Hay-rake. Horse	C. M. Hyatt	471,239	Mar. 22	2483	630	58	1608
Hay-rake. Horse	J. Macphail	470,300	Mar. 8	1029	263	58	1308
Hay-rake. Horse	W. R. Mann	471,648	Mar. 29	3075	782	58	1728
Hay-rake. Horse	W. R. Mann	481,501	Aug. 23	2842	698	60	1166
Hay-rake. Horse	H. S. Powell	475,342	May 24	2326	596	59	1131
Hay-rake. Horse	W. Strait	473,795	Apr. 26	2842	714	59	589
Hay-rake. Horse	E. Swift	479,033	July 19	1490	{ 370 371 }	60	319
Hay-rake. Side-delivery horse	H. McPherson	476,961	June 14	1144	276	59	1678
Hay-ricker	C. A. Blume	486,751	Nov. 22	2497	{ 652 653 }	61	1125
Hay-ricker	M. Chase	475,200	May 17	2097	530	59	1070
Hay-sling	J. M. Kellogg	487,575	Dec. 6	549	{ 141 142 }	61	1430
Hay-stack-cutting machine	J. T. Evans and J. H. Douglass	481,393	Aug. 23	2665	{ 653 654 }	60	1131
Hay-stacker	P. Bernard	478,979	July 19	1401	{ 347 348 }	60	303
Hay-stacker	T. Collins	467,856	Jan. 26	2520	638	58	502
Hay-stacker	C. N. Haworth	474,246	May 3	554	136	59	745
Hay-stacker	C. A. Purvis	478,021	June 25	2872	718	59	2046
Hay-stacker	D. M. Stephens	474,422	May 10	873	{ 227 228 }	59	817
Hay-stacker	F. W. Whitney	477,878	June 28	2653	663	59	2003
Hay stacker and rake. Combined mounted	E. O. Ervin	484,493	Oct. 18	1494	380	61	326
Hay-stacking machine	P. Bernard	482,611	Sept. 13	1152	279	60	1573
Hay-stacking machine	S. Concannon	472,338	Apr. 5	525	136	59	99
Hay-tedder	G. H. Earnest	467,224	Jan. 19	1507	{ 385 386 }	58	303
Hay-tedder fork	A. B. Pixley	477,820	June 28	2551	638	59	144
Hay-tedder fork	C. and C. A. Silberzahn	473,243	Apr. 19	1937	487	59	392

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Head and shoulder rest	L. L. Pletcher	474,688	May 10	1295	331	59	898
Head-light. Locomotive	L. L. Jobling	475,242	May 17	2166	551	59	10-2
Head-rest	J. A. Barker	477,197	June 21	1525	373	59	1769
Head-rest	J. H. Barth	471,040	Mar. 15	2182	561	58	1538
Head-rest	R. E. Cherrington	479,585	July 26	2385	594	60	505
Head-rest	E. H. Durkee	485,374	Nov. 1	350	94	61	644
Head-rest for beds	C. V. Reeves	471,895	Mar. 29	3464	884	58	1802
Head-rest. Portable	Z. F. Magill	468,505	Feb. 9	939	239	58	716
Head-rests, &c. Folding support for	T. Maves	480,822	Aug. 16	1718	429	60	939
Header	M. P. Upp and J. C. Young	468,375	Feb. 9	734	182	58	675
Headers. Brake attachment for the steer-wheels of	D. E. Mentzel	477,136	June 14	1417	345	59	1733
Headstall	L. Dare	466,330	Jan. 5	32	7	58	9
Hearse attachment	T. J. Weir	469,617	Feb. 23	3659	684	58	1070
Hearth. Fore	A. J. Schumacher	475,614	May 24	2755	698	59	1213
Heat-alarm. Automatic electric	F. S. Palmer and L. H. Desisle	475,340	May 24	2320	594	59	1130
Heat-alarm. Automatic electric	M. S. Pierce, L. H. Desisle, and O. C. Oliver	466,865	Jan. 12	907	232	58	182
Heat-alarm. Electric	J. Meyer	474,673	May 10	1274	325	59	893
Heat. Apparatus for utilizing waste	W. A. Koneman	469,860	Mar. 1	312	80	58	1162
Heat-distributor	J. W. Reid	469,597	Feb. 23	2636	676	58	1065
Heat-generating apparatus	H. A. Ramsay	474,344	May 3	739	193	59	779
Heat-indicator	F. W. Sears	477,313	June 21	1732	424	59	1807
Heat-regenerators. Working	J. T. Wainwright	483,752	Oct. 4	343	86	61	72
Heat-regulating apparatus. Automatic	C. F. Goodhue	473,699	Apr. 26	2701	679	59	562
Heat-regulating device	A. B. Morse	474,139	May 3	389	94	59	713
Heater:							
See Barrel-heater. Hot-water and hot-air							
Brick-press steam-heater. heater.							
Car-heater. Lamp-heater.							
Candy-cream heater. Metal-heater.							
Car-heater. Peanut-heater.							
Curling-tongs heater. Portable heater.							
Dental heater. Portable safety-heater.							
Electric heater. Rubber-heater.							
Electrical heater. Sad-iron heater.							
Feed-water heater. Sectional heater.							
Fireplace-heater. Steam-heater.							
Gas-heater. Tank-heater.							
Gas-burning heater. Tire-heater.							
Gasoline-heater. Vehicle-heater.							
Glue-heater. Water-heater.							
Hot-water heater.							
Heater	H. Ball	470,345	Mar. 8	1120	226	58	1322
Heater	R. Bigley	478,557	July 12	768	187	60	167
Heater	A. Graf	485,190	Nov. 1	54	17	61	583
Heater	J. Nelson	488,131	Dec. 13	1477	372	61	1634
Heater and shade. Combined	F. Busch	471,742	Mar. 29	3236	824	58	1757
Heater attachment for illuminating apparatus	S. L. Huber	477,368	June 21	1818	445	59	1823
Heater for food, &c	G. L. Hinderer	481,759	Aug. 30	3269	796	60	1264
Heater, furnace, &c	M. O'Gorman	486,121	Nov. 15	1515	401	61	915
Heaters. Governor for	C. B. Bosworth	473,056	Apr. 19	1611	411	59	332
Heating and cooling milk. Apparatus for	J. L. Jönsson	486,642	Nov. 22	2325	608	61	1089
Heating and puddling furnace	O. Hughes	467,413	Jan. 19	1795	457	58	357
Heating and steam-generating apparatus	W. C. Baker	466,552	Jan. 5	386	98	58	74
Heating and ventilating apparatus	C. D. Howard	472,054	Apr. 5	65	17	59	15
Heating and ventilating apparatus	S. W. Wayson	481,085	Aug. 16	2133	531	60	1020
Heating and ventilating apparatus	A. Willgeroth	484,272	Oct. 11	1146	291	61	246
Heating and welding by electricity	H. Howard	473,003	Apr. 19	1527	389	59	317
Heating apparatus	R. Calder	472,940	Apr. 12	1410	360	59	282
Heating apparatus	J. N. and E. N. Gates	482,679	Sept. 13	1245	303	60	1592
Heating apparatus	E. P. H. Kelting	485,388	Nov. 1	372	100	61	649
Heating apparatus	J. F. McElroy	478,203	July 5	210	53	60	43
Heating apparatus	M. Ree	479,463	July 26	2197	551	60	471
Heating apparatus	C. A. Sawin	471,754	Mar. 29	3251	828	58	1760
Heating apparatus	W. H. Turner	487,653	Dec. 6	671	173	61	1454
Heating apparatus	G. A. Watson	481,216	Aug. 23	2363	582	60	1076
Heating apparatus	H. J. Wattles	470,727	Mar. 15	1693	436	58	1444
Heating apparatus. Air	J. Bartlett	467,145	Jan. 19	1328	355	58	251
Heating-apparatus attachment	J. Moak	487,192	Nov. 29	3244	830	61	1288
Heating apparatus. Electrical	A. E. Appleyard	467,075	Jan. 12	1252	317	58	246
Heating, &c. Apparatus for	K. Rivnác and L. Vojáček	474,694	May 10	1303	333	59	899
Heating apparatus for buildings	Q. N. Evans	471,351	Mar. 22	2645	672	58	1640
Heating apparatus for cars or buildings	W. C. Baker	476,972	June 14	1160	280	59	1681
Heating apparatus. Steam	C. H. Robinson	467,900	Jan. 26	2592	657	58	517
Heating apparatus. Steam or hot-water	P. J. Sweeney	467,445	Jan. 19	1245	471	58	367
Heating-boiler	T. Meikle	475,459	May 24	2509	639	59	1165
Heating boiler. Steam or hot-water	G. C. Blackmore	484,083	Oct. 11	839	212	61	186
Heating by metal bath	F. L. White	487,310	Dec. 6	115	34, 35	61	1344
Heating-cup	A. Berger, C. H. Cornet, (veuve,) and C. Martin	468,147	Feb. 2	364	90	58	595
Heating-currents. Distributing apparatus for	G. D. Burton	475,179	May 17	2067	520	59	1062
Heating device. Tool	J. B. Morgan	485,584	Nov. 1	659	175	61	709
Hedge-fence trainer	P. S. Snyder	488,955	Dec. 27	2807	692	61	1931
Heating-furnace	G. F. French	474,316	May 3	681	177	59	768

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & c.	Vol.	Page.
Heating-furnace.....	P. Keil, Jr.....	482,363	Sept. 13	749	{ 180 181	{ 60	1496
Heating-furnace.....	F. L. Sheppard.....	469,099	Feb. 16	1868	477	58	909
Heating-pad. Electro-therapeutic.....	F. H. Soden.....	473,133	Apr. 19	1742	440	59	355
Heating system.....	D. H. Burrell.....	480,903	Aug. 16	1840	{ 457 458	{ 60	964
Heating system.....	J. H. Griffith.....	469,209	Feb. 16	2040	{ 520 521	{ 58	941
Heddle-frames. Harness connection for.....	S. Miller.....	467,424	Jan. 19	1811	463	58	360
Hedge-cutting machine.....	J. F. Champin.....	477,198	June 21	1527	373	59	1769
Hedge-trimming machine.....	A. W. Rockey.....	467,022	Jan. 12	1161	294	58	229
Heel.....	A. R. Parkison.....	483,561	Sept. 13	1080	262	60	1550
Heel.....	G. W. F. Randolph.....	473,590	Apr. 26	2536	640	59	531
Heel.....	M. Wise.....	487,311	Dec. 6	117	35	61	1344
Heel-blank-beveling machine.....	F. E. Wilder.....	484,833	Oct. 25	2051	{ 525 526	{ 61	454
Heel-breasting machine.....	M. C. Lockwood.....	472,736	Apr. 12	1118	287	59	224
Heel-burnishing machine.....	J. O'Connell.....	468,428	Feb. 9	812	{ 203 204	{ 58	691
Heel-burnishing machine.....	G. A. Knox.....	486,229	Nov. 15	1673	{ 442 443	{ 61	946
Heel-burnishing machine.....	F. Molloy.....	472,307	Apr. 5	470	{ 120 121	{ 59	88
Heel. Interchangeable.....	M. Wise.....	487,312	Dec. 6	118	35	61	1345
Heel-lift-skiving machine.....	F. W. Pope.....	466,743	Jan. 5	693	178	58	132
Heel-lifts. Skiving.....	H. O. Beach.....	488,303	Dec. 20	1765	{ 444 445	{ 61	1706
Heel-loading machine.....	F. F. Raymond, 2d.....	480,415	Aug. 9	1073	{ 268 269	{ 60	797
Heel-machine.....	C. C. Small.....	467,242	Jan. 19	1534	{ 270 391 392 393	{ 58	308
Heel-making machine.....	E. H. Taylor.....	475,714	May 24	2900	{ 734 735	{ 59	1240
Heel-nailing and slugging machine.....	C. E. Conner.....	470,547	Mar. 8	1429	372	58	1382
Heel-nailing machine.....	C. H. Brown and A. B. McCoy.....	477,098	June 14	1363	332	59	1723
Heel-nailing machine.....	H. B. Ingraham.....	486,288	Nov. 15	1776	467	61	968
Heel-nailing machine.....	F. F. Raymond, 2d.....	468,957	Feb. 16	1647	{ 419 420	{ 58	865
Heel-nailing machine.....	F. F. Raymond, 2d.....	479,142	July 19	1661	415	60	351
Heel-nailing machine.....	H. A. Webster.....	463,279	Feb. 2	567	{ 140 141 142	{ 58	634
Heel-nailing-machine jack.....	F. F. Raymond, 2d.....	480,741	Aug. 16	1592	399	60	914
Heel-nailing machines. Gluing attachment for.....	F. F. Raymond, 2d.....	476,306	June 7	119	29	59	1461
Heel-packer.....	I. R. Rogers.....	484,609	Oct. 18	1666	422	61	362
Heel plate.....	E. F. Ayres and T. H. Foster.....	481,324	Aug. 23	2564	629	60	1112
Heel-plate and ice-creeper.....	W. Rosenfield.....	472,396	Apr. 5	612	155	59	114
Heel-plate-attaching machine.....	W. Rosenfield.....	472,397	Apr. 5	613	155	59	115
Heel-press.....	W. J. Young.....	486,921	Nov. 29	2825	731	61	1206
Heel-randng machine.....	F. F. Raymond, 2d.....	474,408	May 10	846	{ 221 222	{ 59	812
Heel-stiffener machine.....	L. W. Litch.....	480,023	Aug. 2	427	{ 107 108	{ 60	662
Heel-stiffener machine.....	A. H. Thompson.....	483,184	Sept. 27	2057	519	60	1778
Heel-stiffeners. Machine for forming.....	L. Coté.....	469,774	Mar. 1	166	44	58	1133
Heel-stiffeners. Machine for molding.....	W. C. Stewart.....	467,473	Jan. 19	1889	{ 482 483	{ 58	376
Heels. Attaching.....	F. F. Raymond, 2d.....	475,001	May 17	1798	456	59	1009
Heeling-machine.....	F. F. Raymond, 2d.....	474,407	May 10	844	{ 220 221	{ 59	811
Helmet attachment.....	F. E. Drake.....	488,188	Dec. 20	1577	395	61	1670
Helmet attachment.....	C. Hoppe.....	470,131	Mar. 1	728	181	58	1241
Hem folder and presser.....	F. Henry.....	484,366	Oct. 11	1285	328	61	274
Hemp-brake.....	J. O. Ward.....	474,273	May 3	596	148	59	753
Hemp-brake.....	J. O. Ward.....	480,354	Aug. 9	974	245	60	779
Hemp breaking and cleaning machine.....	J. Breslin.....	477,794	June 28	2507	629	59	1976
Hen-hovel. Knockdown.....	J. M. Holladay.....	479,942	Aug. 2	259	64	60	632
Hide-fleshing machine.....	A. E. Whitney.....	467,216	Jan. 19	1492	382	58	301
Hide-fleshing machine.....	A. E. Whitney.....	473,039	Apr. 19	1587	{ 403 404	{ 59	328
Hide or skin shaving machine.....	A. A. Hunting.....	479,072	July 19	1546	{ 386 387	{ 60	330
Hides or skins. Machine for treating.....	W. Evans.....	484,146	Oct. 11	930	240	61	204
Hides or skins. Machine for treating.....	W. Evans.....	484,147	Oct. 11	932	240	61	205
Hides. Tawing.....	H. Endemann.....	472,701	Apr. 12	1073		59	215
High and low water alarm.....	A. J. Wright.....	479,482	July 26	2243	563	60	479
High and low water alarm. Electrical.....	A. C. McConnell.....	469,424	Feb. 23	2371	608	58	1014
Hinge.....	H. W. Baker and W. J. Stump.....	473,688	Apr. 26	2680	675	59	558
Hinge.....	F. A. H. Faulhaber and C. F. Koch.....	487,476	Dec. 6	406	105	61	1401
Hinge.....	L. H. Foster.....	479,936	Aug. 2	251	62	60	630
Hinge.....	W. S. Gillespie.....	470,043	Mar. 1	599	149	58	1216
Hinge.....	W. S. Gillespie.....	486,952	Nov. 29	2874	742	61	1215
Hinge.....	I. F. Harris.....	486,104	Nov. 15	1488	392	61	910
Hinge.....	H. S. Hart.....	473,175	Apr. 19	1826	460	59	370
Hinge.....	J. F. Hirst.....	481,492	Aug. 23	2827	695	60	1163
Hinge.....	K. L. Karo.....	470,334	Mar. 8	1099	280	58	1319
Hinge.....	R. Linkletter.....	472,622	Apr. 12	954	247	59	195
Hinge.....	F. W. Loring.....	472,192	Apr. 5	287	75	59	54
Hinge.....	J. H. Mahan.....	471,981	Mar. 29	3583	914	58	1825
Hinge.....	J. Marthaler.....	473,194	Apr. 19	1756	467	59	376
Hinge.....	J. H. Moore.....	473,012	Apr. 19	1540	393	59	320
Hinge.....	N. W. Mottinger.....	481,044	Aug. 16	2059	514	60	1006

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Hinge.....	P. S. Nunn.....	470,350	Mar. 8	1125	288	58	1323
Hinge.....	C. Osborne.....	481,732	Aug. 30	3223	786	60	1255
Hinge.....	F. X. Ranker.....	480,238	Aug. 2	773	195	60	729
Hinge.....	T. Tangney.....	480,790	Aug. 16	1665	416	60	928
Hinge. Antifriction.....	T. Corscaden.....	475,439	May 24	2472	630	59	1157
Hinge. Awning-blind.....	J. Sweney.....	488,509	Dec. 20	2100	521	61	1774
Hinge. Blind.....	A. J. Avery.....	484,351	Oct. 11	1263	322	61	270
Hinge. Blind.....	W. E. Mayo.....	475,332	May 24	2301	591	59	1127
Hinge. Butt.....	R. T. Smith.....	477,465	June 21	1969	488	59	1853
Hinge. Coach.....	A. W. Worle.....	475,993	May 31	3367	849	59	1344
Hinge. Door.....	W. P. McMasters.....	471,133	Mar. 22	2318	595	58	1577
Hinge. Gate.....	C. J. Ericson.....	475,271	May 17	2207	563	59	1092
Hinge. Gate.....	G. W. Good.....	488,070	Dec. 13	1388	344	61	1616
Hinge. Gate.....	G. Rohrbach.....	468,210	Feb. 2	456	113	58	614
Hinge-lock.....	R. Deane.....	485,613	Nov. 8	701	184	61	732
Hinge. Lock.....	J. W. Dearing.....	485,460	Nov. 1	476	126	61	669
Hinge. Lock.....	C. E. Gillespie.....	484,361	Oct. 11	1277	{ 325 326 }	61	272
Hinge. Lock.....	F. N. Kelsey.....	476,466	June 7	368	86	59	1508
Hinge. Lock.....	G. L. Loomis.....	472,483	Apr. 5	744	190	59	141
Hinge. Lock.....	A. A. Oat, Sr.....	469,333	Feb. 23	2228	571	58	986
Hinge. Lock.....	G. Oberbeck.....	475,145	May 17	2015	509	59	1052
Hinge. Lock.....	L. Porter.....	475,415	May 24	2437	621	59	1151
Hinge. Mirror.....	W. P. Tarbell.....	472,409	Apr. 5	629	161	59	118
Hinge. Pail-lid.....	J. W. Bowerbank.....	476,032	May 31	3420	864	59	1356
Hinge. Safe.....	W. A. Schenck.....	486,237	Nov. 15	1687	446	61	949
Hinge-seat cutter.....	G. W. Scott.....	483,677	Oct. 4	232	58	61	48
Hinge. Spring.....	L. Bommer.....	485,366	Nov. 1	338	89	61	641
Hinge. Spring.....	L. M. Devore.....	475,080	May 17	1912	485	59	1032
Hinge. Spring.....	A. S. Held and L. Patterson.....	484,200	Oct. 11	1014	259	61	221
Hinge. Spring.....	A. J. McCauley.....	471,059	Mar. 15	2195	565	58	1541
Hinge. Spring.....	M. Redlinger.....	467,472	Jan. 19	1888	481	58	376
Hinge. Spring.....	J. Wolf.....	484,839	Oct. 25	2069	532	61	457
Hinge. Windmill.....	S. A. Rouse.....	472,825	Apr. 12	1242	318	59	248
Hinges. Making butt.....	R. T. Smith.....	487,939	Dec. 13	1154	288	61	1567
Hinges. Manufacture of.....	T. Corscaden.....	476,521	June 7	448	106	59	1525
Hitch. Horse.....	A. Johnson.....	481,231	Aug. 23	2394	591	60	1083
Hitching device.....	E. E. Albin.....	486,842	Nov. 29	2657	695	61	1173
Hitching device.....	C. Beile.....	477,634	June 28	2260	565	59	1927
Hitching device.....	D. W. De Sylva.....	480,179	Aug. 2	667	170	60	709
Hitching device.....	J. E. Parkison.....	472,934	Apr. 12	1400	{ 358 359 }	59	280
Hitching device.....	J. E. Parkison.....	476,812	June 14	895	220	59	1629
Hitching-post.....	C. W. Erath.....	487,727	Dec. 13	801	205	61	1497
Hitching-strap.....	E. Shaw.....	484,646	Oct. 18	1737	441	61	375
Hitching-weight device and support.....	W. J. and J. Robertson.....	466,837	Jan. 12	859	219	58	173
Hobby-horse.....	F. Marquardt.....	468,572	Feb. 9	1048	266	58	737
Hoe.....	H. Burritt.....	470,981	Mar. 15	2084	533	58	1520
Hoe.....	M. A. Smith.....	488,582	Dec. 27	2221	550	61	1813
Hoe and planter. Combined.....	J. R. Ayers.....	488,596	Dec. 27	2215	556	61	1818
Hoe for vineyards. Sulky.....	J. A. Lamb.....	473,513	Apr. 26	2303	606	59	502
Hoo. Garden.....	J. Robinson.....	469,359	Feb. 23	2266	581	58	994
Hog-nose cutter.....	W. Needham.....	472,932	Apr. 12	1396	358	59	280
Hog scraper and claw-hook.....	A. Nittinger, Sr.....	478,810	July 12	1150	284	60	243
Hog-trap.....	P. Fricker, Jr.....	469,558	Feb. 23	2582	662	58	1054
Hog-trough.....	J. C. F. Hurst.....	487,836	Dec. 13	983	247	61	1534
Hogsheds or barrels. Construction of.....	A. Schmidt.....	483,478	Sept. 27	2503	630	60	1863
Hoist.....	J. Garner, T. Cockerill, and C. Porrett.....	479,087	July 19	1572	394	60	335
Hoisting and conveying apparatus.....	G. H. Hulett.....	483,558	Oct. 4	62	15, 16	61	15
Hoisting and conveying apparatus.....	H. R. Palmer.....	486,645	Nov. 22	2330	610	61	1091
Hoisting and conveying device.....	E. G. Spilsbury and S. S. Webber.....	475,710	May 24	2892	{ 731 732 733 }	59	1239
Hoisting and conveying machine.....	A. E. Brown.....	474,494	May 10	979	{ 252 253 }	59	836
Hoisting apparatus.....	B. F. Davis.....	469,355	Feb. 23	2260	580	58	993
Hoisting apparatus.....	B. F. Davis.....	471,468	Mar. 22	2827	720	58	1674
Hoisting apparatus.....	W. J. Kayser.....	483,323	Sept. 27	2297	578	60	1822
Hoisting apparatus.....	J. W. Kinsman.....	475,963	May 31	3325	839	59	1335
Hoisting apparatus.....	J. Mount and F. H. Warnock.....	467,289	Jan. 19	1612	411	58	323
Hoisting apparatus.....	M. J. Paul.....	475,888	May 31	1210	812	59	1313
Hoisting apparatus.....	J. E. Walsh.....	488,044	Dec. 13	1340	332	61	1605
Hoisting-bucket.....	A. J. Frith.....	468,652	Feb. 9	1163	296	58	761
Hoisting device.....	A. Olson.....	482,648	Sept. 13	1197	291	60	1582
Hoisting device.....	A. L. Plotner.....	485,774	Nov. 8	947	254	61	763
Hoisting device.....	I. C. Welter.....	470,730	Mar. 15	1697	438	58	1445
Hoisting device and support.....	H. Sellheim.....	484,252	Oct. 11	1107	280	61	239
Hoisting device. Self-locking.....	O. Hillerscheidt.....	484,932	Oct. 25	2224	{ 573 574 }	61	488
Hoisting-hook.....	R. W. Giese.....	476,534	June 7	465	110	59	1529
Hoisting-machine.....	J. Cosgrove.....	471,955	Mar. 29	3547	907	58	1818
Hoisting-machine.....	M. Curran, Jr.....	473,655	Apr. 26	2633	664	59	549
Hoisting-machine.....	O. Flohr.....	484,358	Oct. 11	1273	325	61	272
Hoisting-machine.....	W. H. Rickabach.....	483,391	Sept. 27	2396	602	60	1840
Hoisting-machine. Differential.....	C. F. Cliff.....	487,994	Dec. 13	1246	310	61	1585
Hoisting machinery.....	H. J. McKeown.....	488,447	Dec. 20	2001	500	61	1753
Hoisting-platform.....	C. F. Ball.....	478,078	July 5	5	2	60	3
Hoisting-tackle.....	J. Farrell.....	471,308	Mar. 22	2586	656	58	1628
Hoisting-wheel. Frictional.....	A. J. Davis.....	480,905	Aug. 16	1843	958	60	964
Holdback.....	O. C. Davis.....	473,569	Apr. 26	2496	631	59	523
Holdback.....	J. H. Logan.....	483,325	Sept. 27	2300	578	60	1822
Holdback. Carriage.....	H. R. Schnarr.....	484,464	Oct. 18	1446	368	61	317
Holdback. Vehicle.....	R. E. Daniels.....	470,834	Mar. 15	1874	480	58	1478

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Holdback. Vehicle.....	W. Dunn.....	487,828	Dec. 13	971	245	61	1532
Holdback. Vehicle.....	E. W. Langer and R. Peterson.....	485,550	Nov. 1	606	162	61	697
Holdback. Vehicle.....	P. Mullaney.....	468,678	Feb. 9	1206	306	58	769
Holdback. Vehicle.....	E. P. Parker.....	488,613	Dec. 27	2257	562	61	1822
Holdback. Vehicle.....	J. F. Taft.....	476,839	June 14	939	229	59	1637
Holdback. Vehicle.....	W. T. Terry.....	470,313	Mar. 8	1060	269	58	1312
Holdback. Vehicle.....	M. R. Wiers.....	467,320	Jan. 19	1635	421	58	331
Holder:							
See Advertising-pro-	Lamp-top holder.						
gram holder.	Lead or crayon holder.						
Arc-light globe-hold-	Lid-holder.						
er.	Line-holder.						
Bag-holder.	Milk-can holder.						
Bill-holder.	Mop-holder.						
Bill and letter holder.	Music-holder.						
Billiard-chalk	Napkin-holder.						
holder.	Newspaper-holder.						
Bit-holder.	Opera-glass holder.						
Blacking-box holder.	Order-holder.						
Bolt-holder.	Pail-holder.						
Book-holder.	Paper-holder.						
Book-leaf holder.	Paper-bag holder.						
Book or sheet-music	Paper-roll holder.						
holder.	Parcel-holder.						
Bottle-holder.	Penholder.						
Bouquet-holder.	Pen and pencil holder.						
Bouquet and badge	Pencil-holder.						
holder.	Perfume-holder.						
Broom-holder.	Photograph-holder.						
Brush-holder.	Photographic-plate hold-						
Calendar-holder.	er.						
Candle-holder.	Photographic-roll holder.						
Candle-shade holder.	Picture-holder.						
Canopy-rod holder.	Pillow-sham holder.						
Carbon-holder.	Pipe-holder.						
Carbon-brush holder.	Plant-holder.						
Carbon-sheet holder.	Plate-holder.						
Card or plate holder.	Printing-plate holder.						
Cartridge-holder.	Rein-holder.						
Cauterizing-point	Ribbon-holder.						
holder.	Ring-holder.						
Chalk-holder.	Rope-holder.						
Chalk-line holder.	Sack-holder.						
Checkrein-holder.	Salt-holder.						
Chimney-holder.	Sandpaper-holder.						
Cigar and ash holder.	Sash-holder.						
Cloth-holder.	Sewing-machine spool-						
Clothes-holder.	holder.						
Clothes-line holder.	Siding-holder.						
Coin-holder.	Shade-holder.						
Collar-holder.	Shaft-holder.						
Copy-holder.	Shoe-holder.						
Cravat-holder.	Sleeve-holder.						
Cuff-holder.	Sleeve and cuff holder.						
Curling-iron holder.	Ship-holder.						
Demijohn-holder.	Soap-holder.						
Dental disk-holder.	Soap-cake holder.						
Dental-flask holder.	Sponge-holder.						
Dust-pan and broom	Spool-holder.						
holder.	Stage-scenery holder.						
Electric-wire holder.	Stamp-holder.						
Eyeglass-holder.	Staple-holder.						
File-holder.	Stub-holder.						
Fishing rod holder.	Tag-holder.						
Flag-staff holder.	Telephone-holder.						
Flower-holder.	Telephone-receiver hold-						
Fly-paper holder.	er.						
Fuse and file holder.	Temporary holder.						
Gage-line holder.	Thread-holder.						
Gas-holder.	Ticket-holder.						
Globe or shade hold-	Tidy-holder.						
er.	Tool-holder.						
Hose-nozzle hold-r.	Tool or reaper-knife hold-						
Ink-bottle holder.	er.						
Ink or color holder.	Trunk-strap holder.						
Jar-holder.	Twine-holder.						
Knife-holder.	Type-holder.						
Knitting-machine	Vine-holder.						
web-holder.	Watch-crown holder.						
Label-holder.	Whetstone-holder.						
Lamp-holder.	Whip-holder.						
Lamp and shade	Wire-holder.						
holder.	Wire-screen-cloth holder.						
Lamp or carbon-	Work-holder.						
holder.	Yard-stick holder.						
Holder or rack.....	C. Warden.....	481,455	Aug. 23	2770	682	60	1152
Hollow articles. Apparatus for forming or shaping.....	F. Moorfield.....	476,058	May 31	3464	874	59	1365
Hollow articles. Machine for making.....	A. A. Blount and F. K. Way.....	479,347	July 19	1986	497	60	414
Hones. Composition for dressing.....	C. A. Praray.....	471,569	Mar. 29	2962	58	1708	
Honey cells and combs. Making artificial.....	E. T. Mason and M. H. Moskovits.....	481,578	Aug. 30	2971	729	60	1208
Honey-extractor.....	W. Bayless.....	476,732	June 7	738	183	59	1584
Honey-extractor. Centrifugal.....	C. W. Metcalf.....	471,487	Mar. 22	2854	726	58	1679
Honey-extractor. Centrifugal.....	C. W. Metcalf.....	486,728	Nov. 22	2456	641	61	1110
Honey-extractor. Centrifugal.....	F. Williams.....	486,151	Nov. 15	1564	414	61	925

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Honey-section press	F. M. Archer	476,116	May 31	3561	895	59	1384
Honey-section press	W. O. Leach	470,893	Mar. 15	1949	499	58	1493
Honey-sections. Combined section-closer and foundation-fastener for	A. Wortman	468,380	Feb. 9	742	184	58	677
Hoof-expander	J. G. Ripley	475,801	May 31	3047	771	59	1382
Hoof-pad	J. Kress	483,691	Oct. 4	253	63	61	53
Hoof-spreader	G. T. Chapman	476,732	June 7	757	186	59	1588
Hook:							
<i>See</i> Back-hand hook.	Hat-hook.						
Bench-hook.	Harness-hook.						
Button-hook.	Hoisting-hook.						
Check-hook.	Lace-fastening hook.						
Coat-hook.	Lacing-hook.						
Coat and hat hook.	Ladder-hook.						
Coupling-hook.	Rope-hook.						
Davit-hook.	Safety-hook.						
Drapery or garment hook.	Snap-hook.						
Fall-hook.	Trolling-hook.						
Fish-hook.	Tug-hook.						
Gaff-hook.	Veterinary parturition-hook.						
Garment-hook.	Whiffletree-hook.						
Grapple-hook.							
Hook.	O. Boiteau	466,766	Jan. 12	738	191	58	150
Hook.	E. W. Davis	478,313	July 5	396	95	60	80
Hook.	R. Gorton	472,948	Apr. 12	1420	363	59	284
Hook.	J. W. Grantland	486,641	Nov. 22	2324	608	61	1069
Hook.	H. S. Hart	477,655	June 28	2289	573	59	1933
Hook.	W. W. Nelson and C. A. Singletary	466,700	Jan. 5	611	159	58	118
Hook and eye	C. A. Bryant	487,209	Nov. 29	3267	835	61	1292
Hook and eye	M. L. Bohanoy	467,638	Jan. 26	2169	551	58	435
Hook and eye	W. J. Edwards and F. R. Barclay	482,867	Sept. 20	1548	386	60	1664
Hook and eye	H. C. Frank	482,473	Sept. 13	927	226	60	1529
Hook and eye	F. Meyers and M. Stoveken	484,720	Oct. 18	1845	469	61	387
Hook and eye	B. D. Paine	478,357	July 5	468	113	60	93
Hook and eye	L. M. Porter	478,360	July 5	471	114	60	94
Hook and eye	A. A. Wright	466,857	Jan. 12	888	227	58	178
Hook and eye. Garment	F. E. Bennett	478,555	July 12	766	187	60	167
Hook-rack	E. Roos	477,270	June 21	1658	405	59	1793
Hoop	W. A. Sawyer	474,101	May 3	346	82	59	704
Hoop-coupling	H. W. Ford and R. M. Ferguson	477,173	June 14	1480	362	59	1747
Hoop-coupling	H. W. Ford and R. M. Ferguson	477,174	June 14	1481	363	59	1747
Hoop-fastener	W. F. Robertson	472,142	Apr. 5	205	55	59	39
Hoop-flaring machine	T. A. Cook	482,300	Sept. 6	622	148	60	1456
Hoop or band fastener and tightener	C. Sparks	469,889	Mar. 1	359	91	58	1170
Hoop pointing and lapping machine	A. F. Ward	484,126	Oct. 11	891	227	61	197
Hoops, &c. Coupling for	M. Y. Campbell	476,001	May 31	3377	851	59	1346
Hoops. Machine for forming barrel	G. T. Chester	467,154	Jan. 19	1406	359	58	284
Hop-picking machine	C. C. Green	478,592	July 12	815	201	60	177
Hop-press	P. Riggs	470,600	Mar. 8	1499	390	58	1397
Hops. Obtaining extracts from	C. H. and B. O. Frings	478,508	July 5	656	167	60	136
Hopple	G. P. Cole	472,961	Apr. 12	1446	369	59	269
Hopple	L. P. Stine	488,849	Dec. 27	2640	654	61	1896
Hopple	W. H. Westen	487,863	Dec. 13	1034	258	61	1543
Horn	H. P. Young	488,238	Dec. 20	1664	415	61	1686
Horns. Mouthpiece for reed	I. W. Pratt	468,156	Feb. 2	375	92	58	597
Horse-blanket	E. Chamberlain	484,996	Oct. 25	2325	600	61	507
Horse-blanket	C. A. Gevers	483,980	Oct. 4	689	172	61	142
Horse-blanket fastener	E. H. Danforth	473,916	May 3	47	9	59	645
Horse-blanket fastener	C. A. Harvey	481,326	Aug. 23	2565	630	60	1113
Horse-blanket fastener	C. H. Pitcher and G. A. Moody	474,264	May 3	579	142	59	750
Horse-boot	J. Hoar	481,790	Aug. 30	3326	811	60	1276
Horse-boot	H. R. Hurd	482,041	Sept. 6	191	46	60	1373
Horse-boot	C. A. Rahn	484,820	Oct. 25	2028	520	61	449
Horse-boot	J. H. Rowell	487,296	Dec. 6	88	27	61	1339
Horse-boot	C. L. Schoonmaker	475,421	May 24	2448	624	59	1153
Horse-boot	J. Summers	475,827	May 31	3103	786	59	1292
Horse-checking device	I. Labelle	483,306	Sept. 27	2270	571	60	1817
Horse-controlling device	D. T. Woodman	476,109	May 31	3548	893	59	1381
Horse-detacher	E. Hays	483,059	Sept. 20	1851	470	60	1726
Horse-detacher	J. H. Lane	477,664	June 28	2299	576	59	1935
Horse-detacher	H. Leeman	487,126	Nov. 29	3144	806	61	1269
Horse-detacher	G. W. McAlister	477,775	June 28	2478	620	59	1971
Horse-detacher	E. H. McBride	475,140	May 17	2008	507	59	1051
Horse-detaching device	C. D. Hill	470,127	Mar. 1	722	180	58	1240
Horse-detaching mechanism	F. M. Doughty	477,358	June 21	1802	441	59	1819
Horse-hair, &c. Machine for interlacing curled	F. Ochs	476,405	June 7	282	66	59	1493
Horse-hitching device	L. House	488,475	Dec. 20	2042	508	61	1762
Horse-hitching device	J. H. Quinton	483,514	Sept. 27	2567	643	60	1875
Horse-hitching device	M. E. Steele	474,928	May 17	1670	426	59	986
Horse-power	R. B. Miller	475,044	May 17	1859	471	59	1022
Horse-power	W. B. Swartz	484,524	Oct. 18	1542	391	61	336
Horse-power	J. G. Walton	486,142	Nov. 15	1549	409	61	922
Horse-power	A. M. Wead	473,663	Apr. 26	2674	673	59	557
Horse-power	A. Wickey	486,652	Nov. 22	2343	612	61	1092
Horse-power	P. Wirth	467,626	Jan. 26	2150	546	58	432
Horse-protector	S. P. Hodgen	466,786	Jan. 12	773	201	58	157
Horse-rake	E. C. Jenkins	466,936	Jan. 12	1023	261	58	203

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'s	Vol.	Page.
Horse-restrainer	F. B. Tyler	471,201	Mar. 22	2426	617	58	1597
Horse-shield	C. H. Baldwin	484,282	Oct. 11	1158	295	61	249
Horse-shield	A. P. Chase	484,701	Oct. 18	1818	462	61	392
Horse-tail holder	J. C. Tallman	478,894	July 12	1263	312	60	265
Horse-taming apparatus	R. Mazza	484,216	Oct. 11	1045	265	61	226
Horses. Device for hitching	A. W. Dudley	466,667	Jan. 5	566	146	58	109
Horses. Electrical device for preventing cribbing in	G. W. Whitefield	487,461	Dec. 6	352	100	61	1396
Horses. Electrical device for stopping	A. B. Holson	470,155	Mar. 1	759	189	58	1247
Horses. Eye-protector for	J. Steele	481,152	Aug. 16	2260	557	60	1042
Horse's feet. Protecting device for	M. Pigot	476,301	June 7	112	27	59	1460
Horses. Gage for determining the age of	A. Bolinger	478,560	July 12	773	189	60	168
Horses' hoofs. Shoe for expanding	G. F. Alftott	488,535	Dec. 27	2148	541	61	1797
Horses' hoofs. Snow-ball protector for	T. P. Skellenger	469,603	Feb. 23	2643	678	58	1067
Horses. Leg-spreader for	J. R. Phelps	480,625	Aug. 9	1407	350	60	863
Horses. Mouth-speculum for	G. Z. Barnes	472,939	Apr. 12	1409	360	59	282
Horses. Overboot for	R. Coates	473,295	Apr. 19	2018	507	59	409
Horses. Quarter-boot for	J. Clark and F. W. Floyd	476,517	June 7	443	105	59	1524
Horses while being shod. Apparatus for holding	M. A. Crossman	472,917	Apr. 12	1374	352 353	59	276
Horseshoe	M. d'Amilly and J. Caillet	468,130	Feb. 2	339	84	58	590
Horseshoe	O. E. Brown	481,271	Aug. 23	2467	608	60	1096
Horseshoe	J. E. Bull	472,520	Apr. 12	806	207	59	166
Horseshoe	G. T. Chapman	483,209	Sept. 27	2094	531	60	1785
Horseshoe	G. T. Chapman	483,536	Oct. 4	31	8	61	9
Horseshoe	G. T. Chapman	483,537	Oct. 4	32	8	61	9
Horseshoe	G. T. Chapman	483,538	Oct. 4	34	8	61	9
Horseshoe	C. Coplantz	467,497	Jan. 26	1930	493	58	392
Horseshoe	G. Custer	469,547	Feb. 23	2571	659	58	1051
Horseshoe	G. Custer	477,926	June 28	2724	682	59	2018
Horseshoe	C. E. Devine and G. La Chapelle	481,832	Sept. 6	17	5	60	1338
Horseshoe	G. W. East	467,859	Jan. 26	2526	640	58	503
Horseshoe	J. P. Gilbert	474,554	May 10	1079	276	59	855
Horseshoe	C. Hammelmann	472,262	Apr. 5	402	104	59	75
Horseshoe	C. Hammelmann	473,923	May 3	60	12	59	648
Horseshoe	C. Hartmann	484,713	Oct. 18	1834	466	61	395
Horseshoe	E. A. Hills	480,924	Aug. 16	1868	466	60	969
Horseshoe	F. A. Hoover	477,658	June 28	2293	574	59	1934
Horseshoe	C. E. Howard	471,864	Mar. 29	3423	874	58	1794
Horseshoe	J. E. Jarvis	478,435	July 5	576	139	60	113
Horseshoe	A. D. Jeffrey	476,798	June 14	870	214	59	1624
Horseshoe	W. Kondakoff	482,845	Sept. 20	1507	375	60	1656
Horseshoe	F. Korupkat	487,368	Dec. 6	215	59	61	1363
Horseshoe	R. F. Lewis	479,137	July 19	1654	413	60	349
Horseshoe	N. Lundwall	474,751	May 10	1387	350	59	915
Horseshoe	G. Martin	480,731	Aug. 16	1579	395	60	911
Horseshoe	W. J. and M. J. Mohan	485,470	Nov. 1	494	131	61	672
Horseshoe	W. H. Moore	468,252	Feb. 2	518	128	58	626
Horseshoe	H. Olson	481,716	Aug. 30	3189	779	60	1249
Horseshoe	C. A. Reade	482,650	Sept. 13	1200	292	60	1583
Horseshoe	A. W. Smith	469,335	Feb. 23	2232	572	58	987
Horseshoe	G. L. Turcott	477,476	June 21	1985	493	59	1856
Horseshoe and calk	J. B. Stoner	472,562	Apr. 12	863	222	59	178
Horseshoe-bending machine	J. Wilke	484,750	Oct. 18	1901	485	61	410
Horseshoe-blank bar	C. H. Perkins	470,352	Mar. 8	1129	289	58	1324
Horseshoe-blank bar	C. H. Perkins	487,056	Nov. 29	3027	778	61	1245
Horseshoe-blank bars. Die-roll for making side-weighted	C. H. Perkins	470,364	Mar. 8	1150	294	58	1328
Horseshoe-blank bars. Roll for making	C. H. Perkins	487,057	Nov. 29	3030	778	61	1246
Horseshoe-blanks. Method of and means for making	C. H. Perkins	470,351	Mar. 8	1127	289	58	1323
Horseshoe-blanks. Roll for making	C. H. Perkins	470,353	Mar. 8	1130	289	58	1324
Horseshoe-calk	W. Pearce	470,702	Mar. 15	1654	429	58	1436
Horseshoe-calk. Detachable	M. J. L. Towler	487,038	Nov. 29	3002	773	61	1240
Horseshoe-calk. Expandible	J. C. Higgins and T. Lea	477,542	June 21	2091	520	59	1878
Horseshoe-calk. Removable	S. Budlong	466,884	Jan. 12	945	241	58	189
Horseshoe-calk-sharpening device	A. J. Neal	485,585	Nov. 1	661	175	61	709
Horseshoe-calks. Device for sharpening	J. Lussier	469,707	Mar. 1	54	16	58	1109
Horseshoe-fastening	G. Calls and F. J. Tetley	481,000	Aug. 16	1989	498	60	992
Horseshoe-fastening	E. T. Covell	483,602	Oct. 4	128	32	61	27
Horseshoe-groover	G. H. Smith	468,702	Feb. 9	1247	317	58	778
Horseshoe-machine	H. Nicol and G. Ljung	474,918	May 17	1652	422 423	59	983
Horseshoe-nail blanks. Die for swaging	W. W. Miner	484,220	Oct. 11	1051	266	61	228
Horseshoe-nail pointing and finishing machine	C. E. Moore	470,321	Mar. 8	1070	272 273 328 329 330 331	58	1314
Horseshoe-nails. Machine for making	D. F. Williams	484,836	Oct. 25	2050	529 530 531	61	455
Horseshoe-nails. Manufacturing	W. W. Miner	481,962	Sept. 6	60	14	60	1346
Horseshoe. Nailless	C. W. Crannell	487,177	Nov. 29	3220	824 825	61	1284
Horseshoe. Nailless	J. McCaffrey	478,455	July 5	602	147	60	119
Horseshoe. Open-toed	A. D. Baker	479,111	July 19	1615	404	60	342
Horseshoe-pad	N. G. Mooney	479,912	Aug. 2	202	50	60	622
Horseshoe plug-calk	E. P. Noyes	480,611	Aug. 9	1377	342	60	857
Horseshoe. Rubber-tread	W. Davis	479,790	Aug. 2	24	6	60	586
Horseshoe. Sectional	C. H. Doran	480,563	Aug. 9	1300	325	60	842
Horseshoe. Spring-heel	D. C. Dwyer	482,998	Sept. 20	1759	444	60	1705
Horseshoe toe-calk	T. S. Very	481,336	Aug. 23	2584	634	60	1116
Horseshoe. Weighted	C. N. Barton	470,815	Mar. 15	1839	472	58	1471
Horseshoe with detachable ice-calks	J. L. Crocker and C. L. Bridges	473,384	Apr. 19	2180	548	59	440
Horseshoe with removable calks	C. B. Hulbert	484,740	Oct. 18	1884	480	61	407
Horseshoe with self-sharpening calks	H. O. Sageug	487,645	Dec. 6	658	169	61	1152

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Horseshoes. Method of and apparatus for manufacturing blanks and blank-bars for side-weighted	C. H. Perkins	470,365	Mar. 8	1152	295	58	1328
Horseshoes. Side-weighted blank and blank-bar for use in making side-weighted	C. H. Perkins	470,400	Mar. 8	1208	309	58	1338
Horseshoeing apparatus	J. Lamb	488,077	Dec. 13	1397	347	61	1617
Horseshoeing-rack	S. M. Martiu	487,190	Nov. 29	3241	829	61	1287
Horseshoeing-rack	W. Tompkins and G. Schneider	470,958	Mar. 15	2048	524	58	1512
Horseshoeing-rack	J. Wagner and G. B. Sunderland	481,083	Aug. 16	2130	530	60	1019
Horseshoer's stool and clincher. Combined.	J. A. McDonald	466,618	Jan. 5	492	127	58	95
Horseshoer's tool	O. Handeland	481,490	Aug. 23	2825	694	60	1163
Horseshoer's tool	S. T. Miles, Jr.	468,547	Feb. 9	1006	257	58	730
Hose	F. Buscher	471,266	Mar. 22	2526	641	58	1616
Hose and wire bridge	W. Williams and J. H. Crook	488,258	Dec. 20	1693	423	61	1692
Hose-band	F. T. Baldwin	470,344	Mar. 8	1118	286	58	1322
Hose-band	G. Ferguson	484,190	Oct. 11	998	255	61	217
Hose-bridge	J. H. Gloninger	488,888	Dec. 27	2690	666	61	1907
Hose-clamp	A. R. Dickinson	483,302	Sept. 27	2266	570	60	1816
Hose-clamp	L. H. Redfield	477,227	June 21	1586	359	59	1719
Hose-clamp	L. H. Redfield	480,513	Aug. 9	1225	307	60	827
Hose-clamp	L. H. Redfield	480,514	Aug. 9	1226	307	60	827
Hose-clamp	L. H. Redfield	480,515	Aug. 9	1227	307	60	828
Hose-clamp	F. T. Weidaw	473,537	Apr. 26	2432	616	59	510
Hose-clamps. Device for applying	Z. L. Chadbourne, E. A. Behringer, and H. J. McCoy.	484,298	Oct. 11	1185	301	61	253
Hose connections. Machine for applying	A. M. Smith	482,593	Sept. 13	1125	{ 271 272 }	60	1568
Hose-connector. Electric.	C. F. Kellom	482,181	Sept. 6	429	102	60	1419
Hose-coupling	J. Balmore and E. E. Gold	475,738	May 24	2942	746	59	1247
Hose-coupling	C. Christy, Jr.	472,471	Apr. 5	722	184	59	137
Hose-coupling	E. and A. Draudt	472,342	Apr. 5	531	138	59	99
Hose-coupling	E. E. Gold	466,561	Jan. 5	404	{ 102 103 }	58	77
Hose-coupling	A. W. Jackson	480,197	Aug. 2	698	{ 176 177 }	60	714
Hose-coupling	J. Lentz	476,752	June 7	788	194	59	1594
Hose-coupling	J. E. Louthian	475,406	May 24	2418	618	59	1148
Hose-coupling	J. F. McElroy	486,118	Nov. 15	1510	400	61	914
Hose-coupling	C. E. Petterson	475,704	May 24	2886	730	59	1238
Hose-coupling	F. Schimper and C. Zoller	487,893	Dec. 13	1080	270	61	1552
Hose-coupling	O. P. Snyder	475,254	May 17	2180	555	59	1086
Hose-coupling	A. Whelan	476,711	June 7	722	178	59	1580
Hose-coupling	F. W. Wright	471,661	Mar. 29	3092	{ 786 787 }	58	1731
Hose-coupling	F. W. Wright	471,662	Mar. 29	3095	787	58	1732
Hose-coupling	F. W. Wright	474,894	May 17	1621	{ 414 415 }	59	976
Hose-coupling	F. W. Wright	477,239	June 21	1610	394	59	1784
Hose-coupling	F. W. Wright	485,729	Nov. 8	891	239	61	772
Hose-coupling. Air-brake	G. Cain	469,830	Mar. 1	267	69	58	1152
Hose-coupling. Electric	J. B. Strauss	469,283	Feb. 23	2156	554	58	971
Hose-elevating apparatus	A. O. Muhlstein	485,129	Oct. 25	2517	647	61	547
Hose-nozzle	C. Spencer	476,966	June 14	1151	278	59	1679
Hose-nozzle guide for walls	J. N. Brewster	483,624	Dec. 27	2229	567	61	1825
Hose-nozzle holder	C. R. Robinson	479,841	Aug. 2	100	25	60	601
Hose-nozzle holder	G. W. Tinsley	471,156	Mar. 22	2362	603	58	1585
Hose or tubing. Flexible	J. Cockburn	475,384	May 24	2391	611	59	1143
Hose-pipe	J. A. Stevens	473,716	Apr. 26	2723	{ 685 686 }	59	566
Hose-pipe carrier	J. M. Harper	484,961	Oct. 25	2263	584	61	495
Hose-pipe fitting	W. Fraser	475,213	May 17	2118	536	59	1074
Hose-rack	J. C. N. Guibert	483,673	Oct. 4	226	56	61	47
Hose. Reducer and nozzle for	C. R. Robinson	477,824	June 28	2556	640	59	1985
Hose-reel	A. D. Coplin	486,692	Nov. 22	2403	627	61	1105
Hose-reel	S. F. Reynolds	483,390	Sept. 27	2395	602	60	1840
Hose-reel	R. D. Wirt	486,010	Nov. 8	1317	350	61	859
Hose-spanner	D. McCune	469,487	Feb. 23	2474	634	58	1033
Hose-support	J. A. C. Moore	484,557	Oct. 18	1592	404	61	346
Hose-supporter	E. A. Black	486,076	Nov. 15	1424	376	61	898
Hose supporter	P. F. Daniels	471,104	Mar. 22	2278	585	58	1570
Hose to couplings. Device for securing	Z. L. Chadbourne, E. A. Behringer, and H. J. McCoy.	477,043	June 14	1264	307	59	1703
Hosiery. Machine for making lace	H. Clarke and T. Mawby	486,767	Nov. 22	2520	{ 657 658 659 660 }	61	1129
Hosiery. Manufacture of	H. J. Griswold	472,876	Apr. 12	1311	{ 336 337 }	59	262
Hot-air evaporator or drier	J. H. Crozier	473,452	Apr. 26	2227	578	59	483
Hot-air furnace	H. D. Babcock	476,775	June 14	825	203	59	1615
Hot-air furnace	N. A. Boynton	471,095	Mar. 22	2261	581	58	1566
Hot-air furnace	A. Brake	471,664	Mar. 29	3098	788	58	1732
Hot-air furnace	J. Cunningham	477,519	June 21	2053	{ 511 512 }	59	1870
Hot-air furnace	J. Evans	471,110	Mar. 22	2285	587	58	1571
Hot-air furnace	J. Fridley	476,877	June 14	999	243	59	1649
Hot-air furnace	J. W. Frizzell	478,001	June 28	2845	{ 711 712 }	59	2041
Hot-air furnace	W. W. Kelsey	476,230	May 31	3759	949	59	1422
Hot-air furnace	M. Koehler	472,219	Apr. 5	334	86	59	63
Hot-air furnace	J. Kohler	468,424	Feb. 9	808	203	58	691
Hot-air furnace	A. D. Martin	466,920	Jan. 12	1001	256	58	199
Hot-air furnace	D. S. Richardson	470,446	Mar. 8	1287	329	58	1353
Hot-air furnace	J. E. and J. L. Spencer	486,134	Nov. 15	1539	{ 406 407 }	61	920

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Hot-air furnace	R. Tate	483,819	Oct. 4	448	111	61	92
Hot-air furnace	W. Thuener, Jr., and P. Herchenbach.	479,769	July 26	2701	673	60	564
Hot-air furnace	L. J. Treacy	471,038	Mar. 15	2168	558	58	1335
Hot-air furnace and cooking-stove	F. Moses	467,755	Jan. 26	2361	539	58	472
Hot-air furnace. Magazine	J., J., and P. Schill	466,944	Jan. 12	1033	263	58	205
Hot-air register	R. S. T. Cissel	479,586	July 26	2386	595	60	505
Hot-air register	J. W. Collins	471,681	Mar. 29	3131	798	58	1739
Hot-box alarm	J. C. Basel and E. Fruehauf.	483,682	Oct. 4	239	60	61	50
Hot-water and hot-air heater. Combination	F. C. Peteler	473,475	Apr. 26	2330	590	59	491
Hot-water boiler	C. Behre	480,059	Aug. 2	483	123	60	674
Hot-water furnace	E. S. Manny	475,878	May 31	3193	808	59	1310
Hot-water heater	J. H. Dodds	476,526	June 7	454	108	59	1526
Hot-water heater	J. Q. A. Gantt and J. D. Bloomhardt.	466,673	Jan. 5	573	148	58	111
Hot-water heater	A. Hallett	468,993	Feb. 16	1717	437	58	879
Hot-water heater	C. E. Hanscom	468,745	Feb. 9	1305	331	58	790
Hot-water heater	M. E. Herbert	487,620	Dec. 6	616	158	61	1444
Hot-water heater	W. Kennedy	480,406	Aug. 9	1057	265	60	794
Hot-water heater	T. Trice	476,218	May 31	3741	945	59	1418
Hot-water or steam boiler	J. M. Thatcher	477,470	June 21	1975	490	59	1854
Hotel call system	G. P. Greene	474,907	May 17	1639	418	59	980
Hotel-register	J. Murray	467,426	Jan. 19	1814	463	58	361
House:							
See Portable house.							
House interiors. Finishing of	J. Ballard	466,897	Jan. 12	965	246	58	193
Household press	J. Stendle	472,559	Apr. 12	859	220	59	178
Household utensil.	J. Wood	471,162	Mar. 22	2367	605	58	1586
Household utensil. Divided	H. H. Barry and W. James	471,517	Mar. 22	2890	735	58	1686
Hub	J. H. and E. S. Coyle	467,220	Feb. 2	467	115	58	616
Hub	S. D. Forbes	467,004	Jan. 12	1127	286	58	222
Hub	R. Green	473,837	Apr. 26	2904	729	59	601
Hub-attaching collar. Vehicle	L. Faris	482,627	Sept. 13	1174	284	60	1577
Hub-attaching device	M. F. Deiminger	482,571	Sept. 13	1091	265	60	1562
Hub-attaching device	L. Harris	476,199	May 31	3698	931	59	1410
Hub-attaching device	O. Jacobi	477,420	June 21	1893	465	59	1838
Hub-attaching device	I. Van Winkle	481,603	Aug. 30	3017	737	60	1215
Hub-band	G. Monteith	474,754	May 10	1330	351	59	916
Hub-band	C. L. Wiedrich	486,653	Nov. 22	2343	612	61	1093
Hub-bands. Cover for the ends of	J. Maris	470,895	Mar. 15	1952	500	58	1494
Hub. Bicycle	J. U. Morgan	473,426	Apr. 19	2241	564	59	452
Hub-blank for metal wheels	J. R. Little	488,125	Dec. 13	1465	370	61	1631
Hub-boring machine	D. H. Gowing	486,869	Nov. 29	2704	706	61	1182
Hub-boring machine	W. E. Kane	486,407	Nov. 15	1957	519	61	1004
Hub-boring machine	C. Seymonr	467,206	Jan. 19	1480	379	58	298
Hub dust-guard	J. T. Richards	478,466	July 5	622	151	60	125
Hub for vehicles. Metallic	J. H. Coyle	470,550	Mar. 8	1433	373	58	1382
Hub. Lubricating	F. W. Randolph	482,195	Sept. 6	450	109	60	1423
Hub. Vehicle	G. and P. Blechschmidt	473,607	Apr. 26	2560	645	59	535
Hub. Vehicle	A. G. Burrows	480,690	Aug. 9	1513	376	60	883
Hub. Vehicle	F. W. Fiedler	478,277	July 5	345	83	60	69
Hub. Vehicle	A. Hough	468,494	Feb. 9	924	235	58	713
Hub. Vehicle	W. Janiszewski	476,018	May 31	3400	858	59	1352
Hub. Vehicle	G. W. Jones and F. F. Green	467,031	Jan. 12	1172	297	58	231
Hub. Vehicle	A. A. Minor	478,287	July 5	359	87	60	72
Hub. Vehicle	I. M. Warner	473,596	Apr. 26	2545	641	59	532
Hub. Vehicle	W. H. White	473,985	May 3	155	37	59	668
Hub. Vehicle-wheel	L. Swenson	482,418	Sept. 13	838	201	60	1513
Hub. Vehicle-wheel	C. Whitford	486,996	Nov. 29	2941	758	61	1223
Hub. Wheel	R. and E. Brent	473,904	May 3	10	3	59	639
Hub. Wheel	J. Edwards	469,235	Feb. 23	2077	534	58	957
Hub. Wheel	M. L. Smith	470,216	Mar. 8	881	218	58	1279
Hub. Wheel	F. A. Wilmot	469,494	Feb. 23	2480	636	58	1034
Hubs. Band-shell for wheel	H. Higgin	480,093	Aug. 2	531	135	60	683
Hubs. Dust and mud cap for vehicle	J. Maris	487,189	Nov. 29	3240	829	61	1287
Hubs. Elastic cushion for	J. R. Gleeson	484,552	Oct. 18	1584	402	61	345
Hubs. Point-band and dust-cap for	J. Maris	469,484	Feb. 23	2470	633	58	1032
Hubs. Tool for cutting keyways in wheel	W. Smith, D. Marks, and R. Watson.	475,352	May 24	2339	600	59	1134
Huller:							
See Coffee-huller.							
Pea-huller.							
Hulling oats, barley, and other grains. Machine for.	J. E. Davis	474,164	May 3	428	103	59	721
Hydrant	E. J. Bachelder	480,313	Aug. 9	916	231	60	768
Hydrant	W. H. Bootman	485,603	Nov. 8	690	182	61	730
Hydrant	C. G. Ette	479,259	July 19	1840	461	60	325
Hydrant	J. A. Gregg	484,197	Oct. 11	1008	258	61	220
Hydrant	J. Rodican	470,842	Mar. 15	1883	482	58	1460
Hydrant. Fire	S. Brentano	468,781	Feb. 16	1369	345	58	812
Hydrant. Fire	S. Brentano	468,782	Feb. 16	1371	346	58	812
Hydrant. Fire	H. F. Hayden	485,409	Nov. 1	403	108	61	653
Hydrant or plug. Fire	T. A. Knickerbacker and R. Hughes.	488,015	Dec. 13	1277	318	61	1392
Hydrantic apparatus	J. Weeks	468,104	Feb. 2	294	71	58	581
Hydraulic drill	C. H. Oxley	470,593	Mar. 8	1491	388	58	1395
Hydraulic elevator	J. E. Barry	473,811	Apr. 26	2866	719	59	594
Hydraulic elevator	J. E. Barry	480,486	Aug. 9	1188	299	60	819
Hydraulic elevator	T. E. Brown, Jr.	487,709	Dec. 13	766	196	61	1490
Hydraulic elevator	C. I. Hall	488,891	Dec. 27	2695	667	61	1908
Hydraulic elevator	G. W. Jones	470,936	Mar. 15	2014	516	58	1506
Hydraulic elevator	A. J. McAdam	469,585	Feb. 23	2622	673	58	1062
Hydraulic elevator	I. H. Venn	476,581	June 7	530	136	59	1542

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Hydraulic engine	H. F. Crawford and R. C. Lambert.	472,942	Apr. 12	1412	361	59	282
Hydraulic jack. Horizontal	J. Weeks	478,530	July 5	725	177	60	143
Hydraulic lift	R. Carey	477,294	June 21	1697	416	59	1800
Hydraulic machinery	G. S. Duncan	478,225	July 5	251	61, 62	60	51
Hydraulic motor	S. Forter	482,732	Sept. 20	1334	{ 327 328 329	{ 60	1622
Hydraulic motor	F. Johnson	485,412	Nov. 1	410	110	61	656
Hydraulic motor	M. G. Lindsey	488,246	Dec. 20	1676	419	61	1689
Hydraulic motor	S. S. Marsh	479,291	July 19	1885	472	60	395
Hydraulic motor	E. I. Nichols	467,612	Jan. 26	2134	542	58	429
Hydraulic motor	J. W. Pack	469,589	Feb. 23	2628	674	58	1063
Hydraulic motor	W. H. Robinett	476,174	May 31	3654	{ 924 925	{ 59	1403
Hydraulic motor	M. Van Ensley	482,976	Sept. 20	1723	435	60	1698
Hydraulic motor	W. A. Wood	479,668	Aug. 2	144	35	60	610
Hydraulic motor. Oscillating	P. A. Gardner	474,238	May 3	544	134	59	743
Hydraulic motor. Reciprocating	A. T. Ballantine	476,359	June 7	209	51, 52	59	1476
Hydraulic press	J. F. Taylor	479,817	July 19	1922	4-0	60	402
Hydraulic press	H. von Mitzlaff	475,224	May 17	2130	{ 539 540	{ 59	1076
Hydraulic-pressure accumulator or regulator	W. W. Sutcliffe	477,468	June 21	1972	489	59	1853
Hydraulic supply system	J. G. Stamp	471,278	Mar. 22	2539	645	58	1618
Hydraulic variable-speed gear	L. Duncan	466,660	Jan. 5	551	{ 142 143	{ 58	106
Hydraulic variable-speed gear	L. Duncan	466,661	Jan. 5	553	143	58	107
Hydraulic variable-speed gear	L. Duncan	466,662	Jan. 5	555	{ 143 144	{ 58	107
Hydrocarbon-burner	A. Chaney and E. T. Wires	481,088	Aug. 16	2137	532	60	1020
Hydrocarbon-burner	J. A. Lannert and W. R. Jeavons	466,498	Jan. 5	307	78	58	58
Hydrocarbon-burner	M. E. Ray	472,226	Apr. 5	344	8	59	65
Hydrocarbon-burner	H. T. Russell	471,721	Mar. 29	3201	816	58	1751
Hydrocarbon-burner	G. H. Scott	472,231	Apr. 5	350	90	59	65
Hydrocarbon-burner	C. Siemens	470,711	Mar. 15	1670	432	58	1439
Hydrocarbon-burner	E. J. Thompson	476,177	May 31	3665	927	59	1404
Hydrocarbon-burner	L. B. White and J. V. Reitmayer	469,108	Feb. 16	1877	490	58	911
Hydrocarbon-burner and device for automatically feeding the same.	C. F. A. Convert	481,273	Aug. 23	2471	609	60	1097
Hydrocarbon-burning apparatus	J. H. Bullard. (Reissue)	11,236	Apr. 26	3016	760	59	623
Hydrocarbon-burning apparatus	J. H. Bullard	483,099	Sept. 20	1913	484	60	1738
Hydrocarbon-burning apparatus	J. H. Bullard	483,100	Sept. 20	1914	484	60	1738
Hydrocarbon-oil burner	F. Hagelin	475,277	May 17	2217	568	59	1094
Hydrocarbon-vapor burner	L. D. Copeland	471,465	Mar. 22	2282	719	58	1673
Hydrometer	W. C. Tiffany	480,480	Aug. 9	1181	297	60	818
Hymn-indicator	J. H. Buchanan	485,122	Oct. 25	2507	644	61	545
Ice. Apparatus for cooling water in the manufacture of	A. Smith	483,397	Sept. 27	2403	604	60	1842
Ice-cake conveyer	G. E. Berna	487,001	Nov. 29	2947	{ 759 760	{ 61	1229
Ice-can	C. E. Struck	475,629	May 24	2776	703	59	1217
Ice. Can for the manufacture of	A. Smith	472,407	Apr. 5	625	160	59	117
Ice-cans. Lid and supporting-framework for	W. H. Glover	467,406	Jan. 19	1784	435	58	355
Ice-carrier	E. T. Whiting	471,451	Mar. 22	2802	715	58	1669
Ice-chipping implement	E. W. Flynn	475,978	May 31	3346	843	59	1340
Ice-cracking machine	J. E. Richard	475,518	May 24	2606	663	59	1183
Ice-cream dasher	C. Hamill	474,989	May 17	1778	450	59	1006
Ice-cream freezer	H. W. Atwater	479,931	Aug. 2	242	60	60	628
Ice-cream freezer	C. L. Bellamy	468,092	Feb. 2	273	66	58	577
Ice-cream freezer	C. L. Bellamy	475,748	May 31	2965	752	59	1266
Ice-cream freezer	L. P. Burdick	477,184	June 14	1495	366	59	1750
Ice-cream freezer	N. Clarkson	476,518	June 7	444	105	59	1524
Ice-cream freezer	T. W. Crozier	480,714	Aug. 16	1556	{ 387 388	{ 60	905
Ice-cream freezer	F. P. Harbaugh	477,211	June 21	1549	380	59	1774
Ice-cream freezer	J. Heberling	470,360	Mar. 8	1144	293	58	1327
Ice-cream freezer	P. M. Hinman and J. B. Thompson	475,240	May 17	2163	550	59	1082
Ice-cream freezer	W. H. Hopkins	486,779	Nov. 22	2544	664	61	1133
Ice-cream freezer	J. C. Hoxie	467,934	Feb. 2	50	12	58	535
Ice-cream freezer	T. S. Lewis	474,475	May 10	951	245	59	831
Ice-cream freezer	H. Meyers	487,370	Dec. 6	217	60	61	1363
Ice-cream freezer	S. C. Moeney	476,232	May 31	3765	950	59	1423
Ice-cream freezer	J. E. Newhouse	485,646	Nov. 8	748	197	61	742
Ice-cream freezer	E. M. Searce	468,900	Feb. 16	1544	391	58	845
Ice-cream freezer	C. G. Shepard and P. Adams	469,456	Feb. 23	2417	619	58	1023
Ice-cream freezer	J. Sirrine	475,817	May 31	3033	780	59	1289
Ice-cream freezer	A. P. Storris	488,325	Dec. 20	1804	452	61	1714
Ice-cream freezer	C. T. Van Sicken	483,028	Sept. 20	1811	459	60	1717
Ice-cream freezer	E. P. Voisard	483,029	Sept. 20	1813	460	60	1717
Ice-cream mold	W. C. Treadwell	486,362	Nov. 15	1883	496	61	989
Ice-cream or water-ice	W. H. Allen	468,631	Feb. 9	1131	58	58	754
Ice-creper	H. Jedlicka	477,255	June 21	1637	399	59	1789
Ice-creper	G. D. Mussey	488,215	Dec. 20	1630	406	61	1600
Ice-cultivator	J. G. Bodenstern	470,099	Mar. 1	684	168	58	1232
Ice-cutting machine	T. F. Langley	474,962	May 17	1729	439	59	998
Ice-cutting machine	J. S. Newell	467,189	Jan. 19	1455	371	58	293
Ice-cutting machine	W. J. Pine	485,114	Oct. 25	2495	641	61	543
Ice-discharging apparatus	A. Ruemmel and F. Baner	469,320	Feb. 23	2207	566	58	982
Ice elevators. Planer for	W. H. M. Smith	482,206	Sept. 6	467	112	60	1426
Ice-forming and preserving room	F. M. Rosse	485,805	Nov. 8	982	264	61	791
Ice-machine	J. W. Hoos and E. Mann	469,999	Mar. 1	537	133	58	1203
Ice-machine	M. J. Palson	482,694	Sept. 13	1273	312	60	1597
Ice. Machine for packing	S. Kaye	466,755	Jan. 5	714	124	53	135
Ice-making apparatus	T. Shipley	476,832	June 14	926	226	59	1634
Ice-making machine	D. L. Holden	471,684	Mar. 29	3135	799	58	1739

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Ice-manufacturing apparatus	J. Buckner	485,149	Oct. 25	2552	{ 655 656 }	61	554
Ice-pick	G. W. Topping	474,879	May 17	1597	407	59	971
Ice-pick	E. Wenigmann	477,919	June 28	2714	679	59	2015
Ice-pick. Combination	J. F. Loftus and E. B. Williams	476,052	May 31	3453	871	59	1363
Ice-plow	H. Pray	483,015	Sept. 20	1793	452	60	1713
Ice-plow	T. H. Reeves	473,782	Apr. 26	2822	709	59	585
Ice-run. Portable	I. A. Manchester	458,080	Dec. 13	1402	318	61	1619
Ice-shave	J. Stubbs	482,883	Sept. 20	1582	397	60	1669
Ice-shaving machine	G. B. Webb	487,339	Dec. 6	162	46	61	1353
Ice-tool. Combination	F. R. Woodward	466,549	Jan. 5	382	97	58	74
Identification device	B. H. Weeks	481,448	Aug. 23	2757	678	60	1149
Identity-indicator	T. Houghton and A. D. Dick	475,400	May 24	2411	615	59	1147
Illuminating device for stage-scenery and for other purposes	W. Jordan and E. Broadbridge, Jr.	482,362	Sept. 13	748	180	60	1496
Implement. Combination	M. Herzberg	474,012	May 3	203	47	59	677
Implement. Hand	M. Ryan	483,477	Sept. 27	2502	630	60	1862
Implement-handle	M. E. Carleton	473,250	Apr. 19	1944	489	59	394
Implement-holder for tablets, &c.	O. T. Houghton and G. W. Paulus	478,794	July 12	1127	278	60	238
Impression-roller	F. M. Moore	468,071	Feb. 2	246	60	58	572
Incinerating-furnace	O. Stevens	486,512	Nov. 22	2114	558	61	1049
Incrustation-preventer	W. H. Wilson	484,837	Oct. 25	2067	531	61	457
Incrustation preventive	J. B. Dodds and J. R. Fothergill	477,357	June 21	1801	59	1819	
Incubator	J. W. Atkinson	467,285	Jan. 19	1606	410	58	322
Incubator	M. T. Greenleaf	470,394	Mar. 8	1200	307	58	1337
Incubator	E. Harrison	473,664	Apr. 26	2647	667	59	552
Incubator	L. Kuhner	484,325	Oct. 11	1227	313	61	202
Incubator	J. S. Rubel	482,755	Sept. 20	1379	342	60	1630
Incubator	H. M. Sheer	488,953	Dec. 27	2805	691	61	1931
Index	H. S. Bacon	483,595	Oct. 4	118	29	61	25
Index	F. Bowman	486,755	Nov. 22	2503	654	61	1126
Index	C. M. Cott	487,516	Dec. 6	467	122	61	1413
Index	F. S. Dewey	479,206	July 19	1760	441	60	369
Index	M. S. Ford	484,151	Oct. 11	939	241	61	206
Index	C. L. Ratliff	470,504	Mar. 8	1370	357	58	1369
Index	H. A. Stephenson	472,629	Apr. 12	962	249	59	196
Index	H. A. Stephenson	472,630	Apr. 12	963	250	59	197
Index and mail-assorter	W. H. Lodwick	478,617	July 12	850	209	60	184
Index. Book	L. B. Trask	466,530	Jan. 5	354	89	58	68
Index for letter-copy books. Movable	M. Vernon	476,708	June 7	719	177	59	1580
Index or directory	A. H. Martin	474,479	May 10	957	{ 246 247 }	59	832
Index. Roller	J. D. Nance	466,619	Jan. 5	493	127	58	95
Indexing	R. R. Williams	471,205	Mar. 22	2432	619	58	1599
Indicating and adding apparatus	C. E. Richson	466,836	Jan. 12	855	{ 218 219 }	58	173
Indicating discharge from or into hoppers. Means for. Indicator	F. H. Briggs	468,970	Feb. 16	1673	426	58	870
See Bill-of-fare indicator. Identity-indicator.							
Boiler-feed-indicator. Nautical course-indicator.							
Boiler water-indicator. Office-door indicator.							
tor. Pressure-indicator.							
Book-indicator. Rudder-indicator.							
Brake-piston indicator. Speed-indicator.							
tor. Station-indicator.							
Cash-indicator. Street or station indicator.							
Circumference-indicator. Telegraph-indicator.							
tor. Thermostatic indicator.							
Door-indicator. Time-indicator.							
Electric indicator. Train-indicator.							
Electric-current indicator. Valve-indicator.							
indicator. Valve-motion indicator.							
Electrical indicator. Vessel draft-indicator.							
Elevator-indicator. Watch-regulator indicator.							
Engine-indicator. tor.							
Fire-indicator. Water-indicator.							
Heat-indicator. Weather-vane indicator.							
Hymn-indicator. Wind-vane indicator.							
Indicator	R. L. Appleby	467,910	Feb. 2	8	3	58	528
Indicator	N. A. Miller	487,445	Dec. 6	363	94	61	1393
Indicator-lock	L. T. Crabtree	471,956	Mar. 29	3549	907	58	1819
Indicator-lock	L. King	487,276	Dec. 6	61	19	61	1334
Indicator-lock	C. Lindstrom	481,960	Sept. 6	58	14	60	1346
Indicator-lock	D. E. Young and W. F. Littell	483,092	Sept. 20	1903	481	60	1735
Indicia. Blank with signature-controlling	E. A. Dubey	477,744	June 28	2427	606	59	1962
Induction apparatus	C. Williams	488,299	Dec. 20	1758	443	61	1705
Induction-coil for electric meters	E. Thomson	482,209	Sept. 6	471	113	60	1427
Induction device. Self	W. Stanley, Jr.	485,336	Nov. 1	283	77	61	630
Inductorium. Electrical	L. S. M. Pyke and H. T. Barnett	484,543	Oct. 18	1573	399	61	342
Inductorium. Electrical	L. S. M. Pyke and E. S. Harris	484,544	Oct. 18	1574	400	61	313
Inflatable tube	L. J. Phelps	472,465	Apr. 5	747	190	59	142
Ingot-extractor	J. F. Lewis	480,432	Aug. 9	1102	{ 275 276 }	60	801
Ingot-manipulator	P. N. Cunningham	483,644	Oct. 4	188	47	61	39
Ingot-mold	J. Illingworth	473,579	Apr. 26	2515	{ 634 635 }	59	527
Ingot-protector	W. R. Hinsdale	476,383	June 7	245	59	59	1484
Ingots. Apparatus for extracting	H. Aiken	475,027	May 17	1834	465	59	1017
Ingots. Manufacture of steel	C. W. Kennedy and J. W. Grantland	473,466	Apr. 26	2317	586	59	489
Ingots. Manufacture of steel	C. W. Kennedy and J. W. Grantland	472,936	July 12	1329	330	60	278
Ingots. Preventing segregation in large	W. R. Hinsdale	479,120	July 19	1627	407	60	344
Ingots. Process of and apparatus for forming solid-metal	A. J. Thowless	484,476	Oct. 18	1470	374	61	321
Inhaler	H. D. Cushman	476,131	May 31	3586	905	59	1389

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Inhaler	H. D. Cushman	476,132	May 31	3587	905	59	1389
Inhaler	H. D. Cushman	488,427	Dec. 20	1972	492	61	1746
Inhaler	A. Dow	476,190	May 31	3683	930	59	1408
Inhaler	H. Ellis	486,951	Nov. 20	2873	742	61	1215
Inhaler	C. T. Kingzett	468,347	Feb. 9	695	172	58	668
Inhaler	C. D. McGrath	472,176	Apr. 5	258	68	59	49
Inhaler	H. P. Roberts	470,011	Mar. 1	550	136	58	1205
Inhaler	J. M. Van Orden	472,238	Apr. 5	362	93	59	68
Inhaler	W. C. Wilson	486,519	Nov. 22	2123	560	61	1051
Inhaler	M. S. Woodward	484,944	Oct. 25	2241	577	61	491
Inhaler	R. E. Woodward	466,718	Jan. 5	656	168	58	124
Inhaler	T. M. Dunham	482,083	Sept. 6	263	63	60	1387
Inhaler and medicament-holder. Combined	J. J. Sencenbaugh	473,526	Apr. 26	2412	612	59	506
Inhaler and medicator. Combined	J. A. Perou	469,594	Feb. 23	2633	675	58	1061
Inhaler and respirator	L. B. Hilborn	473,225	Apr. 19	1909	481	59	386
Inhaler and vaporizer	L. Walleiser	477,342	June 21	1772	434	59	1815
Inhaling and disinfecting device							
Injector	R. G. Brooke	474,361	May 10	777	202	59	797
Injector	C. E. Church	475,201	May 17	2099	531	59	1070
Injector	W. E. Dodge	478,317	July 5	404	97	60	81
Injector	W. E. Dodge	478,741	July 12	1034	254	60	221
Injector	O. L. Hallbeck	479,214	July 19	1771	444	60	371
Injector	R. Harrison	480,921	Aug. 16	1864	465	60	969
Injector	T. J. Hart	474,991	May 17	1780	450	59	1007
Injector	T. J. Hart	488,313	Dec. 20	1781	448	61	1709
Injector	F. Kelch	472,949	Apr. 12	1421	363	59	284
Injector	H. C. Reagan, Jr.	480,784	Aug. 16	1656	414	60	927
Injector	L. Schutte	468,698	Feb. 9	1241	316	58	776
Injector	J. Trix	488,099	Dec. 13	1426	356	61	1623
Injector. Automatic restarting.	W. Penberthy	484,044	Oct. 11	786	198	61	176
Injector-burner	A. L. Avery	488,646	Dec. 27	2321	574	61	1832
Injector. Centrifugal steam	M. R. Ruble	467,655	Jan. 26	2194	557	58	440
Injector. Double-acting	H. A. Bolze	469,674	Mar. 1	6	2	58	1100
Injector for locomotives. Steam and air	F. Leadbeater	486,934	Nov. 29	2843	736	61	1209
Injector or insufflator for the larynx, &c	W. Scott	480,787	Aug. 16	1662	415	60	928
Injector. Steam	J. N. Derby	484,302	Oct. 11	1191	303	61	254
Injector. Steam	J. N. Derby	484,303	Oct. 11	1194	304	61	255
Injector. Steam	G. Marty	473,010	Apr. 19	1538	392	59	319
Ink	C. M. Higgins	483,446	Sept. 27	2467	60	1855	
Ink	C. M. Higgins	483,447	Sept. 27	2468	60	1855	
Ink-bottle holder and pen-rack. Combined	J. R. Greer and W. D. Thomas	484,498	Oct. 18	1503	382	61	328
Ink or color holder	A. V. Benoit	466,974	Jan. 12	1084	274	58	214
Ink stand or bottle	W. G. Collins	467,275	Jan. 19	1591	406	58	319
Ink-well	D. Greenwood	471,511	Mar. 22	2883	734	58	1685
Ink-well	W. E. Lewis	484,893	Oct. 25	2003	514	61	444
Ink-well	J. W. MacDonald	483,072	Sept. 20	1868	473	60	1729
Ink-well	R. G. Young	472,649	Apr. 12	985	255	59	200
Ink-well for school-desks	W. H. Morden and A. J. Gilmour	485,595	Nov. 1	674	179	61	712
Inked ribbons. Method of and apparatus for making	G. W. Bishop	488,766	Dec. 27	2535	629	61	1874
Inking-roller	C. M. Bowman	477,497	June 21	2018	501	59	1862
Inkstand	F. S. Brown	468,325	Feb. 9	655	162	58	660
Inkstand	J. L. Du Bois	468,332	Feb. 9	675	167	58	664
Inkstand	M. Faust	485,375	Nov. 1	351	94	61	644
Inkstand	G. H. Foster and P. H. Farrell	481,649	Aug. 30	3080	752	60	1228
Inkstand	G. W. Galbreath	470,119	Mar. 1	711	176	58	1237
Inkstand	J. H. Gifford	483,840	Oct. 4	477	119	61	99
Inkstand	J. Graham	469,042	Feb. 16	1793	458	58	895
Inkstand	J. W. Grantland	473,551	Apr. 26	2447	620	59	512
Inkstand	M. Herzberg	468,515	Feb. 9	958	244	58	720
Inkstand	C. G. Knott	488,822	Dec. 27	2590	642	61	1886
Inkstand	L. B. Manley	469,158	Feb. 16	1944	498	58	925
Inkstand	L. B. Manley	481,408	Aug. 23	2692	661	60	1136
Inkstand	C. F. Mason	476,288	June 7	87	20	59	1455
Inkstand	W. S. Mendenhall	487,630	Dec. 6	632	162	61	1447
Inkstand	E. S. Raff. (Reissue).	11,233	Apr. 26	3012	759	59	622
Inkstand	E. S. Raff. (Reissue).	11,234	Apr. 26	3013	759	59	622
Inkstand	P. W. Salias	477,707	June 28	2371	592	59	1951
Inkstand	W. J. Sawyer	467,053	Jan. 12	1215	307	58	239
Inkstand	H. H. Schive	479,774	July 26	2720	676	60	569
Inkstand	A. W. Skog	486,686	Nov. 22	2392	625	61	1103
Inkstand	C. R. Straughn	481,600	Aug. 30	3010	736	60	1214
Inkstand and penholder. Combined	H. Siegert	487,396	Dec. 6	256	70	61	1372
Inkstand. Automatic	J. Urquhart	470,226	Mar. 8	895	221	58	1282
Inkstand, envelope, and card holder. Combined	E. G. Gereke	474,317	May 3	683	177	59	769
Inkstand. Fountain	A. Gaskill	473,703	Apr. 12	1076	276	59	216
Inkstand. Fountain	E. C. Mayloy	484,106	Oct. 11	866	220	61	192
Inkstand fountain attachment	J. H. Hamill	471,002	Mar. 15	2118	544	58	1526
Inkstand. Self-closing	C. R. Straughn	485,397	Nov. 1	386	103	61	651
Inkstand-stopper	C. L. Wheeler, Jr	482,051	Sept. 6	210	50	60	1376
Inkstand-support and pen-rack. Combined	E. Davis	486,278	Nov. 15	1765	464	61	966
Inkstand-support and pen-rack. Combined	E. Davis	486,279	Nov. 15	1766	464	61	966
Inlaid work for decorative purposes. Manufacture of	H. A. Cousins	488,542	Dec. 27	2153	532	61	1798
Inlaid work for decorative purposes. Manufacturing	H. A. Cousins	488,540	Dec. 27	2153	532	61	1798
Inlaid work for decorative purposes. Manufacturing	H. A. Cousins	488,541	Dec. 27	2154	532	61	1798
Inseam-trimming machine	F. H. Warren	488,591	Dec. 27	2238	554	61	1816
Insect-catcher	W. A. McAdams	483,079	Sept. 20	1879	476	60	1731
Insect-exterminator	L. G. Tuttle	471,779	Mar. 29	3296	841	58	1769
Insect-powder distributor	C. H. Joosten	487,122	Nov. 29	3137	804	61	1268
Insect-trap	W. Amos	485,077	Oct. 25	2447	630	61	532
Insect-trap	J. H. Edwards	473,920	May 3	56	10	59	647

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Insect-trap.....	C. F. Jolitz.....	488,394	Dec. 20	1916	479	61	1735
Insect-trap.....	E. Koecher.....	485,815	Nov. 8	994	237	61	793
Insect-trap.....	H. v. Pücker.....	473,778	Apr. 26	2816	708	59	584
Insect-trap or receptacle for disinfectants.....	M. S. O'Brien.....	471,273	Mar. 22	2534	643	58	1617
Insecticide.....	H. Berkefeld.....	469,892	Mar. 1	363	.....	58	1171
Insecticide.....	J. J. Carter.....	482,403	Sept. 13	813	.....	60	1509
Insecticide.....	W. D. Sunderlin.....	469,285	Feb. 23	2160	.....	58	972
Insecticide-distributor.....	R. J. Talley.....	4-3,269	Sept. 27	2218	557	60	1807
Insecticides. Device for applying.....	M. A. Hawley.....	472,456	Apr. 5	702	179	59	133
Insole.....	J. G. Brooks.....	469,537	Feb. 23	2516	654	58	1047
Insole.....	E. H. Noble.....	472,713	Apr. 12	1088	279	59	218
Instruction in reading and calculating. Device for.....	W. W. Hallett.....	481,728	Aug. 30	3217	785	60	1254
Insulated electric conductor.....	J. B. Williams.....	471,587	Mar. 29	2993	762	58	1714
Insulated electric conductor.....	J. B. Williams.....	471,588	Mar. 29	2995	762	58	1714
Insulated electric wire.....	T. L. Reed.....	482,753	Sept. 20	1377	341	60	1629
Insulated gear-wheel.....	G. F. Lockwood.....	474,913	May 17	1645	420	59	981
Insulating magnetic coils. Machine for making.....	C. E. Lipe.....	473,123	Apr. 19	1725	436 437	59	351
Insulated rivet.....	W. S. Hull.....	483,806	Oct. 4	421	105	61	88
Insulating-chair for rails.....	F. E. Kinsman.....	486,477	Nov. 22	2065	547	61	1039
Insulating-coupling.....	A. Anderson.....	474,569	May 10	1106	282	59	861
Insulating-coupling.....	L. McCarthy.....	468,772	Feb. 9	1347	340	58	798
Insulating-coupling.....	L. McCarthy.....	468,773	Feb. 9	1347	340	58	798
Insulating delicate mechanism from vibration. Apparatus for.....	C. L. Wright.....	466,818	Jan. 12	823	212	58	167
Insulating electric conductors.....	A. V. Abbott.....	477,732	June 28	2408	.....	59	1958
Insulating electric conductors.....	C. C. Cuttriss.....	4-8,141	Dec. 13	1491	375	61	1636
Insulating electric wires. Compound for.....	L. Hill.....	472,352	Apr. 5	543	.....	59	101
Insulating-joint.....	C. Wirt.....	484,483	Oct. 18	1481	377	61	323
Insulating purposes. Composition of matter for.....	D. H. Piffard.....	467,520	Jan. 26	1962	.....	58	401
Insulating-support for electric-railway wires.....	A. A. Shobe and W. Embley.....	474,049	May 3	268	65	59	689
Insulating-swivel.....	A. H. Englund.....	468,053	Feb. 2	220	54	58	567
Insulating-tube for electric conductors.....	A. P. Seymour.....	476,964	June 14	1149	277	59	1679
Insulation for electric wires.....	S. Vanstone.....	470,883	Mar. 15	1939	496	58	1491
Insulation. Making artificial mica sheets for electrical.....	A. H. S. Dyer.....	483,646	Oct. 4	192	48	61	40
Insulator.....	W. S. Andrews.....	466,391	Jan. 5	126	35	58	26
Insulator.....	W. J. Bowen.....	481,132	Aug. 16	2210	546	60	1034
Insulator.....	H. H. Brooks.....	482,913	Sept. 20	1626	407	60	1678
Insulator.....	C. E. Conover.....	479,134	July 19	1645	411	60	347
Insulator.....	C. F. Goodrich.....	474,319	May 3	687	178	59	769
Insulator.....	F. D. Gould.....	477,753	June 28	2448	611	59	1965
Insulator.....	J. J. Green.....	480,011	Aug. 2	395	98	60	656
Insulator.....	C. N. Hammond.....	469,940	Mar. 1	438	109	58	1185
Insulator.....	C. T. Lee.....	467,941	Feb. 2	59	14	58	536
Insulator.....	C. T. Lee.....	467,942	Feb. 2	60	14	58	537
Insulator.....	C. T. Lee.....	482,872	Sept. 20	1553	388	60	1665
Insulator.....	C. T. Lee.....	485,106	Oct. 25	2186	639	61	541
Insulator.....	F. M. Locke.....	484,209	Oct. 11	1034	263	61	224
Insulator.....	L. McCarthy.....	478,518	July 5	703	170	60	140
Insulator.....	G. B. Norgrave.....	466,726	Jan. 5	670	172	58	127
Insulator.....	A. P. Seymour.....	483,771	Oct. 4	376	93	61	74
Insulator.....	C. Wirt.....	488,046	Dec. 13	1342	332	61	1605
Insulator.....	H. C. Wirt.....	477,980	June 28	2197	701	59	2033
Insulator.....	A. J. Wylie.....	481,457	Aug. 23	2772	683	60	1152
Insulator-bracket.....	T. H. Brady.....	476,604	June 7	571	136	59	1550
Insulator. Circuit-breaking.....	A. P. Seymour.....	476,828	June 14	920	225	59	1634
Insulator. Electric.....	W. H. Clark.....	482,297	Sept. 6	619	147	60	1456
Insulator for boilers. Electric.....	P. Decker.....	467,085	Jan. 12	1264	320	58	248
Insulator for electric-railway conductors.....	C. T. Lee.....	485,105	Oct. 25	2185	638	61	541
Insulator for overhead electric railways.....	H. D. Winton.....	470,356	Mar. 8	1137	291	58	1325
Insulator for trolley-wires.....	W. S. Andrews and H. P. Ball.....	470,417	Mar. 8	1234	315 316	58	1343
Insulator-pin.....	F. M. Locke.....	476,207	May 31	3716	939	59	1413
Insulator. Pipe.....	G. E. Dixon.....	481,899	Aug. 30	3501	857	60	1309
Insulator. Porcelain.....	J. Pass and A. P. Seymour.....	476,813	June 14	897	220	59	1630
Insulator-support.....	D. Doren.....	472,529	Apr. 12	825	210	59	170
Insulator. Trolley-wire.....	A. Anderson.....	484,280	Oct. 11	1155	294	61	248
Insulators. Molding mica forms for electrical.....	C. W. Jefferson.....	483,653	Oct. 4	201	50	61	41
Interlocking block for building, paving, &c.....	C. E. Simpson.....	472,590	Apr. 12	902	231	59	185
Intrenching-tool.....	W. H. Hamner.....	470,122	Mar. 1	715	177	58	1238
Intrenching-tool.....	M. A. Luther.....	484,806	Oct. 25	2066	515	61	445
Invalid and center table. Combined.....	W. Kohlstedt.....	468,112	Feb. 2	307	74	58	583
Invalid-lift.....	H. G. Monkhouse.....	470,944	Mar. 15	2027	518 519	58	1508
Invalid-supporter.....	S. J. Rhoads.....	483,657	Oct. 4	206	51	61	42
Invalid's adjustable back-rest.....	J. Parker.....	484,974	Oct. 25	2287	590 591	61	500
Iodine derivatives of acetyl paramido-phenetole.....	L. Scholvien.....	472,828	Apr. 12	1245	.....	59	248
Iridescent stone or body.....	J. Jacobson.....	467,579	Jan. 26	2087	529	58	420
Iridescent stone or body.....	J. Jacobson. (Reissue).....	11,263	Aug. 16	2271	560	60	1044
Iridescent-surfaced articles. Making.....	J. Jacobson.....	467,661	Jan. 26	2203	560	58	442
Iron:							
See Corner-iron. Seam-iron.							
Curling-iron. Smoothing-iron.							
Flat-iron. Soldering-iron.							
Plane-iron. Trace-iron.							
Sad-iron.							
Iron and alumina. Apparatus for removing.....	S. Hughes.....	479,882	Aug. 2	163	41	60	614
Iron and steel. Apparatus for galvanizing wrought or cast.....	T. Jones.....	476,651	June 7	640	155 156	59	1564
Iron and steel. Manufacture of.....	J. P. Witherow.....	481,881	Aug. 30	3467	850	60	1303
Iron. Clamp for bending sheet.....	R. E. Bradburn.....	466,733	Jan. 5	681	175	58	129
Iron from ore. Separating.....	H. H. Eames.....	484,877	Oct. 25	2122	.....	61	467

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Iron. Manufacturing sheet.	B. Talbot	482,396	Sept. 13	806		60	1507
Iron. Melting.	H. J. Graf	485,927	Nov. 8	1173	309	61	828
Iron or steel. Determining the temper of.	C. A. Caspersson	471,809	Mar. 29	3349	853	58	1779
Iron ore. Composition of matter and process of preparing comminuted	G. Conkling	468,219	Feb. 2	466		58	616
Iron ore. Reducing.	E. E. Graff	470,640	Mar. 8	1560		58	1409
Iron ores. Treating powdery.	J. Wilson	467,361	Jan. 19	1720		58	343
Iron. Reducing oxides of.	T. S. Blair, Jr.	466,452	Jan. 5	229	58, 59	58	44
Iron, steel, and other similar metals homogeneous.	J. C. Fraley	475,498	May 24	2571	654	59	1177
Rendering							
Iron structures. Cooling.	C. J. Williams	472,746	Apr. 12	1135	291	59	227
Iron. Treating.	R. Southerton	470,606	Mar. 8	1506		58	1399
Iron ware. Producing enameled.	C. A. W. Vollrath	438,683	Dec. 27	2385		61	1844
Ironing-board.	S. Boone	473,653	Apr. 26	2631	663	59	549
Ironing-board.	F. N. Chapin	480,170	Aug. 2	658	168	60	707
Ironing-board.	C. A. Cook	468,790	Feb. 16	1384	350	58	814
Ironing-board.	J. W. Danielson	467,084	Jan. 12	1263	320	58	248
Ironing-board.	E. R. Fowler	482,348	Sept. 13	718	171	60	1490
Ironing-board.	S. C. Horn	483,932	Oct. 4	598	152	61	124
Ironing-board cover.	M. S. Everett	484,951	Oct. 25	2247	579	61	492
Ironing-machine.	F. D. Adams	482,607	Sept. 13	1141	275	60	1572
Ironing-machine.	A. R. Gustafson	485,465	Nov. 1	486	129	61	671
Ironing-machine.	R. S. Nelson and A. Kreuter	473,950	May 3	106	24	59	657
Ironing-machine.	R. S. Nelson and A. Kreuter	485,707	Nov. 8	853	229	61	764
Ironing-machine.	W. Phillips	468,527	Feb. 9	981	251	58	724
Ironing-machine.	W. Phillips	480,277	Aug. 9	850	216	60	757
Ironing-machine.	C. E. Quarnström	472,954	Apr. 12	1437	366	59	287
Ironing-machine.	H. E. Smith	468,266	Feb. 2	553	135	58	631
Ironing-machine.	H. E. Smith	468,267	Feb. 2	553	136	58	631
Ironing-machine.	D. C. Tibbs	476,332	June 7	168	41	59	1469
Ironing-machine.	L. H. Watson	484,925	Oct. 25	2213	570	61	485
Ironing-machine.	F. C. Wendell	466,815	Jan. 12	820	211	58	166
Ironing-machine clamp.	F. A. Walker	486,650	Nov. 22	2340	611	61	1092
Ironing-table.	G. Bacon	469,431	Feb. 23	2378	610	58	1016
Ironing-table.	O. J. Bailey	483,347	Dec. 20	1844	461	61	1721
Ironing-table.	G. W. Lawbaugh	486,482	Nov. 22	2073	549	61	1040
Ironing-table.	W. G. Lindsay	483,460	Sept. 27	2481	625	60	1858
Ironing-table.	W. H. Little	486,878	Nov. 29	2715	707	61	1184
Ironing-table.	B. F. Melloe	467,944	Feb. 2	62	14	58	537
Ironing-table.	W. F. Parmelee	479,301	July 19	1899	475	60	397
Ironing-table.	G. N. Simmons	466,378	Jan. 5	110	32	58	24
Ironing-table.	R. D. P., and C. Voorhees	488,858	Dec. 27	2653	657	61	1899
Ironing-table and clothes-rack. Combined	R. R. Boggs	470,467	Mar. 8	1321	343	58	1359
Ironing-table. Folding.	H. C. Hill and C. W. Frey	483,353	Sept. 27	2335	587	60	339
Irrigating and sprinkling land. Apparatus for	J. Franklin	479,105	July 19	1537	490	60	339
Irrigating head-gate.	J. Ettien	474,549	May 10	1072	275	59	854
Irrigating-laterals. Machine for forming	A. J. Thompson	478,034	June 28	2892	723	59	2050
Isoeugenol benzyl-ether and preparing the same.	F. Ach	487,205	Nov. 29	3263		61	1291
Jack.							
See Bootjack.	Pegging-jack.						
Counter-shaft-sup.	Plug spring-jack.						
porting jack.	Railway-track jack.						
Floor-jack.	Screw-jack.						
Hydraulic jack.	Stove-jack.						
Lever-jack.	Thill-coupling jack.						
Lifting-jack.	Vehicle-jack.						
Lowering-jack.	Wagon-jack.						
Nailing-jack.	Window-jack.						
Jack.	J. J. Adgate	488,300	Dec. 20	1759	443	61	1705
Jacket, &c.	L. Goodman	483,686	Oct. 4	245	61	61	51
Jacket. Shooting.	E. D. Bean	479,385	July 19	2052	512	60	428
Jacketed can.	G. B. Cooper	478,050	June 23	2914	728	59	2054
Jacquard-card wire	A. and T. W. Bentley	488,418	Dec. 20	1960	489	61	1744
Jacquard mechanism.	G. W. Stafford	475,711	May 24	2896	733	59	1240
Jacquard-mechanism griff-guide.	O. W. Schaum	488,226	Dec. 20	1648	412	61	1663
Jacquard punch-selecting apparatus.	B. Toone	487,499	Dec. 6	441	113	61	1408
Jail.	D. K. Osbourne	487,448	Dec. 6	365	95, 96	61	1393
Jail-bar.	L. D. York	480,358	Aug. 9	978	246	60	779
Jail-corridors. Safety-door for.	P. Hale	475,556	May 24	2668	678	59	1195
Jail. Electric.	P. Hale and C. H. Sparks	477,301	June 21	1710	419	59	1802
Jail-grating.	P. J. Pauly, Sr.	480,700	Aug. 9	1529	380	60	886
Jail or vault construction.	D. K. Osbourne	485,506	Nov. 1	540	143	61	682
Jail-plate. Electric.	W. S. Hull	480,099	Aug. 2	539	137	60	685
Jails. Constructing.	P. Hale	469,635	Feb. 23	2630	689	58	1075
Jails. Construction of.	D. K. Osbourne	485,559	Nov. 1	618	165	61	699
Jar.							
See Butter-jar.	Milk or fruit preserving						
Canning or preserv-	jar.						
ing jar.	Packing-jar.						
Fruit-jar.	Preserving-jar.						
Jar.	A. Weissenhaner	483,033	Sept. 20	1818	462	60	1718
Jar-cap spanner.	H. P. Hobbs	468,804	Feb. 16	1401	353	58	818
Jar-closure.	F. Guilleaume and E. Goltstein	481,112	Aug. 16	2181	540	60	1028
Jar cover and lock therefor. Fruit	J. B. Johns	471,483	Mar. 22	2819	725	58	1678
Jar covers. Tool for turning fruit.	J. Van Altena	484,070	Oct. 11	820	207	61	183
Jar-fastener.	G. B. Valentine	471,917	Mar. 29	3494	893	58	1809
Jar-fastening.	R. L. Patterson	477,955	June 28	2766	693	59	2027
Jar-fastening.	W. Teamer	469,985	Mar. 1	520	129	58	1199
Jar filler and holder.	I. M. and I. M. Fisher	483,049	Sept. 20	1838	467	60	1723

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Jar filler. Fruit.....	W. I. Leggett	475,874	May 31	3179	806	59	1309
Jar-holder.....	W. G. Cummins	470,846	Mar. 15	1888	483	58	1480
Jar holder. Fruit.....	A. F. Frost	476,790	June 14	852	210	59	1620
Jar holder. Fruit.....	J. G. Van Altena	485,850	Nov. 8	1049	280	61	803
Jar, jug, or can	W. E. and C. W. Clark	475,078	May 17	1909	484	59	1031
Jar-sealing device.....	I. P. Nelson	474,756	May 10	1392	352	59	917
Jar sealing device.....	I. P. Nelson	478,126	July 5	70	18	60	16
Jars or similar vessels. Means for sealing.....	J. W. Fuller	487,366	Dec. 6	211	58	61	1362
Jars or vessels. Self-fastening rim for.....	H. Cone	484,779	Oct. 25	1962	500	61	435
Jewel-setting machine	D. H. Church	488,240	Dec. 20	1666	416 417	61	1087
Jewel-settings. Machine for truing.....	T. Gill	485,410	Nov. 1	406	109 110	61	655
Jeweler's forceps	D. Mendelson	476,754	June 7	790	194	59	1595
Jeweler's spring-snap	W. C. Edge	472,616	Apr. 12	943	243	59	193
Jeweler's turk's-head roll	F. Mossberg	484,108	Oct. 11	868	221	61	192
Jewelry	A. J. Groenman	466,344	Jan. 5	56	14	58	13
Jewelry	H. Lehr	482,453	Sept. 13	940	229	60	1531
Jewelry, &c. Apparatus for cleaning.....	C. T. Bradshaw	486,756	Nov. 22	2505	654	61	1126
Jewelry. Hinge-joint for	D. F. Adams	467,391	Jan. 19	1762	440	58	351
Jewelry. Manufacturing articles of	G. C. Bugbee	469,496	Feb. 23	2433	637	58	1035
Jigging-machine	R. Kennedy	468,111	Feb. 2	304	74	58	583
Joiner's clamp	F. Martin	484,104	Oct. 11	865	220	61	191
Joiners' work. Device for fixing	J. Hartley	470,672	Mar. 15	1612	418	58	1428
Joint:							
See Caliper-joint. Rod-joint.							
Electric-conductor joint. Sheet-metal lock-joint.							
Electric-wire joint. Universal joint.							
Insulating-joint. Vehicle top-joint.							
Rail-joint. Wood-joint.							
Railway-rail joint. Woodwork-joint.							
Joint and metallic cylinder and producing the same.....	L. White and B. S. Bigelow	468,298	Feb. 2	607	152	58	641
Joint-bolt	E. H. Duchemin	470,995	Mar. 15	2110	542	58	1525
Joint coupling. Long.....	F. I. Maule	485,961	Nov. 8	1238	327	61	842
Joint for furniture, &c.....	J. W. Campbell	468,963	Feb. 16	1657	424	58	867
Joint-mold	H. W. Fisher	467,881	Jan. 26	2562	649	58	509
Joint-mold	J. C. Raymond	471,894	Mar. 29	3463	884	58	1802
Joint or coupling for metallic pipes or tubes.....	J. Aird	478,496	July 5	662	162	60	131
Joint-wiper	R. Reach. (Reissue)	11,229	Mar. 8	1574	409	58	1412
Jointing and sanding machine.....	W. F. Larish	484,639	Oct. 18	1719	436 437	61	371
Joist-anchor	M. W. Mitchell	484,666	Oct. 18	1773	451	61	383
Joist-lifter	W. Heister	484,365	Oct. 11	1285	328	61	274
Joists. Wrought-metal hanger for	I. J. Lehman	478,163	July 5	140	36	60	30
Journal	W. S. Loveland and E. C. Henn	470,497	Mar. 8	1361	354	58	1367
Journal and hinge. Combined ball.....	R. O. Bingham	479,731	July 26	2636	654	60	551
Journal-bearing	J. M. Andrews	487,815	Dec. 13	952	240 241	61	1528
Journal-bearing	J. M. and M. A. Andrews	478,533	July 5	733	178 179	60	145
Journal-bearing	C. A. Burton	487,236	Nov. 29	3344	851	61	1305
Journal-bearing	W. Curran	484,143	Oct. 11	927	239	61	204
Journal-bearing	J. R. Montague and J. A. Pross	480,025	Aug. 2	430	109	60	693
Journal-bearing	W. N. Rumely	477,272	June 21	1662	406	59	1793
Journal-bearing	S. J. Shimer	486,199	Nov. 15	1626	430	61	937
Journal-bearing	A. E. Smith	475,990	May 31	3364	848	59	1343
Journal-bearing	J. W. Terman	471,405	Mar. 22	2735	698	58	1657
Journal-bearing	H. A. Todd and A. H. Anderson	472,150	Apr. 5	218	58	59	41
Journal-bearing. Dust-proof	T. A. Edison	472,752	Apr. 12	1144	293	59	228
Journal-bearing. Automatic adjusting device for	G. Wilcox	471,346	Mar. 22	2636	670	58	1638
Journal-bearing. Bushing for	F. Latulip	475,983	May 31	3356	846	59	1342
Journal-bearing. Composition of matter for	A. G. Haley	485,688	Nov. 8	819	...	61	757
Journal-bearing. Composition of matter for	P. H. Holmes	481,949	Sept. 6	45	10	60	1343
Journal-bearing. Manufacturing composition	P. H. Holmes	482,310	Sept. 6	648	...	60	1462
Journal-bearing. Reducible lining for	F. Van Benthuysen	479,039	July 19	1499	373	60	321
Journal-box	E. E. Angell	486,175	Nov. 15	1595	422	61	931
Journal-box	G. F. Godley	471,069	Mar. 15	2216	569	58	1545
Journal-box	W. B. Hosford	472,729	Apr. 12	1106	285	59	222
Journal-box	E. Jones, C. Dawson, and H. Stanton	477,329	June 21	1754	429	59	1611
Journal-box	J. L. Jönsson	479,983	Aug. 2	327	80	60	644
Journal-box	J. Z. Nyquist	485,213	Nov. 1	88	27.28	61	591
Journal-box	W. Sneddon	488,720	Dec. 27	2438	605	61	1855
Journal-box	A. C. Stilson	469,890	Mar. 1	360	91	58	1170
Journal-box	W. O. Wakefield	469,730	Mar. 1	98	26	58	1118
Journal-box. Antifriction	M. B. Stafford and R. W. Morgan	473,974	May 3	141	32	59	664
Journal-box lifter	E. E. Taylor	472,835	Apr. 12	1256	321	59	250
Journal-box. Lubricating	R. D. O. Smith	488,800	Dec. 27	2561	636	61	1680
Journal box or bearing.....	S. S. Morton	476,158	May 31	3628	917 918	59	1398
Journal-braces. Machine for reducing.....	E. Ferriss	483,956	Oct. 4	651	162	61	135
Journal-lubricator	W. H. Bache and W. W. Smalley	484,512	Oct. 18	1525	387	61	332
Journals. Counterbalance for	W. H. Wood	466,645	Jan. 5	528	137 138	58	102
Jumping-stand	F. Medart	468,625	Feb. 9	1123	286	58	752
Junction-box	C. R. Arnold	476,970	June 14	1157	279	59	1680
Keel	J. Grothgar and J. M. Garfield	468,339	Feb. 9	684	169	58	666
Keg or barrel tilter	W. I. Leggett	486,484	Nov. 22	2075	550	61	1041
Keg hooping and heading machine	T. A. Cook	482,079	Sept. 6	257	62	60	1386
Kerf-spreader	J. M. Foster	482,507	Sept. 13	526	239	60	1542
Kettle-carrier. Elevated	E. Sterner and W. B. Amspacher	475,167	May 17	2048	515	59	1059
Kettle. Confectioner's	W. Brierley	484,134	Oct. 11	907	232	61	200
Kettle. Confectioner's	T. Burkhard	476,917	June 14	1068	257	59	1663

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Kettle. Lamp.....	W. H. Holden.....	487,326	Dec. 6	147	42	61	1349
Kettle. Steam-jacketed.....	S. H. Emmens.....	484,784	Oct. 25	1972	502	61	438
Kettle. Steaming.....	J. F. Taylor.....	481,982	Sept. 6	92	563	60	1352
Key: See Musical-instrument Violin-key. key.					24		
Key.....	J. W. Toops.....	485,725	Nov. 8	885	237	61	771
Key-controller and signal-transmitter.....	M. Martin.....	479,715	July 26	2603	647	60	545
Key-fastener.....	A. J. Lyon.....	478,448	July 5	595	145	60	117
Key-fastener.....	A. C. Mack.....	480,330	Aug. 9	938	238	60	772
Key-fastener.....	J. J. Travis.....	468,630	Feb. 9	1129	287	58	754
Key-holder.....	N. W. Crandall.....	480,712	Aug. 16	1552	387	60	905
Key-opening can.....	J. Zimmerman.....	486,521	Nov. 22	2126	561	61	1051
Key-opening can.....	J. Zimmerman.....	486,522	Nov. 22	2129	562	61	1052
Key-opening sheet-metal can.....	J. Zimmerman.....	486,523	Nov. 22	2131	562	61	1052
Key-ring and pencil. Combined.....	H. P. Fairchild.....	470,997	Mar. 15	2113	543	58	1525
Key-seat-cutting machine.....	M. Morton.....	468,072	Feb. 2	247	60, 61	58	572
Key-slot-forming tool.....	W. H. Taylor.....	487,701	Dec. 6	748	191	61	1468
Keys. Device for carrying.....	J. C. Taylor.....	477,970	June 28	2783	697	59	2030
Keyboard attachment.....	M. Brownold.....	469,647	Feb. 23	2696	693	58	1078
Keyboard. Exercising.....	A. K. Virgil.....	479,339	July 19	1954	694	60	408
Keyboard for musicians. Exercising.....	A. K. Virgil.....	479,340	July 19	1959	488	60	409
Keyboard-operator. Automatic.....	H. S. Prentiss.....	487,936	Dec. 13	1149	287	61	1565
Keyboard. Transposing.....	R. E. Bell.....	481,778	Aug. 30	3308	288	60	1273
Keyhole-guard.....	C. L. Goodridge.....	474,906	May 17	1638	808	59	980
Keyhole-guard.....	O. Stoddard.....	478,768	July 12	1075	418	59	980
Keyhole-guard for padlocks.....	J. V. Carvell.....	483,945	Sept. 27	2325	267	60	229
Kiln: See Brick-kiln. Malt-drying kiln. Drying-kiln. Pottery-kiln. Lumber-drying kiln.					584	60	1827
Kiln.....	P. J. Handel.....	481,562	Aug. 30	2948	724	60	1203
Kiln. Continuous.....	M. A. T. Boehneke.....	474,807	May 17	1480	378	59	948
Kiln. Continuous.....	W. Radford.....	484,237	Oct. 11	1081	379	61	234
Kilns. System of pipes for heating lumber.....	A. T. Bemis.....	475,480	May 24	2541	274	61	234
King-bolt.....	J. Friar.....	485,496	Nov. 1	526	647	59	1171
King-bolt for vehicles.....	W. H. Sheldon.....	471,401	Mar. 22	2727	139	61	679
Kitchen-cabinet.....	A. C. Carr.....	475,197	May 17	2094	695	58	1656
Kitchen-cabinet.....	C. H. Hagler.....	488,807	Dec. 27	2569	529	59	1069
Kitchen-cabinet.....	F. Holmes.....	483,219	Sept. 27	2108	638	61	1881
Kitchen-cabinet.....	R. G. May.....	487,629	Dec. 6	630	534	60	1788
Kitchen-cabinet.....	E. F. Smith.....	485,718	Nov. 8	870	535	61	1446
Kitchen-cabinet.....	W. Thompson.....	469,842	Mar. 1	282	162	61	768
Kitchen-cabinet and ironing-board. Combined.....	A. Meron.....	479,893	Aug. 2	181	73, 74	58	1155
Kitchen utensil.....	H. B. Wiley.....	485,312	Nov. 1	235	44	60	617
Kite.....	G. S. Crosby.....	487,471	Dec. 6	400	65	61	620
Kneader. Dough.....	F. Erren and O. Lohner.....	478,507	July 5	685	103	61	1399
Kneader. Dough.....	E. Prescott.....	485,822	Nov. 8	1006	167	60	135
Kneader or mixer. Dough.....	A. Dagry.....	483,430	Sept. 27	2446	269	61	795
Kneading dough and shaping it into loaves. Apparatus for.....	W. J. Müller.....	479,827	Aug. 2	84	615	60	1851
Kneading-machine.....	J. M. Ruthrauff.....	478,133	July 5	78	616	60	538
Kneading machine. Dough.....	L. Durand.....	485,096	Oct. 25	2474	21	60	538
Knife: See Butter-knife. Paper-knife. Chopping-knife. Pocket-knife. Cutter-head knife. Rotary knife. Cutting-knife. Stoning-knife. Gage-knife. Surgical knife. Oyster-knife.							
Knife.....	C. C. Brooks.....	486,426	Nov. 22	1994	529	61	1024
Knife.....	J. J. Eberhard.....	485,264	Nov. 1	165	48	61	607
Knife.....	N. P. Nielsen.....	477,817	June 28	2548	637	59	1933
Knife.....	R. W. Walker and J. W. Peifer.....	472,006	Mar. 29	3617	924	58	1832
Knife-blade machine.....	T. R. Moore.....	481,804	Aug. 30	3347	819	60	1280
Knife-cleaner.....	T. Murphy.....	487,446	Dec. 6	364	94	61	1393
Knife cleaner and polisher.....	J. F. C. Farquhar.....	487,728	Dec. 13	802	205	61	1497
Knife cleaning and flouring device.....	J. H. Mitchell.....	472,194	Apr. 5	289	76	59	54
Knife cleaning and polishing machine.....	J. Pietscher.....	479,304	July 19	1903	476	60	398
Knife for cutting the rope used in boring Artesian and oil wells.....	W. A. Lloyd.....	484,204	Oct. 25	2004	515	61	444
Knife for shearing paper, &c.....	F. Talcott.....	467,316	Jan. 19	1650	490	58	330
Knife-handle.....	J. H. Bennett.....	485,166	Nov. 1	12	3	61	575
Knife-holder.....	T. Shaw.....	479,669	July 26	2520	627	60	531
Knife-sharpener.....	F. Chailly.....	468,472	Feb. 9	877	223	58	704
Knife-sharpener.....	S. W. Wardwell, Jr.....	469,615	Feb. 23	2657	682	58	1070
Knives, forks, &c. Apparatus for polishing and sharpening.....	F. Bosse.....	479,114	July 19	1619	405	60	343
Knit fabric.....	J. F. Gee.....	481,351	Aug. 23	2602	639	60	1119
Knit fabric.....	W. H. Pepper.....	473,474	Apr. 26	2338	589	59	491
Knit goods. Method of and apparatus for making colored figures in.....	R. Lieb.....	488,019	Dec. 13	1287	321	61	1594
Knit nether garment.....	S. T. Sutton.....	475,734	May 24	2937	745	59	1246
Knit undergarment.....	J. H. Pike.....	482,097	Sept. 6	282	68	60	1391
Knitted fabric.....	M. Gernshym.....	467,091	Jan. 12	1275	323	58	250

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Knitted fabric.....	W. Janssen.....	473,580	Apr. 26	2517	635	59	528
Knitted fabrics. Device for transferring.....	H. J. Griswold.....	472,874	Apr. 12	1308	336	59	262
Knitted goods and manufacturing the same.....	H. J. Griswold.....	472,875	Apr. 12	1309	336	59	262
Knitting and forming hose.....	F. W. Simons.....	468,212	Feb. 2	458	113	58	614
Knitting-frame. Straight-bar.....	G. Lindemuth.....	470,397	June 7	271	64	59	1490
Knitting-frames. Needle-rail for Cotton's.....	F. A. Ludwig.....	476,959	June 14	1142	275	59	1678
Knitting hose.....	F. W. Simons.....	476,084	May 31	3503	883	59	1374
Knitting-machine.....	C. J. Appleton.....	482,608	Sept. 13	1143	276 277 278	60	1572
Knitting-machine.....	J. Bendor.....	485,316	Nov. 1	242	66, 67	61	621
Knitting-machine.....	J. Bendor.....	485,317	Nov. 1	247	68, 69	61	622
Knitting-machine.....	F. A. Calley.....	470,909	Mar. 15	1972	504	58	1498
Knitting-machine.....	R. Emerson.....	485,738	Nov. 8	904	242	61	774
Knitting-machine.....	G. H. Gilbert.....	468,513	Feb. 9	953	242 243	58	718
Knitting-machine.....	J. F. Gordon.....	467,094	Jan. 12	1282	325	58	251
Knitting-machine.....	H. E. Harbaugh.....	482,173	Sept. 6	416	99 100 82 83 84 85 86 87	60	1417
Knitting-machine.....	R. W. King.....	479,986	Aug. 2	334	88 89	60	645
Knitting-machine.....	M. Kirshner.....	479,601	July 26	2408	600 601	60	510
Knitting-machine.....	W. H. and G. D. Mayo.....	474,671	May 10	1264	323 324 325	59	891
Knitting-machine.....	G. F. McKenney.....	488,575	Dec. 27	2208	546 547 548	61	1810
Knitting-machine.....	E. E. Randall.....	480,938	Aug. 16	1886	471 422	60	973
Knitting-machine.....	R. W. Scott and L. N. D. Williams.....	484,610	Oct. 18	1667	423 424 425	61	362
Knitting-machine.....	M. A. Seüler.....	475,989	May 31	3363	848 512 513	59	1343
Knitting-machine.....	B. F. Shaw.....	469,200	Feb. 16	2010	514 515 516	58	937
Knitting-machine.....	N. J. Winlund.....	478,673	July 12	927	230 231	60	199
Knitting-machine attachment.....	T. H. Hollingsworth.....	475,113	May 17	1973	499 500	59	1044
Knitting-machine attachment.....	J. Whitelaw.....	484,749	Oct. 18	1900	484 477	61	410
Knitting machine. Automatic circular.....	H. A. Houseman.....	484,737	Oct. 18	1872	478 161	61	403
Knitting machine. Circular.....	E. R. Branson.....	468,323	Feb. 9	650	162	58	659
Knitting machine. Circular.....	A. T. and W. L. Cathcart.....	472,029	Apr. 5	14	4, 5	59	5
Knitting machine. Circular.....	W. Diebel.....	483,954	Oct. 4	640	162	61	131
Knitting machine. Circular.....	J. E. Gearhart.....	479,639	July 26	2468	614	60	521
Knitting machine. Circular.....	D. H. Hill.....	475,058	May 17	1880	476 477	59	1026
Knitting machine. Circular.....	E. A. Hirner.....	471,220	Mar. 22	2459	625	58	1603
Knitting machine. Circular.....	H. A. Houseman.....	484,738	Oct. 18	1877	478 479 480	61	404
Knitting machine. Circular.....	T. R. Houseman.....	470,757	Mar. 15	1739	447 448	58	1453
Knitting machine. Circular.....	W. H. Jackson.....	467,874	Jan. 26	2546	645	58	507
Knitting machine. Circular.....	B. Kerr and I. L. Berridge.....	483,616	Oct. 4	150	37	61	31
Knitting machine. Circular.....	A. M. Perkins.....	466,424	Jan. 5	183	48	58	35
Knitting machine. Circular.....	J. H. Place.....	466,369	Jan. 5	95	26, 27	58	21
Knitting machine. Circular.....	R. W. Scott and L. N. D. Williams.....	467,956	Feb. 2	74	18	58	539
Knitting machine. Circular.....	A. Sedmihradsky.....	480,043	Aug. 2	457	116 117 183	60	669
Knitting machine. Circular.....	J. M. Slack, G. J. Graff, and J. B. Paxton.....	474,330	May 3	708	184 185 186	59	773
Knitting machine. Circular.....	C. Terrot.....	467,330	Jan. 19	1670	425 426	58	334
Knitting machine. Circular.....	W. S. Ward and H. F. Lancashire.....	488,100	Dec. 13	1423	356 357	61	1624
Knitting machine. Circular.....	W. H. Zellers.....	476,110	May 31	3550	893 894	59	1382
Knitting-machine. Circular spring-beard-needle.....	J. Bradley and G. Y. Hodge.....	469,006	Feb. 16	1746	444	58	885
Knitting-machine cylinders. Device for centering.....	C. E. Wakeman.....	479,862	Aug. 2	130	32	60	608
Knitting-machine feeding mechanism.....	S. L. Otis.....	471,566	Mar. 29	2957	754	58	1707
Knitting machine for knitting checkered fabrics. Circular.....	J. Bradley.....	471,416	Mar. 22	2751	702 703	58	1660
Knitting machine for knitting elastic fabrics. Warp.....	J. Cooper.....	471,350	Mar. 22	2643	672	58	1640
Knitting machine for knitting striped fabrics. Circular.....	J. Bradley.....	471,415	Mar. 22	2749	701 702	58	1660
Knitting machine for ribbed work. Circular.....	J. F. Gordon.....	469,694	Mar. 1	32	1, 12	58	1104
Knitting-machine needle.....	J. C. Egly.....	473,697	Apr. 26	2695	679	59	562
Knitting-machine needle.....	C. B. M. Sprowles.....	485,021	Oct. 25	2370	609	61	516
Knitting-machine stop mechanism. Circular.....	H. P. Snyder and M. J. Fisher.....	488,039	Dec. 13	1334	330 331	61	1604

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Knitting-machine stop-motion	F. B. Klock	484,594	Oct. 18	1640	416	61	356
Knitting-machine stop-motion	G. J. Manderfield	479,763	July 26	2690	668 669	60	562
Knitting machine. Straight	W. Coult	472,698	Apr. 12	1068	275	59	215
Knitting machine. Straight	A. Heidler	471,696	Mar. 29	3152	803 804	58	1743
Knitting machine. Straight	S. E. and F. F. Lewis	466,853	Jan. 12	881	225 226	58	177
Knitting machine. Warp	G. Buhlmann	484,844	Oct. 25	2077	534	61	458
Knitting machine. Warp	W. Campion	466,555	Jan. 5	395	100	58	76
Knitting machine. Warp	B. L. Stowe	486,648	Nov. 22	2335	610 611	61	1091
Knitting-machine web-holder	J. B. Paxton and E. I. O'Neill	468,137	Feb. 2	348	86	58	592
Knitting-machines. Automatic chain-motion for	D. C. Bellis	482,892	Sept. 20	1591	400	60	1671
Knitting-machines. Burring and napping attachment for	H. Eddishaw	469,128	Feb. 16	1901	486 487	58	916
Knitting-machines. Electrical stop-motion for	A. Beyer	477,986	June 28	2807	703	59	2035
Knitting-machines. Electrically-controlled stop-motion for	V. S. Clute	481,726	Aug. 30	3212	724	60	1253
Knitting machines. Fashioning apparatus for straight	G. Sowter	478,527	July 5	717	173	60	142
Knitting machines. Stand, presser, and guide for circular	G. W. Cummings	467,534	Jan. 26	2007	508 509	58	406
Knitting-machines. Stitch-holding mechanism for	F. Lasher	481,631	Aug. 30	3052	745	60	1222
Knitting-machines. Transfer device for	W. H. Almy	467,907	Feb. 2	2	1	58	527
Knitting-machines. Transferring mechanism for producing tape-narrowings on	R. H. Carter	486,431	Nov. 22	2001	531	61	1026
Knitting narrowed tubular fabrics	J. H. Place	466,370	Jan. 5	97	27	58	21
Knitting reinforced stockings	J. H. Place	466,372	Jan. 5	98	28	58	22
Knitting stockings	W. Diebel	483,955	Oct. 4	650	162	61	135
Knitting stockings	W. Esty. (Reissue)	11,221	Feb. 2	644	160	58	649
Knob	E. J. Forrest	472,805	Apr. 12	1214	312	59	242
Knob	F. A. Wilmot	482,953	Sept. 20	1689	425	60	1691
Knob	F. A. Wilmot	482,954	Sept. 20	1690	425	60	1691
Knob attachment	W. A. G. Ashley	481,519	Aug. 23	2866	705	60	1171
Knob attachment	W. A. G. Ashley	485,145	Oct. 25	2543	653	61	552
Knob attachment	C. M. Burgess	472,725	Apr. 12	1102	224	59	221
Knob attachment	C. O. Case	487,416	Dec. 6	308	79	61	1382
Knob attachment	C. F. Doeblor and C. K. Bryant	477,836	June 28	2582	646	59	1990
Knob attachment	C. F. Doeblor and C. K. Bryant	485,154	Oct. 25	2560	657	61	555
Knob attachment	G. E. Hamlin	466,679	Jan. 5	523	151	58	113
Knob attachment	C. Marshall	473,262	Apr. 19	1967	493	59	398
Knob attachment	J. Mathesen	467,039	Jan. 12	1126	300	58	233
Knob attachment	W. F. and W. M. Morton	471,563	Mar. 29	2953	753	58	1706
Knob attachment	A. M. Napier	467,281	Jan. 19	1601	408	58	320
Knob attachment	F. H. Richards	485,137	Oct. 25	2532	650	61	550
Knob attachment	W. E. Sparks	469,953	Mar. 1	465	116	58	1189
Knob. Door	H. J. P. Whipple	473,988	May 3	160	38	59	669
Knob-fastening device. Sheet-metal	N. J. Johnson	468,545	Feb. 9	1004	257	58	729
Knob fastening. Door	E. L. Rogers	470,919	Mar. 15	1988	509	53	1500
Knob. Sheet-metal	J. H. Ormsby	470,072	Mar. 1	643	159	58	1223
Knobs to shanks. Attaching	A. T. Matthews	475,880	May 31	3200	809	59	1312
Knobs to shanks. Machine for attaching	F. A. Wilmot	482,952	Sept. 20	1687	425	60	1691
Knockdown box	I. I. Smith	473,091	Apr. 19	1663	423	59	341
Knockdown box	G. S. Carter	486,819	Nov. 22	2614	681	61	1148
	J. J. McDonald	472,797	Apr. 12	1204	309	59	240
Kraut-cutter	C. Martindale	477,377	June 21	1832	449 450	59	1825
Label-attaching machine	H. W. Morgan	486,882	Nov. 29	2719	709	61	1185
Label-cabinet	H. H. Livingston	467,035	Jan. 12	1178	298	58	232
Label-holder	H. F. Bente	472,248	Apr. 5	379	99	59	71
Label-holder	F. J. McArdle and J. B. Furay	471,323	Mar. 22	2463	625	58	1604
Label-holder	C. W. Miller	479,716	July 26	2607	648	60	546
Label-holder	G. Nithack	480,837	Aug. 16	1766	442	60	943
Label-holder	H. J. Small	472,278	Apr. 5	422	109	59	79
Label-holder	E. E. Smith	484,902	Oct. 25	2168	558	61	477
Label-holder	C. E. Wheeler	485,310	Nov. 1	231	64, 65	61	620
Labels in soap cakes. Machine for inserting	A. E. Webb	480,642	Aug. 9	1435	357 358	60	869
Labels on bottles. Machine for pasting	A. Eymor	479,209	July 19	1766	442	60	370
Labels to cans. Machine for applying	J. F. Williams	478,298	July 5	372	90, 91	60	75
Labeling-machine	R. Kufs	476,392	June 7	261	62	59	1488
Labeling-machine	F. Mueller	474,677	May 10	1278	326	59	894
Labeling machine. Can	P. Crittenden	481,896	Aug. 30	3496	856	60	1308
Labeling machine. Can	C. L. Gorrell	476,879	June 14	1002	244 245	59	1650
Labeling machine. Can	R. L. and H. F. Wight	474,618	May 10	1181	300 301	59	875
Lace-fastener	J. W. King	484,661	Oct. 18	1767	449	61	382
Lace fastener. Shoe	C. M. Johnson	483,764	Oct. 4	362	91	61	76
Lace fastener. Shoe	A. Lizotte	484,438	Oct. 18	1411	360	61	310
Lace fastener. Shoe	B. F. Lynch	484,899	Oct. 25	2163	556	61	476
Lace fastener. Shoe	A. Meyer	488,268	Dec. 20	1711	430	61	1696
Lace fastener. Shoe	J. S. Murphy	478,122	July 5	66	17	60	15
Lace fastener. Shoe	E. H. Roberts	472,078	Apr. 5	104	28	59	21
Lace-fastening hook	J. Walden	485,247	Nov. 1	142	42	61	602
Lace fastening. Shoe	A. I. Crowell	473,615	Apr. 26	2573	648	59	537
Lace fastening. Shoe	I. H. Sisson	483,622	Oct. 4	159	39	61	33
Laces. Machine for pointing and punching shoe	P. Goldstein	476,999	June 14	1199	291	59	1690
Lacing. Corset	J. Stone	469,412	Feb. 23	2354	604	58	1010
Lacing for shoes or other articles	F. S. McKenney	478,519	July 5	704	171	60	140
Lacing-hook	W. C. Bray	477,242	June 21	1616	395	59	1785
Lacing-hooks. Machine for making	F. Egge	473,215	Apr. 19	1887	475 476	59	382

Alphabetical list of inventions—Continued.

Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lacing-hooks. Machine for setting.....	F. Egge.....	476,006	May 31	3383	{ 852 853 854 172 173	59	1348
Lacing-hooks. Machine for setting.....	F. Egge.....	480,185	Aug. 2	680	{ 172 173	60	711
Lacing. Shoe.....	W. H. Gates.....	470,376	Mar. 8	1172	300	58	1332
Lacing-string.....	A. L. Wild.....	487,411	Dec. 6	304	78	61	1381
Lacing-strings of shoes. Eye for.....	W. Lang.....	477,903	June 28	2691	673	59	2011
Lacing-stud.....	H. B. Baker.....	483,680	Oct. 4	237	59	61	49
Lacing-stud.....	F. S. McKenney.....	478,521	July 5	706	171	60	140
Lacing-stud.....	J. L. Thomson.....	481,124	Aug. 16	2197	544	60	1031
Lacing-stud.....	G. Troxler, Jr.....	466,811	Jan. 12	815	210	58	165
Lacing-studs. Machine for setting.....	E. D. Welton.....	477,852	June 28	2606	{ 652 653	59	1994
Lacing studs or staples. Machine for securing.....	G. Troxler, Jr.....	466,810	Jan. 12	813	{ 209 210	58	165
Ladder.....	T. B. Bennett.....	469,534	Feb. 23	2542	653	58	1046
Ladder.....	J. H. Frye and B. Pitman.....	488,428	Dec. 20	1973	493	61	1746
Ladder.....	J. F. Mitchell.....	473,768	Apr. 26	2796	703	59	581
Ladder.....	E. L. Ripp.....	472,141	Apr. 5	204	55	59	38
Ladder.....	E. L. Ripp.....	476,897	June 14	1032	250	59	1656
Ladder.....	F. S. Sprague.....	475,164	May 17	2042	514	59	1052
Ladder.....	R. W. Whitehurst.....	476,179	May 31	3668	927	59	1405
Ladder. Adjustable-platform.....	A. C. McKendree.....	471,245	Mar. 22	2491	632	58	1609
Ladder and ironing-board. Combined step.....	D. W. Arave.....	473,896	May 3	2	1	59	637
Ladder and ironing-board holder. Combined step.....	W. H. Lish.....	472,303	Apr. 5	466	119	59	87
Ladder. Combination extension.....	C. P. Bushnell.....	480,655	Aug. 9	1458	363	60	873
Ladder. Combination step.....	C. A. Poland.....	480,342	Aug. 9	954	241	60	775
Ladder. Extensible.....	J. McQuillan.....	473,852	Apr. 26	2933	739	59	607
Ladder. Extension.....	J. S. Burgess.....	487,469	Dec. 6	398	102	61	1399
Ladder. Extension.....	D. H. Crews.....	475,935	May 31	3278	827	59	1326
Ladder. Extension.....	V. Holmquist.....	475,279	May 17	2219	569	59	1095
Ladder. Extension.....	W. J. Robertson and J. B. Genin.....	478,969	July 12	1382	340	60	287
Ladder. Extension.....	H. E. Skeels.....	470,515	Mar. 8	1385	362	58	1372
Ladder. Extension.....	A. A. Sorg.....	487,301	Dec. 6	98	29	61	1341
Ladder. Extension.....	M. C. Wilson.....	466,816	Jan. 12	822	211	58	166
Ladder. Extension and step.....	E. W. Hammon.....	467,685	Jan. 26	2242	571	58	1449
Ladder. Extension step.....	E. C. Andre.....	486,069	Nov. 15	1412	374	61	896
Ladder. Extension truck.....	C. Canciani.....	474,628	May 10	1194	304	59	877
Ladder. Fire.....	R. Brayton.....	487,235	Nov. 29	3342	851	61	1305
Ladder. Fire.....	I. W. Salyer and L. Shadbolt.....	484,199	Aug. 23	2333	575	60	1071
Ladder. Flexible.....	A. Kirchhoff.....	487,393	Dec. 6	252	68	61	1371
Ladder-guard.....	J. C. Adams.....	480,160	Aug. 2	641	163	60	704
Ladder hook. Extension.....	J. A. Weston.....	477,677	June 28	2652	663	59	2003
Ladder. Railway step.....	A. H. Fisher.....	470,374	Mar. 8	1166	299	58	1331
Ladder. Rolling shelf.....	G. A. Milbradt.....	470,499	Mar. 8	1364	355	58	1368
Ladder. Rolling step.....	C. H. D. Sincennes.....	476,564	June 7	509	120	59	1538
Ladder. Sliding.....	R. Bithorn.....	475,287	May 17	2231	572	59	1097
Ladder. Step.....	L. E. and A. E. Bowser.....	479,051	July 19	1516	377	60	325
Ladder. Step.....	T. F. Groves.....	475,857	May 31	3154	800	59	1303
Ladder. Step.....	S. Keeling.....	477,243	June 28	2596	651	59	1993
Ladder. Step.....	C. H. D. Sincennes.....	469,751	Mar. 1	130	35	58	1125
Ladder. Step.....	H. V. Vanderbilt.....	480,224	Aug. 2	754	190	60	725
Ladders. Automatic latch for extension.....	J. A. Weston.....	477,393	June 21	1856	456	59	1831
Ladders. Combined side and center brace attachment for step.....	A. O. Tannenberg.....	485,900	Nov. 8	1135	301	61	821
Ladders, &c. Gripper for scaling.....	T. L. Judd.....	473,581	Apr. 26	2518	635	59	528
Ladders. Latch for extension.....	J. A. Weston.....	478,384	July 5	503	122	60	99
Ladle-nozzle.....	C. Mercader.....	481,041	Aug. 16	2055	513	60	1005
Lamp.....	W. Benner.....	486,022	Nov. 8	1335	{ 354 355	61	863
Lamp.....	I. E. Blake, G. E. Smith, and E. M. Doig.....	482,290	Sept. 6	602	{ 143 144	60	1452
Lamp.....	L. A. Cooper.....	479,350	July 19	1989	498	60	415
Lamp.....	L. A. Cooper.....	482,994	Sept. 20	1752	443	60	1704
Lamp.....	O. Fergusson.....	488,711	Dec. 27	2425	601	61	1852
Lamp.....	L. F. Griswold.....	486,038	Nov. 8	1358	362	61	867
Lamp.....	T. Hipwell.....	477,366	June 21	1815	{ 443 444	59	1822
Lamp.....	J. Kirby, Jr.....	483,155	Sept. 27	2003	507	60	1767
Lamp.....	J. Kirby, Jr.....	484,323	Oct. 11	1220	{ 311 312	61	260
Lamp.....	H. E. N. Mason.....	476,055	May 31	3458	{ 872 873	59	1364
Lamp.....	W. S. McLewee.....	471,822	Mar. 29	3367	857	58	1782
Lamp.....	W. S. McLewee.....	471,823	Mar. 29	3368	857	58	1783
Lamp.....	J. C. Patterson and J. Kirby, Jr.....	480,412	Aug. 9	1069	267	60	796
Lamp.....	A. W. Paull.....	467,194	Jan. 19	1461	{ 373 374	58	294
Lamp.....	A. W. Paull.....	477,332	June 21	1758	430	59	1812
Lamp.....	J. M. Pfandler.....	478,215	July 12	1163	288	60	246
Lamp.....	R. H. Plass.....	477,698	June 28	2355	589	59	1948
Lamp.....	H. E. Shaffer.....	486,510	Nov. 22	2111	558	61	1048
Lamp.....	T. C. J. Thomas.....	477,081	June 14	1337	{ 324 325	59	1718
Lamp.....	C. S. Upson.....	474,979	May 17	1760	446	59	1003
Lamp.....	C. H. Van Hise.....	471,282	Mar. 23	2546	646	58	1620
Lamp.....	A. C. West.....	477,480	June 21	1991	494	59	1857
Lamp. Alternating current arc.....	B. B. Ward.....	473,536	Apr. 26	2430	615	59	509
Lamp and cane or umbrella. Combined.....	S. Lamberger.....	473,763	Apr. 26	2791	702	59	579
Lamp and cigar-lighter. Pocket.....	H. A. Sherman.....	485,990	Nov. 8	1283	341	61	852
Lamp and lamp-socket. Incandescent electric.....	B. Ford.....	481,019	Aug. 16	2018	504	60	927
Lamp and shade holder.....	W. S. Atwood and H. H. Ashenden.....	471,266	Mar. 22	2550	648	58	1621
Lamp. Arc.....	C. Schmid.....	480,285	Aug. 9	862	220	60	759

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Lamp. Argand.	L. J. Atwood	466,551	Jan. 5	384	98	58	74
Lamp. Argand.	F. Rhind	478,639	July 12	879	216	60	190
Lamp. Argand.	F. Rhind	480,373	Aug. 9	1005	253	60	785
Lamp. Argand.	F. Rhind	481,674	Aug. 30	3118	761	60	1235
Lamp. Argand.	F. Rhind	483,167	Sept. 27	2028	513	60	1772
Lamp attachment.	A. Hoeninghausen and C. R. Mueller, Jr.	487,482	Dec. 6	413	106	61	1402
Lamp attachment. Electric.	J. Clift	483,044	Sept. 20	1832	465	60	1721
Lamp base. Incandescent-electric.	F. C. Rockwell	488,222	Dec. 20	1641	409	61	1682
Lampblack. Apparatus for making.	S. Salberg	486,127	Nov. 15	1526	403	61	917
Lampblack. Apparatus for the manufacture of.	G. L. Cabot	468,510	Feb. 9	948	241	58	718
Lampblack-machine.	E. R. Blood	480,990	Aug. 16	1979	495	60	990
Lampblack-machine.	H. J. C. Ester	486,097	Nov. 15	1476	389	61	907
Lampblack. Making.	S. P. Wenstrau and E. R. Blood	478,268	July 5	332	80	60	67
Lamp. Blowpipe.	E. W. Ellsworth	480,717	Aug. 16	1559	388	60	906
Lamp-burner.	P. J. F. Graeme	473,738	Apr. 26	2764	694	59	773
Lamp-burner.	T. Hipwell	480,404	Aug. 9	1055	264	60	793
Lamp-burner.	J. Jauch	479,598	July 26	2403	598	60	509
Lamp-burner.	B. P. Luce	481,729	Aug. 30	3218	785	60	1254
Lamp-burner.	B. P. Luce	487,020	Nov. 29	2976	766	61	1234
Lamp-burner.	E. Ohnstrand	480,826	Aug. 16	1725	431	60	941
Lamp-burner.	E. B. Regua	488,972	Dec. 27	2832	699	61	1938
Lamp-burner.	E. B. Regua	488,973	Dec. 27	2834	699	61	1938
Lamp-burner.	R. A. Wentworth	481,607	Aug. 30	3020	738	60	1216
Lamp-burner.	F. T. Williams	477,034	June 14	1232	303	59	1701
Lamp-burner.	F. T. Williams	477,035	June 14	1253	303	59	1701
Lamp-burner attachment.	J. W. Broer, H. J. and G. H. Merriell.	466,939	Jan. 12	1027	262	58	204
Lamp-burner attachment.	J. King	483,253	Sept. 27	2185	550	60	1802
Lamp burner. Central-draft.	J. C. Miller	187,955	Dec. 13	1177	294	61	1571
Lamp-burner filler attachment.	G. B. N. Dow	488,164	Dec. 13	1538	385	61	1645
Lamp-burner wick-raiser.	C. Pabst	487,076	Nov. 29	3060	785	61	1252
Lamp. Caboose.	G. C. Dressel	470,292	Mar. 8	1017	260	58	1306
Lamp carbon-holder. Arc.	C. A. Pfinger	471,190	Mar. 22	2408	613	58	1593
Lamp carbons. Clamp for arc.	A. Weber	482,535	Sept. 13	1037	251	60	1551
Lamp. Central-draft.	H. Craighead	471,507	Mar. 22	2879	733	58	1684
Lamp. Central-draft.	W. C. Homan	477,885	June 28	2629	658	59	1999
Lamp. Central-draft.	J. Jauch	473,667	Apr. 26	2650	668	59	553
Lamp. Central-draft.	A. H. Jones	476,541	June 7	474	113	59	1531
Lamp. Central-draft.	J. C. Miller	478,802	July 12	1138	280	60	241
Lamp. Central-draft.	N. Roitman	484,242	Oct. 11	1089	276	61	236
Lamp-chimney attachment.	J. Shoemaker	472,405	Apr. 5	623	159	59	117
Lamp-chimney cleaner.	C. E. Drury	470,393	Mar. 8	1200	306	58	1334
Lamp-chimney cover-plate.	J. H. Hunt	487,624	Dec. 6	624	159	61	1445
Lamp-chimney protector.	J. Tomlinson	484,564	Oct. 18	1600	406	61	348
Lamp-chimney raiser.	E. M. Goldsmith	477,930	June 28	2731	684	59	2019
Lamp-chimney. Shaded.	D. M. Mefford	487,850	Dec. 13	1008	254	61	1539
Lamp-chimneys. Machine for cutting.	J. Lobet	477,133	June 14	1411	343	59	1732
Lamp circuits. Adapter or plug for incandescent.	E. Weston	480,900	Aug. 16	1835	457	60	963
Lamp. Cooking.	L. Wojdkow	466,867	Jan. 12	913	234	58	133
Lamp cord-adjuster. Electric.	J. W. Heaphy, Jr.	479,509	July 26	2284	571	60	486
Lamp. Cycle.	A. H. Overman	480,210	Aug. 2	730	185	60	720
Lamp. Cycle.	C. E. W. Woodward	478,776	July 12	1088	270	60	232
Lamp. Duplex arc.	H. M. Odell	488,696	Dec. 27	2405	596	61	1848
Lamp. Duplex-arc.	C. E. Scribner	481,677	Aug. 30	3122	762	60	1236
Lamp. Duplex-arc.	E. P. Warner	480,050	Aug. 2	470	120	60	672
Lamp. Electric-arc.	T. E. Adams	473,283	Apr. 19	1998	502	59	405
Lamp. Electric-arc.	R. E. Ball	472,747	Apr. 12	1136	291	59	227
Lamp. Electric-arc.	H. H. Bigland and J. Burns.	482,568	Sept. 13	1088	264	60	1561
Lamp. Electric-arc.	J. T. Birch	482,157	Sept. 6	387	91, 92	60	1411
Lamp. Electric-arc.	F. R. Boardman	469,362	Feb. 23	2270	582	58	995
Lamp. Electric-arc.	L. Brienne	475,289	May 24	2234	575	59	1113
Lamp. Electric-arc.	J. Brockie	486,757	Nov. 22	2507	654	61	1126
Lamp. Electric-arc.	C. Coerper	484,530	Oct. 18	1551	394	61	337
Lamp. Electric-arc.	H. H. Cutler	482,435	Sept. 13	864	207	60	1518
Lamp. Electric-arc.	A. De Puydt	488,329	Dec. 20	1812	454	61	1715
Lamp. Electric-arc.	H. Dewar	471,234	Mar. 22	2478	629	58	1607
Lamp. Electric-arc.	R. S. Dobbie	469,041	Feb. 16	1791	458	58	894
Lamp. Electric-arc.	R. S. Dobbie	475,544	May 24	2645	673	59	1191
Lamp. Electric-arc.	T. A. Edison	476,993	June 14	1189	288	59	1688
Lamp. Electric-arc.	E. A. Edwards	485,537	Nov. 1	588	157	61	693
Lamp. Electric-arc.	J. E. Gaston	475,727	May 24	2927	743	59	1244
Lamp. Electric-arc.	J. E. Gaston	482,240	Sept. 6	517	123	60	1435
Lamp. Electric-arc.	F. D. Gould	480,721	Aug. 16	1563	390	60	907
Lamp. Electric-arc.	W. D. Graves	469,347	Feb. 23	2247	576	58	990
Lamp. Electric-arc.	J. A. Hayes	484,199	Oct. 11	1011	258	61	220
Lamp. Electric-arc.	D. Higham	486,377	Nov. 15	1908	505	61	994
Lamp. Electric-arc.	R. M. Hunter	478,510	July 5	688	167	60	136
Lamp. Electric-arc.	W. E. Irish	479,121	July 19	1629	407	60	345

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et.	Vol.	Page.
Lamp. Electric-arc	W. E. Irish	479,510	July 26	2225	571	60	486
Lamp. Electric-arc	H. Japy and O. Helmer	485,347	Nov. 1	306	81, 82	61	634
Lamp. Electric-arc	J. F. Kester	482,253	Sept. 6	542	129	60	1440
Lamp. Electric-arc	G. Kirkegaard	485,744	Nov. 8	910	244	61	776
Lamp. Electric-arc	E. R. Knowles	485,327	Nov. 1	270	73, 74	61	627
Lamp. Electric-arc	M. S. Logau	479,007	July 19	1447	{ 359 860 }	60	311
Lamp. Electric-arc	W. B. Luce	474,091	May 3	332	79, 80	59	701
Lamp. Electric-arc	F. V. Maquaire	477,427	June 21	1900	{ 468 469 }	59	1840
Lamp. Electric-arc	W. O. Meissner	486,488	Nov. 22	2080	551	61	1042
Lamp. Electric-arc	J. A. Mosher	467,610	Jan. 26	2131	541	58	428
Lamp. Electric-arc	J. A. Mosher	472,064	Apr. 5	81	22, 23	59	17
Lamp. Electric-arc	J. A. Mosher	485,293	Nov. 1	206	59	61	614
Lamp. Electric-arc	L. Parker	477,221	June 21	1571	386	59	1777
Lamp. Electric-arc	O. Patin	473,076	Apr. 19	1641	418	59	338
Lamp. Electric-arc	C. A. Pfuger	473,955	May 3	113	26	59	659
Lamp. Electric-arc	C. A. Pfuger	473,956	May 3	114	26, 27	59	659
Lamp. Electric-arc	J. A. Pierce	479,659	July 26	2497	622	60	526
Lamp. Electric-arc	J. Riedel	467,199	Jan. 19	1472	377	58	297
Lamp. Electric-arc	S. W. Rushmore	472,274	Apr. 5	417	107	59	78
Lamp. Electric-arc	N. F. Rutherford	477,273	June 21	1663	406	59	1793
Lamp. Electric-arc	H. Sawyer	469,093	Feb. 16	1860	476	58	908
Lamp. Electric-arc	R. Schefbaner	480,968	Aug. 16	1944	{ 486 487 }	60	983
Lamp. Electric-arc	C. E. Scribner	467,656	Jan. 26	2196	558	58	440
Lamp. Electric-arc	C. E. Scribner	476,493	June 7	411	96	59	1517
Lamp. Electric-arc	C. E. Scribner	486,958	Nov. 29	2282	745	61	1217
Lamp. Electric-arc	A. L. Shepard	474,266	May 3	581	{ 143 144 145 }	59	751
Lamp. Electric-arc	E. F. Smith	476,425	June 7	307	71	59	1497
Lamp. Electric-arc	E. A. Sperry	479,029	July 19	1484	369	60	318
Lamp. Electric-arc	E. A. Sperry	480,525	Aug. 9	1243	312	60	831
Lamp. Electric-arc	J. R. Steers	485,895	Nov. 8	1128	299	61	820
Lamp. Electric-arc	J. A. Stuart	482,986	Sept. 20	1739	439	60	1701
Lamp. Electric-arc	E. Thomson	478,145	July 5	107	27, 28	60	24
Lamp. Electric-arc	E. Thomson	488,585	Dec. 27	2225	{ 551 552 }	61	1813
Lamp. Electric-arc	R. H. Thurston	476,700	June 7	708	174	59	1578
Lamp. Electric-arc	A. G. Waterhouse	468,711	Feb. 9	1258	320	58	760
Lamp. Electric-arc	J. J. Wood	487,315	Dec. 6	122	37, 38	61	1345
Lamp. Electric cigar-lighting	W. J. Eastman	481,692	Aug. 30	3147	768	60	1941
Lamp extension-tube	T. H. Hellstrom	478,325	July 5	413	99	60	83
Lamp-extinguisher	M. Goetze	484,362	Oct. 11	1278	326	61	272
Lamp-extinguisher	M. Lajoie	480,773	Aug. 16	1640	410	60	924
Lamp-extinguisher	J. B. Price	477,267	June 21	1654	404	59	1792
Lamp-extinguisher	J. B. Price	481,268	Aug. 23	2462	607	60	1096
Lamp filament. Incandescent	T. A. Edison	485,617	Nov. 8	705	.....	61	733
Lamp filament. Incandescent-electric	F. Hicklev	467,169	Jan. 19	1428	.....	58	288
Lamp-filler	T. Hipwell	471,791	Mar. 29	3321	846	58	1774
Lamp-filling tank or can	A. K. Murray	483,657	Oct. 4	501	125	61	104
Lamp for burning hydrocarbon or other oils	S. A. Johnson	487,147	Nov. 29	3176	814	61	1275
Lamp for burning hydrocarbons	G. Barthel	478,733	July 12	1026	252	60	219
Lamp for burning mineral oils	A. Howat	472,056	Apr. 5	67	17, 18	59	15
Lamp-fount for central-draft lamps	W. C. Homan	477,864	June 28	2627	658	59	1998
Lamp-frame. Electric-arc	W. F. Bossert and J. H. Findlay	482,940	Sept. 20	1661	418	60	1686
Lamp. Gas	L. A. Cooper	487,065	Nov. 29	3041	780	61	1248
Lamp guard. Incandescent	G. W. Demmick	479,791	Aug. 2	25	6, 7	60	587
Lamp-hanger	G. Albee	487,977	Dec. 13	1205	301	61	1577
Lamp-hanger	C. E. Hilliard	483,448	Sept. 27	2469	621	60	1855
Lamp hanger. Electric	E. Dills	474,003	May 3	187	44	59	675
Lamp hanger. Electric	D. B. Matson	467,511	Jan. 26	1967	500	58	398
Lamp hanger. Electric-arc	C. A. Pfuger	479,017	July 19	1464	364	60	314
Lamp. Hanging	G. Bohner	467,462	Jan. 19	1867	476	58	372
Lamp-heater	H. S. Loury	478,753	July 12	1049	258	60	224
Lamp-holder	F. O. Dewey	474,082	May 3	319	76	59	699
Lamp holder. Electric	J. B. Moore	475,286	May 17	2229	572	59	1697
Lamp holder. Incandescent	E. P. Allam	483,974	Oct. 4	682	170	61	141
Lamp. Incandescent	E. W. Applegate	488,139	Dec. 13	1488	375	61	1636
Lamp. Incandescent	J. Ball	476,183	May 31	3674	928	59	1406
Lamp. Incandescent	J. H. F. Gorges	487,049	Nov. 29	3020	776	61	1244
Lamp. Incandescent	P. Grant	466,562	Jan. 5	408	{ 103 104 }	58	78
Lamp. Incandescent	F. H. Manchester	469,482	Feb. 23	2468	633	58	1032
Lamp. Incandescent	F. H. Manchester	469,483	Feb. 23	2469	633	58	1032
Lamp. Incandescent	F. H. Prentiss	488,636	Dec. 27	2305	571	61	1828
Lamp. Incandescent	F. S. Smith	484,825	Oct. 25	2035	521	61	450
Lamp. Incandescent electric	E. W. Applegate	487,360	Dec. 6	202	55	61	1360
Lamp. Incandescent electric	G. C. Baillard	472,800	Apr. 12	1207	310	59	241
Lamp. Incandescent electric	G. C. Baillard	472,801	Apr. 12	1209	310	59	241
Lamp. Incandescent electric	A. C. Carey	470,471	Mar. 8	1326	345	58	1360
Lamp. Incandescent electric	A. C. Carey	473,208	Apr. 19	1877	473	59	380
Lamp. Incandescent electric	A. C. Carey	485,682	Nov. 8	811	216	61	755
Lamp. Incandescent electric	J. L. Curtiss	467,276	Jan. 19	1592	406	58	319
Lamp. Incandescent electric	T. A. Edison	476,528	June 7	457	109	59	1527
Lamp. Incandescent electric	T. A. Edison	476,530	June 7	459	109	59	1528
Lamp. Incandescent electric	T. A. Edison	476,992	June 14	1188	288	59	1687
Lamp. Incandescent electric	G. A. Frei	486,457	Nov. 22	2035	538	61	1033
Lamp. Incandescent electric	G. A. Frei	487,477	Dec. 6	407	105	61	1401
Lamp. Incandescent electric	G. A. Frei	487,479	Dec. 6	410	106	61	1402
Lamp. Incandescent electric	H. Green	475,394	May 24	2402	614	59	1145
Lamp. Incandescent electric	H. Green	479,360	July 19	2609	502	60	419
Lamp. Incandescent electric	H. J. Gutman	467,576	Jan. 26	2083	527	58	419

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Lamp. Incandescent electric.	H. B. Meech.	475,698	May 24	2877	727	59	1236
Lamp. Incandescent electric.	G. F. Melick.	480,954	Aug. 16	1920	480	60	979
Lamp. Incandescent electric.	D. H. Piffard.	467,982	Feb. 2	113	28	58	546
Lamp. Incandescent electric.	E. Pollard.	485,478	Nov. 1	504	133	61	674
Lamp. Incandescent electric.	F. H. Prentiss.	488,635	Dec. 27	2304	571	61	1828
Lamp. Incandescent electric.	M. A. Richter and J. G. Nolen.	479,020	July 19	1468	365	60	315
Lamp. Incandescent electric.	E. P. Roberts.	467,523	Jan. 26	1984	504	58	401
Lamp. Incandescent electric.	P. Scharf.	480,284	Aug. 9	861	219	60	759
Lamp. Incandescent electric.	E. E. Weaver and G. B. Manypenny.	476,501	June 7	420	98	59	1519
Lamp. Incandescent electric.	C. H. Wilkins.	467,270	Jan. 19	1584	404	58	318
Lamp-lighter.	W. Palmer.	483,967	Oct. 4	667	167	61	138
Lamp lighter and extinguisher. Automatic electric.	J. H. Caughy.	472,494	Apr. 5	759	193	59	144
Lamp. Miner's.	J. R. Watts.	472,487	July 5	650	159	60	129
Lamp. Miner's safety.	J. B. Harris, J. T. Griffith, and T. B. Harris.	469,918	Mar. 1	401	101	58	1178
Lamp. Miner's safety.	G. T. Parry.	467,193	Jan. 19	1460	373	58	294
Lamp. Miner's safety.	H. J. Richards.	476,488	June 7	404	94	59	1516
Lamp. Miner's safety.	L. N. Williams.	472,098	Apr. 5	136	37	59	26
Lamp. Oil.	J. D. and H. B. Young.	479,344	July 19	1981	495	60	414
Lamp oil-gage.	T. A. McGovern.	475,967	May 31	3330	840	59	1337
Lamp. Oil-spray.	A. Shedlock.	468,065	Feb. 2	237	58	58	570
Lamp or conductor support. Electric.	C. Bell.	477,984	June 28	2802	702	59	2034
Lamp or gas-light screen.	T. A. Brouwer, Jr.	486,323	Nov. 15	1824	481	61	978
Lamp or lantern.	J. W. Ormsby.	483,386	Sept. 27	2391	600	60	1839
Lamp or lighting device. Pocket.	E. Kronenberg.	480,267	Aug. 9	836	213	60	754
Lamp or lighting device. Pocket.	N. F. Mathewson.	479,222	July 19	1783	447		
Lamp-pipe.	A. T. Loyd.	478,700	July 12	960	238	60	207
Lamp. Pocket.	J. H. Farrel.	479,741	July 26	2652	657	60	554
Lamp. Pocket.	J. H. Fawkes.	476,042	May 31	3435	867	59	1359
Lamp. Pocket.	S. G. Speir.	471,985	Mar. 29	3588	916	58	1826
Lamp post. Electric-street.	T. Flaberty.	476,739	June 7	768	189	59	1590
Lamp. Regenerating gas.	W. Stenth and J. W. Körber.	477,314	June 21	1733	424	59	1807
Lamp. Regenerative hydrocarbon.	J. Schülke.	474,192	May 3	475	115	59	730.
Lamp. Regulable electric.	G. W. Hall and J. J. De Marr.	486,334	Nov. 15	1844	485	61	981
Lamp. Safety miner's.	A. L. Nelson, J. Knapper, and I. Taylor.	474,182	May 3	457	111	59	726
Lamp. Self-extinguishing hydrocarbon.	S. A. Johnson.	485,041	Oct. 25	2393	615	61	521
Lamp-shade.	E. L. Bearse.	476,239	June 7	5	1	59	1439
Lamp-shade.	W. B. Curtis and C. Himrod.	470,371	Mar. 8	1161	298	58	1330
Lamp-shade. Adjustable.	H. Schloerb.	470,603	Mar. 8	1503	392	58	1398
Lamp shade. Electric.	C. J. Miller.	486,729	Nov. 22	2459	641	61	1117
Lamp shade. Incandescent-electric.	C. J. Salick and E. Sipp.	481,285	Aug. 23	2500	615	60	1101
Lamp-shade support.	M. Bauer, L. Harry, and J. Bunge.	484,635	Oct. 18	1812	461	61	391
Lamp-shade support.	C. Berthélémy.	480,989	Aug. 16	1977	494	60	990
Lamp-shade support.	J. E. Bohner.	481,154	Aug. 16	2262	558		
Lamp-shade support.	T. Hipwell.	472,790	Apr. 12	1195	307	59	239
Lamp-shade support.	R. G. Ledig.	466,761	Jan. 12	897	230	58	180
Lamp-socket and circuit-closer therefor.	S. Bergmann.	484,580	Oct. 18	1623	412	61	352
Lamp-socket and terminal therefor.	J. Huchinson.	488,205	Dec. 20	1607	401	61	1676
Lamp socket. Electric.	W. D. Kurz and H. Amundson.	474,667	May 10	1257	321	59	890
Lamp socket. Incandescent.	P. Dunn.	467,716	Jan. 26	2301	584	58	460
Lamp socket. Incandescent.	C. B. Elliott.	487,213	Nov. 29	3273	836	61	1293
Lamp socket. Incandescent.	I. Goldkind.	479,359	July 19	2008	502	60	419
Lamp socket. Incandescent.	H. J. Gutman.	474,826	May 17	1515	387	59	954
Lamp socket. Incandescent.	C. A. B. Halvorson.	475,555	May 24	2666	678	59	1195
Lamp socket. Incandescent.	D. H. Piffard.	467,983	Feb. 2	115	28	58	546
Lamp socket. Incandescent.	F. C. Rockwell.	475,345	May 24	2330	597	59	1132
Lamp socket. Incandescent.	W. L. Silvey.	467,958	Feb. 2	79	19	58	540
Lamp socket. Incandescent.	E. L. Smith and G. C. H. Foster.	477,786	June 28	2492	624	59	1974
Lamp socket. Incandescent-electric.	C. R. Arnold.	473,373	Apr. 19	2156	542	59	436
Lamp socket. Incandescent-electric.	J. S. Gibbs.	477,407	June 21	1876	462	59	1835
Lamp socket. Incandescent-electric.	C. J. Klein.	484,207	Oct. 11	1031	262	61	223
Lamp socket. Incandescent-electric.	J. S. Potter and D. J. Cartwright.	485,587	Nov. 1	662	176	61	710
Lamp socket. Incandescent-electric.	H. E. Werline.	478,149	July 5	116	29	60	26
Lamp-socket switch. Electric.	G. E. Painter.	466,510	Jan. 5	326	81	58	62
Lamp-socket switch. Electric.	G. E. Painter.	466,511	Jan. 5	327	81	58	63
Lamp-socket switch. Electric.	G. E. Painter.	477,146	June 14	1428	348	59	1736
Lamp sockets. Adapter for incandescent.	H. P. Ball.	480,988	Aug. 16	1976	494	60	929
Lamp. Spirit.	A. C. Monfort.	472,506	Apr. 5	785	200	59	149
Lamp. Standard oil.	A. G. V. Harcourt.	480,013	Aug. 2	397	98	60	657
Lamp-support.	A. H. Lucas.	473,846	Apr. 26	2922	735	59	605
Lamp-support.	A. H. Lucas.	483,071	Sept. 20	1866	473	60	1729
Lamp-support.	L. Nilson.	468,442	Feb. 9	830	210	58	695
Lamp-support.	D. F. Oliver.	488,971	Dec. 27	2831	698	61	1937
Lamp support. Electric.	C. J. Klein.	471,645	Mar. 20	3070	781	58	1727
Lamp support. Electric.	A. Wright.	482,112	Sept. 6	308	72, 73	60	1395
Lamp support. Electric-arc.	A. Wright.	480,539	Aug. 9	1266	318	50	835
Lamp supports. Line-wire tightening device for electric.	C. A. Pfuger.	482,486	Sept. 13	945	230	60	1532
Lamp supporting-ring.	T. Hipwell.	479,880	Aug. 2	160	40	60	613
Lamp-suspending device.	G. W. Baldwin.	472,468	Apr. 5	719	183	59	136
Lamp suspension-bar. Electric.	T. Dillon.	478,275	July 5	343	82	60	69
Lamp suspension device.	F. G. Echois.	479,874	Aug. 2	150	37	60	611
Lamp-top holder.	I. N. Roberts.	466,343	Jan. 5	372	93	58	72
Lamp. Vehicle bracket.	S. L. Reedy.	475,798	May 31	3040	769	59	1280
Lamp. Velocipede.	A. C. Davison.	488,626	Dec. 27	2291	567	61	1826
Lamp-wick lift.	H. L. Clark.	481,748	Aug. 30	3255	732	60	1262
Lamp-wick raiser.	C. H. Broad.	467,571	Jan. 26	2075	524	58	418
Lamp-wick raiser.	H. H. Hipwell.	472,354	Apr. 5	544	141	59	132
Lamp-wick raiser.	E. McDowell.	480,205	Aug. 2	711	162	60	717
Lamp-wick raiser. Argand.	T. Hipwell.	488,968	Dec. 27	2827	697	61	1936

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Lamps and means for lighting and extinguishing the same. Device for controlling the distribution of oils to	T. and A. E. Penn	477,150	June 14	1433	{ 349 350 }	59	1737
Lamps and similar globes. Holder for arc	F. D. Goold	480,720	Aug. 16	1561	{ 389 390 }	60	907
Lamps. Automatic safety-extinguisher for	J. B. Dowdall	486,439	Nov. 22	2013	534	61	1029
Lamps. Bracket for incandescent electric	J. H. Goehst	471,732	Mar. 29	3221	820	58	1754
Lamps by means of multiphase currents. System for operating glow	J. F. H. Gorges	468,500	Feb. 9	931	237	58	714
Lamps. Carbon-holder for arc	S. P. Parmly	468,411	Feb. 9	791	196	58	687
Lamps. Carbon-rod contact for arc	C. McNellis	477,219	June 21	1569	386	59	1776
Lamps. Casing for bases of incandescent	G. R. Lean and C. B. Burleigh	487,846	Dec. 13	1003	252	61	1538
Lamps. Ceiling-block for incandescent	L. Stieringer	482,104	Sept. 6	298	70	60	1394
Lamps. Cut-out for incandescent	T. A. Edison and J. F. Ott	466,400	Jan. 5	139	38	58	28
Lamps. Device for preventing shadows of electric or other forms of	J. B. Sheldon	468,700	Feb. 9	1244	316	58	777
Lamps. Device for raising or lowering electric	W. Doran	488,878	Dec. 27	2678	663	61	1904
Lamps. Disk carbon for arc	H. W. Libbey	471,526	Mar. 22	2902	738	58	1689
Lamps. Electric-light attachment for	R. C. Putnam	470,008	Mar. 1	547	136	58	1204
Lamps. Extinguishing mechanism for central-draft	H. C. Webb	466,545	Jan. 5	375	94, 95	58	73
Lamps. Flexible supporting-arm for electric	L. T. Stanley	472,611	Apr. 12	936	241	59	192
Lamps. Hanger-board for electric-arc	B. B. Ward	484,480	Oct. 18	1476	376	61	322
Lamps, &c. Heating attachment for Argand	R. S. Merrill	469,161	Feb. 16	1948	498	58	926
Lamps. Inverted burner for gas	D. W. Sugg	479,922	Aug. 2	229	57	60	626
Lamps. Lamp-shade and holder for incandescent	G. F. Seavey	473,240	Apr. 19	1933	466	59	392
Lamps. Manufacture of filaments for incandescent	T. A. Edison	470,922	Mar. 15	1992		58	1501
Lamps. Manufacture of filaments for incandescent electric	T. A. Edison	470,925	Mar. 15	1995	510	58	1502
Lamps. Manufacture of incandescent electric	C. Pauthonier	487,890	Dec. 13	1074	269	61	1551
Lamps. Manufacture of incandescent electric	F. S. Smith	471,526	Mar. 29	2971	757	58	1710
Lamps. Manufacturing central-draft	W. A. Young and A. G. Neville	484,277	Oct. 11	1152	293	61	247
Lamps. Mast-arm switch for electric	T. Dillon	471,730	Mar. 29	3217	819	58	1754
Lamps. Means for utilizing heat of	J. J. Johnston	479,367	July 19	2019	504	60	421
Lamps. Means for utilizing heat of	J. J. Johnston	479,368	July 19	2021	505	60	421
Lamps. Receptacle for portable electric	H. Molendo	477,810	June 28	2528	634	59	1980
Lamps. Reflecting-shade for incandescent	L. T. Stanley	481,378	Aug. 23	2645	648	60	1127
Lamps. Reflecting-shade for incandescent electric	L. T. Stanley	481,288	Aug. 23	2508	617	60	1102
Lamps. Regulating-socket for incandescent electric	E. E. Ries	488,835	Dec. 27	2609	647	61	1890
Lamps. Regulating-socket for incandescent electric	E. E. Ries	488,951	Dec. 27	2799	690	61	1929
Lamps. Regulating-socket or holder for incandescent electric	E. E. Ries and W. S. Horry	470,402	Mar. 8	1212	310	58	1339
Lamps. Shade for incandescent electric	W. J. Edmond and T. J. Keon	479,207	July 19	1761	{ 441 442 }	60	369
Lamps. Spark-arrester for electric	W. M. Spencer	476,933	June 14	1097	265	59	1669
Lamps. Spark-arrester for electric-arc	C. Smallwood	479,994	Aug. 2	366	91	60	650
Lamps. Supplementary lens for bicycle and carriage	A. L. France	480,661	Aug. 9	1469	366	60	874
Lamps. Supplementary lens for bicycle or carriage	A. L. France	467,227	Jan. 19	1512	386	58	304
Lamps. Supporting device for electric-arc	J. Maier	480,470	Aug. 9	1166	294	60	815
Lamps. Suspending device for electric	J. J. Renahan	469,048	Feb. 16	1800	460	58	896
Lamps. Suspension-bracket for electric	T. Dillon	482,727	Sept. 20	1329	325	60	1620
Lamps. Suspension device for incandescent	S. Porter	486,604	Nov. 22	2264	591	61	1076
Lamps. Wick-raiser for central-draft	W. C. Homan	477,862	June 28	2624	657	59	1998
Lamps. Wick-raiser for central-draft	W. C. Homan	477,863	June 28	2625	657	59	1998
Lamps. Wick-raiser for central-draft	J. Jauch	474,171	May 3	445	108	59	724
Lamps. Wick-raiser for central-draft	W. L. Upson	473,681	Apr. 26	2672	673	59	556
Lamps. Wick-raiser for central-draft	W. L. Upson	481,741	Aug. 30	3242	789	60	1259
Lamps. Wick-raising device for central-draft	W. M. Hoerle	466,919	Jan. 12	999	256	58	199
Lamps. Wick-raising mechanism for	W. A. Hull	467,975	Feb. 2	96	24	58	543
Land-roller	F. Baugh	474,038	May 3	244	58	59	685
Land-roller	E. Geisendorfer	482,406	Sept. 13	818	197	60	1509
Land-roller	H. W. Kuhl	468,996	Feb. 16	1723	438	58	880
Land-roller	J. G. Mallory and E. J. Youngs	471,820	Mar. 29	3365	857	58	1782
Land-roller	B. A. Thomas	483,242	Sept. 27	2144	{ 543 544 }	60	1795
Land-roller attachment	G. S. Burr and J. M. Cummings	475,291	May 24	2236	576	59	1113
Land-roller, pulverizer, and harrow. Combined	J. H. Wilts	478,490	July 5	653	160	60	130
Lands from overflow. System for protecting riparian	L. W. Brown	488,422	Dec. 20	1965	491	61	1745
Lantern	A. L. Baron and B. F. Cockayne	482,671	Sept. 13	1231	300	60	1588
Lantern	D. W. Cronin	479,247	July 19	1824	458	60	382
Lantern	H. P. Merriman	480,931	Aug. 16	1878	468	60	971
Lantern	C. I. Mitchell	480,734	Aug. 16	1582	396	60	911
Lantern	F. L. Wells	475,646	May 24	2799	709	59	1222
Lantern and foot-warmer. Combined stirrup	T. F. Baird	482,219	Sept. 6	488	117	60	1430
Lantern for electric lighting	D. S. Page and J. L. Bertsch	484,449	Oct. 18	1424	363	61	313
Lantern kiosk. Magic	F. S. Pierling	486,236	Nov. 15	1686	446	61	949
Lantern. Magic	D. R. Breed	488,057	Dec. 13	1365	339	61	1611
Lantern. Magic	E. I. S. Hart	484,854	Oct. 25	2088	537	61	460
Lantern. Signal	G. A. Bischoff	483,507	Sept. 27	2551	640	60	1872
Lantern. Signal	O. S. Landerman	467,011	Jan. 12	1140	229	58	225
Lantern. Signal	J. H. Parsons	477,697	June 28	2354	588	59	1948
Lantern. Signal	J. Wall	485,071	Oct. 25	2434	{ 625 626 }	61	529
Lantern-slides. Clamp for binding the edges of	D. R. Breed	488,058	Dec. 13	1368	339	61	1611
Lantern. Tubular	J. S. Gall	481,276	Aug. 23	2484	611	60	1090
Lantern. Tubular	W. McArthur	476,478	June 7	392	90	59	1513
Lantern. Tubular	F. K. Wright	476,505	June 7	426	99	59	1520
Lanterns. Dissolving mechanism for magic	P. A. Bradford	470,907	Mar. 15	1970	503	58	1498
Lanterns. Wick-raiser attachment for	F. K. Wright	476,506	June 7	427	100	59	1521
Lap-ring	J. E. Pye	487,156	Nov. 29	3191	817	61	1278
Lap-stick inserter	A. M. Collier	487,995	Dec. 13	1247	310	61	1585
Lard-cooling tank	B. Rosenthal and O. D. Noble	469,305	Feb. 23	2190	561	58	978
Larynx-tube	G. Ermold	478,582	July 12	803	193	60	175
Lasso	E. Shaw	474,103	May 3	347	83	59	704
Last	M. J. Bagley	476,858	June 14	971	236	59	1644

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Last	J. Brigham	473,654	Apr. 26	2632	663	59	549
Last	J. B. Cass	479,628	July 26	2450	611	60	518
Last	A. M. Leighton	487,627	Dec. 6	628	161	61	1446
Last	L. Linberg	474,994	May 17	1786	451 452	59	1008
Last	E. S. Morton	468,088	Feb. 2	268	65	58	576
Last-block fastener	E. S. Morton	468,087	Feb. 2	267	65	58	576
Last-block fastener	E. S. Morton	468,356	Feb. 9	708	175	58	670
Last. Extension shoe	J. H. Livermore	480,596	Aug. 9	1356	337	60	832
Last or support	G. T. Demary	474,335	May 3	727	190	59	777
Last-standard	J. A. Cauldwell	468,385	Feb. 9	750	186	58	678
Last-supporter	J. Grant	477,210	June 21	1548	380	59	1774
Lasts. Method of and means for making patterns for individual	G. W. Willey	486,607	Nov. 22	2268	392	61	1077
Lasting	H. H. V. Lilley	482,016	Sept. 6	157	38	60	1366
Lasting-machine	J. T. Avery	472,509	Apr. 12	910	234 235 236	59	187
Lasting-machine	F. Chase	478,501	July 5	672	164	60	133
Lasting-machine	I. Frechette	482,349	Sept. 13	720	172 173 174 175	60	1490
Lasting-machine	C. P. Lawrence	476,206	May 31	3713	938 939	59	1413
Lasting-machine	J. H. Merrill	488,442	Dec. 20	1991	497 498	61	1750
Lasting-machine	F. Molloy	486,730	Nov. 22	2459	642	61	1117
Lasting-machine	E. Patten	467,877	Jan. 26	2551	646 647 648	58	508
Lasting-machine	C. Sinning	480,145	Aug. 2	615	156	60	700
Lasting-machine	A. E. Stirckler	477,788	June 28	2494	624 625 626	59	1974
Lasting-machine	A. E. Stirckler	477,789	June 28	2500	626	59	1975
Lasting-machines, &c. Stop-motion for	C. Sinning	471,495	Mar. 22	2265	730	58	1681
Lasting-machines. Tacking mechanism for	C. Sinning	476,695	June 7	702	172	59	1576
Lasting-nippers	J. F. O'Neill	473,015	Apr. 19	1545	394	59	321
Lasting-tool	K. Gühring	469,854	Mar. 1	303	78	58	1160
Latch	J. K. Clark	472,430	Apr. 5	659	168	59	124
Latch	J. K. Clark	480,171	Aug. 2	659	168	60	708
Latch	A. Didion	468,040	Feb. 2	202	49	58	564
Latch	G. N. Duncan	480,075	Aug. 2	507	128 129	60	679
Latch	C. Gagnon and L. Lefebvre	481,557	Aug. 30	2942	723	60	1202
Latch	M. R. Hubbell	482,794	Sept. 20	1410	356	60	1612
Latch	J. Marks	469,863	Mar. 1	318	81	58	1163
Latch	C. W. Monroe	481,910	Aug. 30	3524	862	60	1314
Latch	C. Orth	487,153	Nov. 29	3184	815	61	1277
Latch	A. A. Page	477,445	June 21	1936	480	59	1846
Latch	A. A. Page	477,446	June 21	1937	480	59	1846
Latch	B. Piers	473,126	Apr. 19	1733	438	59	353
Latch	A. and F. E. Richardson	476,070	May 31	3483	878	59	1369
Latch	T. T. Rogers	466,373	Jan. 5	99	28	58	22
Latch	J. Simmons	469,068	Feb. 16	1827	467	58	901
Latch	C. A. Westberg	476,434	June 7	325	74	59	1500
Latch and lock	A. F. Nixon and L. L. Gibson	475,089	May 17	1938	491	59	1037
Latch and lock	J. D. Perkins	468,895	Feb. 16	1536	391	58	843
Latch and lock combined	J. E. Armstrong	483,318	Sept. 27	2290	576	60	1820
Latch and lock combined	I. Buisson	488,750	Dec. 27	2480	616	61	1863
Latch and lock combined	J. A. Giesse	481,261	Aug. 23	2454	604	60	1094
Latch and lock combined	G. H. Hyde	479,620	Apr. 12	950	246	59	194
Latch and lock. Combined	B. G. Lowrey	476,663	June 7	656	159	59	1567
Latch and lock. Combined	J. W. McKee	477,142	June 14	1422	346	59	1734
Latch and lock. Combined	W. H. Smith	485,667	Nov. 8	790	210	61	750
Latch attachment	G. G. Rupert	479,723	July 26	2625	651	60	549
Latch-bolt	W. H. Taylor	467,564	Jan. 26	2067	522	58	416
Latch-bolt. Sheet-metal	H. D. Allen	479,582	July 26	2381	594	60	504
Latch. Coach-door	J. M. Orr	472,388	Apr. 5	600	152	59	112
Latch. Door	H. D. Wheatley	477,790	June 28	2501	626	59	1975
Latch. Gate	B. Bennett	480,005	Aug. 2	379	94	60	653
Latch. Gate	C. F. Bettmann, Jr	478,556	July 12	167	187	60	167
Latch. Gate	J. Bird	470,539	Mar. 8	1420	370	58	1379
Latch. Gate	W. Brown	474,362	May 10	780	203	59	708
Latch. Gate	C. J. Ericson	475,270	May 17	2206	563	59	1091
Latch. Gate	J. T. Fox	480,189	Aug. 2	687	174	60	712
Latch. Gate	A. R. Grimes	477,654	June 28	2288	573	59	1833
Latch. Gate	M. Haggart	475,554	May 24	2665	678	59	1194
Latch. Gate	H. G. Hoffman	484,752	Oct. 18	1904	485	61	411
Latch. Gate	C. M. Lamb	482,482	Sept. 13	939	229	60	1531
Latch. Gate	P. T. Rapson	487,077	Nov. 29	3061	786	61	1252
Latch. Gravity	J. R. Palmer	474,263	May 3	577	142	59	750
Latch. Gravity	J. W. Toops	485,724	Nov. 8	884	237	61	771
Latch-handle	C. E. Hart	476,636	June 7	619	149	59	1500
Latch. Reversible	A. A. Dovey	477,929	June 28	2730	684	59	2019
Latch. Sliding-door	C. Kelley	466,419	Jan. 5	173	46	58	34
Lath	S. Toney	487,166	Nov. 29	3205	821	61	1281
Lath-bolter	J. H. Peterson	477,956	June 28	2768	693	59	2027
Lath. Sheathing	I. G. Jenkins	470,759	Mar. 15	1741	448	58	1453
Lath-yarns. Machine for cutting	H. S. Dix	482,917	Sept. 20	1631	409	60	1679
Lathing. Machine for making metal	G. A. Ohl	475,700	May 24	2879	728	59	1236
Lathe	C. H. Bausch	482,991	Sept. 20	1747	441 442	60	1703

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lathe.....	E. Conrady.....	475,671	May 24	2833	717	59	1228
Lathe.....	C. G. Dahlgren and J. H. Svensson.....	469,813	Mar. 1	238	60	58	1147
Lathe.....	W. S. Loveland and E. C. Henn.....	471,674	Mar. 20	3119	794 795	58	1736
Lathe.....	W. von Pittler.....	485,773	Nov. 8	946	253 254	61	783
Lathe.....	C. G. Richardson.....	481,717	Aug. 30	3190	779 780	60	1249
Lathe.....	W. F. Young.....	470,278	Mar. 8	981	242	58	1299
Lathe attachment.....	G. R. Ibach and J. H. Schultz.....	438,815	Dec. 27	2578	640	61	1883
Lathe. Automatic metal boring and turning.....	I. C. Swisher.....	472,833	Apr. 12	1251	320 321	59	249
Lathe. Axle-turning.....	R. R. Spears.....	475,163	May 17	2041	514	59	1057
Lathe. Back-knife gage.....	C. F. E. Peterlein.....	474,856	May 17	1563	398 399	59	964
Lathe-center.....	W. C. Roe.....	474,265	May 3	580	143	59	750
Lathe-centers. Machine for grinding or truing.....	H. E. Hawes.....	478,599	July 12	826	204	60	180
Lathe. Clock.....	F. H. Richards.....	484,673	Oct. 18	1783	454	61	385
Lathe-dog.....	J. H. Brinton, Jr.....	485,405	Nov. 1	398	107	61	654
Lathe-dog.....	W. Moore and J. W. Parker.....	486,166	Nov. 15	1583	419	61	929
Lathe-dog.....	R. Parsons.....	484,668	Oct. 18	1776	452	61	383
Lathe-dog.....	R. L. Stanley.....	488,927	Dec. 27	2758	681	61	1921
Lathe. Engine.....	P. and W. Shellenback.....	468,183	Feb. 2	417	103 104	58	606
Lathe feeding device.....	C. M. Conradson.....	477,513	June 21	2040	508	59	1867
Lathe for roughing lasts.....	A. G. Fitz.....	485,631	Nov. 8	714	187	61	734
Lathe for turning oval objects.....	N. C. Hansen.....	487,525	Dec. 6	420	125 126	61	1416
Lathe for turning wagon-axes.....	C. F. Milburn, G. E. Byrkit, and J. C. Crabbs.....	474,995	May 17	1787	452	59	1008
Lathe. Gage.....	L. C. Trask.....	478,178	July 5	169	43, 44	60	36
Lathe grinding attachment.....	G. A. and O. W. Mueller.....	477,911	June 23	2700	676	59	2013
Lathe. Last-turning.....	F. B. Gilman.....	469,084	Feb. 16	1848	473	53	906
Lathe-mandrel.....	J. H. McGraw.....	480,435	Aug. 9	1105	277	60	802
Lathe-mandrel. Adjustable.....	J. L. Williams.....	470,416	Mar. 8	1233	315	58	1342
Lathe milling attachment.....	F. D. Skeel.....	478,244	July 5	296	72	60	60
Lathe-rest.....	J. J. Cole.....	467,341	Jan. 19	1694	433	58	338
Lathe. Rotary.....	H. W. Tingley.....	488,372	Dec. 20	1885	472 473	61	1729
Lathe-tool.....	R. A. Berger.....	471,839	Mar. 29	3391	865	58	1788
Lathe-tool.....	J. H. Hurley.....	488,145	Dec. 13	1496	376	61	1637
Lathe-tool holder.....	A. Fuller and W. B. Hohenshell.....	488,554	Dec. 27	2169	536	61	1801
Lathe-tool holder.....	W. C. Homan.....	484,317	Oct. 11	1213	308	61	259
Lathe. Turret.....	J. Hartness.....	481,356	Aug. 23	2607	640 641	60	1120
Lathe. Turret.....	F. A. Lane.....	476,205	May 31	3707	937	59	1412
Lathe turret mechanism.....	F. H. Richards.....	480,963	Aug. 16	1933	484	60	981
Lathe. Uprighting.....	D. H. Church.....	486,609	Nov. 22	2274	593	61	1078
Lathes. Back-rest for turning.....	W. H. White.....	470,229	Mar. 8	899	222	58	1282
Lathes. Feed mechanism for screw-cutting.....	W. P. Norton.....	470,591	Mar. 8	1487	387	58	1394
Lathes. Gage for screw-cutting.....	S. Jeffs.....	470,142	Mar. 1	741	184	58	1243
Lathes. Reversing attachment for screw-cutting.....	J. J. Messing.....	482,261	Sept. 6	556	132	60	1443
Lathes. Rotary tool-holder for.....	I. P. Richards.....	469,377	Feb. 23	2298	591	58	1000
Lathes. Stop mechanism for turret.....	F. H. Richards.....	481,192	Aug. 23	2323	572 573	60	1069
Lattice-gate.....	F. B. Conant.....	474,161	May 3	424	102	59	720
Latrine and automatic flushing apparatus.....	W. Clark.....	471,418	Mar. 22	2755	703	58	1661
Laundry drying-room.....	J. E. Chappell.....	481,845	Aug. 30	3413	837 838	60	1292
Lawn-sprinkler.....	C. H. Baker.....	477,164	June 14	1460	358	59	1742
Lawn-sprinkler.....	S. Broichgans.....	469,023	Feb. 16	1768	451	58	890
Lawn-sprinkler.....	G. Carlson.....	484,294	Oct. 11	1171	298	61	251
Lawn-sprinkler.....	C. G. Ette.....	486,771	Nov. 22	2533	661	61	1131
Lawn-sprinkler.....	N. L. Rigby.....	483,017	Sept. 20	1796	453	60	1713
Lawn-sprinkler.....	D. C. Wilgus.....	484,074	Oct. 11	824	208	61	183
Lawn-sprinkler. Traveling.....	H. T. Crepeau.....	485,532	Nov. 1	576	155	61	690
Lawn-sprinkler. Traveling.....	H. T. Crepeau.....	485,533	Nov. 1	578	155	61	691
Lawn-sprinkler. Traveling.....	J. B. Fellows.....	473,454	Apr. 26	2229	578	59	483
Lawn-sweeper.....	O. D. Thompson.....	481,269	Aug. 23	2464	607	60	1096
Lawn-trimmer.....	H. P. Hansen.....	482,307	Sept. 6	633	151	60	1459
Lawn-trimmer.....	H. C. Rice.....	470,950	Mar. 15	2036	521	58	1510
Lazy-tong gate.....	A. J. James and J. Ferguson.....	486,531	Nov. 22	2140	565	61	1053
Leaching solutions. Purifying hyposulphite.....	E. R. Holden.....	471,550	Mar. 29	2938	.....	58	1704
Lead carbonate. Method of and apparatus for producing.....	N. K. Morris and J. W. Bailey.....	467,042	Jan. 12	1193	301	58	235
Lead-corroding apparatus.....	G. D. Coleman.....	481,004	Aug. 16	1993	499	60	993
Lead corroding-pit. White.....	W. H. Wetherill.....	478,488	July 5	651	159	60	130
Lead. Desilverizing argentiferous.....	H. Roessler.....	480,416	Aug. 9	1077	.....	60	797
Lead fiber. Method of and apparatus for the manufacture of.....	N. K. Morris.....	467,041	Jan. 12	1191	301	58	231
Lead-fumes. Enriching.....	A. Chanute and M. W. Iles.....	479,489	July 26	2255	.....	60	481
Lead-lined pipe.....	G. W. Harrington.....	474,322	May 3	695	180	59	771
Lead. Making white.....	G. D. Coleman.....	481,007	Aug. 16	1999	500	60	994
Lead. Making white.....	E. Waller and C. A. Sniffin.....	471,770	Mar. 29	3298	841	58	1769
Lead. Making white.....	E. Waller and C. A. Sniffin.....	488,374	Dec. 20	1890	.....	61	1731
Lead. Manufacturing white.....	G. D. Coleman.....	481,006	Aug. 16	1998	500	60	994
Lead or crayon holder.....	C. W. Boman.....	484,133	Oct. 11	905	232	61	200
Lead or crayon holder.....	E. Faber. (Reissue).....	11,225	Nov. 22	2650	692	61	1156
Lead protoxide. Making.....	G. D. Coleman.....	481,005	Aug. 16	1996	500	60	993
Lead trap.....	J. Dellinger.....	473,062	Apr. 19	1623	414	59	334
Lead. Treating oxidized or corroded.....	R. W. F. Ahb6.....	485,730	Nov. 8	893	239	61	772
Leaf-stripping machine.....	J. L. Myers.....	476,234	May 31	3767	950	59	1123
Leaf-turner.....	A. C. Frankel.....	475,393	May 24	2401	613	59	1145

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Leaf-turner	C. H. Van Deusen	473,246	Apr. 19	1940	482	59	393
Leak-stopper	W. F. Beart	485,121	Oct. 25	2505	643	61	545
Leak-stopper or breach-plate	F. F. Jones	472,888	Apr. 12	1330	341 342	59	266
Leather-beading machine	A. J. Schmiedl	472,609	Apr. 12	933	241	59	191
Leather. Composition for softening enameled	R. L. Tudor	481,516	Aug. 23	2862		60	1171
Leather-cutting die	W. P. Bosworth	473,690	Apr. 26	2623	675	59	559
Leather-dressing composition	J. E. Swain	474,702	May 10	1313		59	902
Leather dressing or finishing machine	L. E. Learyd	484,029	Oct. 11	765	193 194	61	171
Leather. Finishing	J. Sanzenbacher	482,199	Sept. 6	455		60	1424
Leather-frame	L. F. Caulfield	484,137	Oct. 11	912	234	61	201
Leather-gage	A. G. Burton	473,892	Apr. 26	3006	758	59	620
Leather-gage	F. Clark	469,680	Mar. 1	16	7	58	1102
Leather-hammering machine	P. W. Minor	486,194	Nov. 15	1617	429	61	936
Leather. Process of and apparatus for degreasing	F. N. Turney	482,661	Sept. 13	1213	296 297	60	1586
Leather-punching machine	P. W. Rodecker	488,324	Dec. 20	1799	451 452	61	1712
Leather-rolling machine	J. A. Safford	477,460	June 21	1959	486	59	1851
Leather sides. Off-bearing pole for	B. Schnepf	470,872	Mar. 15	1924	492	58	1488
Leather, skins, &c. Machine for coloring	C. Knabe	477,761	June 23	2458	614 615	59	1968
Leather-skiving machine	C. H. Bayley	479,583	July 26	2382	594	60	504
Leather-skiving machine	J. A. Safford	477,458	June 21	1954	484 485	59	1850
Leather-skiving machine	J. A. Safford	477,459	June 21	1956	485 486	59	1850
Leather-skiving machine	A. J. Tewksbury	472,148	Apr. 5	215	57	59	40
Leather-skiving machine	A. K. Washburn	486,813	Nov. 22	2599	677	61	1145
Leather-splicing device	N. B. Holdsworth	472,052	Apr. 5	63	16	59	15
Leather splitting and skiving machine	J. A. Safford	477,456	June 21	1950	483 484	59	1849
Leather-splitting machine	S. H. Randall	479,461	July 26	2194	551	60	470
Leather-splitting machine	J. A. Safford	477,457	June 21	1952	484	59	1850
Leather-splitting machine	J. A. Safford	477,461	June 21	1960	487	59	1851
Leather-splitting machine	J. A. Safford	477,462	June 21	1962	487 488	59	1851
Leather-stretching machine	H. R. Behrens	468,392	Feb. 9	761	189	58	681
Leather. Treating	F. Riegert	467,200	Jan. 19	1474		58	297
Leather washer	L. M. Cabana	475,053	May 17	1874	475	59	1025
Ledger and index. Combined card	J. A. Langstroth	475,043	May 17	1855	471	59	1021
Ledger. Hotel	L. Sehon	473,856	Apr. 26	2941	741	59	608
Leg. Artificial	C. E. Ervin	472,443	Apr. 5	678	173	59	127
Leg. Artificial	J. Schmid	473,671	Apr. 26	2055	669	59	553
Leg. Artificial	U. Tanner	473,097	Apr. 19	1671	424	59	343
Leggin	C. E. Goodspeed	476,377	June 7	238	58	59	1483
Leggin	M. J. McGuigan	487,226	Nov. 29	3301	842	61	1298
Leggin	M. Scheuer	480,348	Aug. 9	965	244	60	777
Lemon-squeezer	W. M. Harris	468,341	Feb. 9	686	170	58	666
Lemon-squeezer	H. J. Williams	473,043	Apr. 19	1595	406	59	329
Lens. Illuminating	L. E. Davenport	478,739	July 12	1033	253	60	220
Letter-box	W. F. Askam	476,971	June 14	1159	280	59	1680
Letter-box	G. E. Becket	483,525	Oct. 4	12	3	61	5
Letter-box	M. J. Donahue	474,229	May 3	532	130	59	740
Letter-box	F. P. Hubbard	470,803	Mar. 15	1815	466	58	1467
Letter-box	O. P. Johnston and C. M. Gates	487,574	Dec. 6	548	141	61	1430
Letter-box	A. N. Klein	476,657	June 7	648	157	59	1565
Letter-box	L. T. Light	483,070	Sept. 20	1865	473	60	1728
Letter-box	J. W. Manlove	475,694	May 24	2871	726	59	1235
Letter-box	W. H. Sheffield	477,964	June 28	2776	695	59	2029
Letter-box	C. Shuman	476,692	June 7	697	171	59	1575
Letter-box	W. D. C. Smith	476,321	June 7	147	36	59	1466
Letter-box	J. Spear	479,576	July 26	2376	592	60	503
Letter-box	J. Spear	481,772	Aug. 30	3295	802	60	1270
Letter-box	W. W. Speer	472,182	Apr. 5	271	71	59	51
Letter-box	W. W. Speer	473,676	Apr. 26	2664	671	59	555
Letter-box	J. B. Stoner	472,560	Apr. 12	860	221	59	178
Letter-box and post therefor	W. W. Speer	473,972	May 3	139	32	59	664
Letter-box. Combined collection and delivery	W. Bussard	472,105	Apr. 5	148	40	59	28
Letter-box. Combined collection and delivery	A. E. Finegan	467,588	Jan. 26	2099	532	58	423
Letter-box. Electric	C. A. Pinkham	469,181	Feb. 16	1977	506	58	931
Letter-box. House	W. J. Andrews	467,586	Jan. 26	2096	531	58	422
Letter-box. House	C. Bennett and A. E. Parkinson	486,423	Nov. 22	1989	528	61	1024
Letter-box. House	P. C. Brown	482,292	Sept. 6	609	144	60	1454
Letter-box. House-door	P. Anderson	473,138	Apr. 19	1753	442	59	357
Letter-box. House-door	B. A. Blakeney	488,419	Dec. 20	1961	490	61	1744
Letter-box. House-door	B. A. Blakeney	488,420	Dec. 20	1962	490	61	1744
Letter-box. House-door	C. E. Calvert	487,210	Nov. 29	3268	835	61	1292
Letter-box. House-door	J. W. Coe, Jr.	485,860	Nov. 8	1066	283	61	807
Letter-box. House-door	C. A. Cummings and W. H. Hill	474,949	May 17	1708	434	59	993
Letter-box. House-door	R. A. and W. B. Denton	466,665	Jan. 5	562	145	58	109
Letter-box. House-door	J. A. Faw	476,139	May 31	3597	909	59	1391
Letter-box. House-door	G. W. Hall	488,556	Dec. 27	2171	536 537	61	1802
Letter-box. House-door	F. Kaempfen, Jr.	475,119	May 17	1980	502	59	1046
Letter-box. House-door	H. W. Laun	468,605	Feb. 9	1091	278	58	746
Letter-box. House-door	T. G. Milligan	476,669	June 7	663	161	59	1568
Letter-box. House-door	J. W. Moore	487,633	Dec. 6	637	163	61	1448
Letter-box. House-door	O. W. Newcomb	473,334	Apr. 19	2030	525	59	423
Letter-box. House-door	C. H. Scofield	475,810	May 31	3072	777 778	59	1287
Letter-box. House-door	G. D. Sidman	475,473	May 24	2531	645	59	1169
Letter-box. House-door	W. C. Thornton	475,095	May 17	1943	492	59	1038

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. G.	Vol.	Page.
Letter-box. House-door	W. C. Thornton	475,096	May 17	1945	493	59	1038
Letter-box. House-door	A. H. Van Pelt	471,918	Mar. 29	3496	893	58	1809
Letter-box. House-door	F. H. Walker	477,091	June 14	1352	329	59	1721
Letter-box. House-door	S. Witherell	472,007	Mar. 29	3617	924	58	1832
Letter-box. House-door	J. H. Wolfsheimer	484,985	Oct. 25	2301	594 595	61	502
Letter-box. Street	W. M. Fitzwater	476,996	June 14	1193	290	59	1629
Letter for signs. Attachable	J. E. and H. E. Hartley	488,655	Dec. 27	2336	578	61	1835
Letter of credit. Circular	H. Potter	488,221	Dec. 20	1638	408	61	1682
Letter-ponch	H. H. Johannigman	472,791	Apr. 12	1196	307	59	239
Letter-press. Pneumatic	W. E. Page and L. J. Buchanan	474,401	May 10	831	218	59	809
Letter-press and cabinet	G. Paul	481,586	Aug. 30	2983	732	60	1210
Letter. Sign	L. Levett	480,106	Aug. 2	549	138	60	637
Letters. Device for opening	H. C. Volk and E. Weiland	471,283	Mar. 22	2547	647	58	1620
Letters, files, &c. Holder for	E. W. Woodruff	476,854	June 14	964	234	59	1642
Letters or designs in relief. Producing	M. J. D. Carter	485,608	Nov. 8	696	183	61	731
Lettering, &c., in relief on sheets of ductile metal.	J. M. Newton	482,267	Sept. 6	565	134	60	1445
Apparatus for producing							
Lettering-tablet	A. Clark	481,002	Aug. 16	1992	499	60	992
Level	W. Rush	474,861	May 17	1575	401	59	966
Level and plumb	F. W. Dechaux	477,405	June 21	1874	401	59	1834
Level and plumb. Pendulum	J. Winkelmann	479,430	Feb. 23	2377	610	58	1015
Level attachment	J. J. Fimmant and J. J. Nissen	472,345	Apr. 5	534	138	59	100
Level. Carpenter's combination	H. R. Winkelmann and A. C. Perkins	467,844	Jan. 26	2501	633 634	58	498
Level for measuring-tapes. Spirit	E. McCullough	479,521	July 26	2299	574	60	489
Level. Plumb	O. B. Fuller	469,132	Feb. 16	1906	488	58	917
Level. Plumb	J. F. Hall	479,981	Aug. 2	325	80	60	644
Level. Plumb	J. T. Rider	482,026	Sept. 6	173	41	60	1368
Level. Plumb	M. C. Rockteacher and J. H. McKeon	477,312	June 21	1731	424	59	1807
Level. Plumb	A. G. Taylor	474,152	May 3	411	99	59	718
Level. Spirit	T. L. Burchinal	478,309	July 5	390	94	60	78
Level. Spirit	J. Dobelman	478,848	July 12	1206	299	60	254
Level. Spirit	W. Pradde	469,451	Feb. 23	2410	617	58	1021
Leveler. Road	A. Zoldoske	469,956	Mar. 1	469	117	58	1190
Leveling-instrument	C. H. Lockwood	479,518	July 26	2296	573	60	489
Lever. Compound	T. A. Briggs	480,450	Aug. 9	1138	284	60	809
Lever-jack	W. Trowhella	476,702	June 7	710	174 175	59	1378
Lever-power engine	A. Annibale	483,776	Oct. 4	385	95, 96	61	50
Lid-holder for pans or vessels	E. E. Ward	483,408	Sept. 27	2420	608	60	1845
Lid-lifter for kettles, &c	A. E. Cobb	479,055	July 19	1520	379	60	326
Life at sea. Apparatus for saving	J. D'Arcy-Irvine	483,667	Oct. 4	219	54, 55	61	45
Life-boat	P. Hübner	484,592	Oct. 18	1637	415	61	355
Life-boat	W. H. Taylor	481,602	Aug. 30	3015	737	60	1215
Life boat and raft	W. Hickman	473,224	Apr. 19	1908	481	59	386
Life-preserver	E. J. Krieg	476,277	June 7	71	15	59	1451
Life-saving and pleasure craft	A. B. Shearer	481,427	Aug. 23	2725	670	60	1143
Lifter:							
See Coal-lifter.	Plate-lifter.						
Feeder-lifter.	Plate or pan lifter.						
Joist-lifter.	Stone-lifter.						
Journal-box lifter.	Transom-lifter.						
Pickle-lifter.	Truck-lifter.						
Lifter. Universal adjustable	J. L. Throop	487,105	Nov. 29	3112	798	61	1263
Lifting-jack	A. P. Aiken	480,685	Aug. 9	1507	375	60	881
Lifting-jack	E. E. Albin	486,922	Nov. 29	2826	731	61	1206
Lifting-jack	I. Botts	469,116	Feb. 16	1887	483	58	913
Lifting-jack	G. P. Brinkman	473,206	Apr. 19	1875	472	59	380
Lifting-jack	G. H. Bryant and V. Beauregard	486,528	Nov. 22	2136	564	61	1053
Lifting-jack	J. H. Cory	469,832	Mar. 1	269	70	58	1153
Lifting-jack	W. H. Cox	468,965	Feb. 16	1660	424	58	868
Lifting-jack	W. H. Cox	475,934	May 31	3277	827	59	1326
Lifting-jack	M. B. Dooley	484,655	Oct. 18	1755	446	61	379
Lifting-jack	W. Y. Fisher and C. Perry	482,628	Sept. 13	1176	284	60	1577
Lifting-jack	E. Garren	475,764	May 31	2957	757	59	1270
Lifting-jack	C. F. Hornbeck	473,002	Apr. 19	1526	389	59	317
Lifting-jack	C. Morrill	477,771	June 28	2473	618	59	1970
Lifting-jack	W. R. Proctor	487,770	Dec. 13	874	222	61	1512
Lifting-jack	G. C. Winpee	485,902	Nov. 8	1136	301	61	821
Lifting-jack	W. A. Wolfinger	479,092	July 26	2556	636	60	537
Lifting-jack	H. York and F. W. Austin	480,646	Aug. 9	1442	359	60	870
Lifting-machine	J. S. Crouch	481,224	Aug. 23	2382	587	60	1081
Light:							
See Dead light.	Electric search-light.						
Electric light.	Head-light.						
Electric drop-light.	Signal-light.						
Light-fixture coupling	J. A. O'Neill	488,946	Dec. 27	2793	689	61	1928
Light-fixtures. Adjustable canopy for	E. C. Schmalz	483,171	Sept. 27	2033	514	60	1773
Light-fixtures. Thimble for	J. J. Miller	479,139	July 19	1656	413 414	60	350
Light. Magnifying-globe for the diffusion of artificial	H. Eldridge	483,482	Sept. 27	2508	631	60	1863
Lights. Apparatus for producing variegated	F. L. M. Smith and W. J. Bryan	479,673	July 26	2525	628 629	60	531
Lights. Apparatus for regulating the intensity of incandescent	J. F. McElroy	484,110	Oct. 11	871	221	61	193
Lighter and match-safe. Combined pocket	A. J. Fredrikson	479,756	July 26	2674	664	60	559
Lighter. Pocket	W. Lang	487,845	Dec. 13	1002	252	61	1538
Lighting and heating apparatus	D. W. Clegg	485,827	Nov. 8	1014	273 272	61	796
Lighting and heating apparatus	J. D. Luther	482,874	Sept. 20	1555	388	60	1666
Lighting device	E. Kronenberg	480,500	Aug. 9	1209	303	60	823
Lighting device	W. W. McKenney	480,207	Aug. 2	715	182	60	718

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lighting device.....	B. H. Pendleton.....	482,587	Sept. 13	1113	269	60	1567
Lighting device.....	B. H. Pendleton.....	486,499	Nov. 22	2097	554	61	1045
Lighting device. Hydrocarbon.....	F. A. Cody and L. T. Lawton.....	484,354	Oct. 11	1267	323	61	270
Lighting device. Pocket.....	W. W. McKenney.....	480,206	Aug. 2	712	182		
Lighting devices, &c. Tape-winding mechanism for.....	C. P. Booth.....	475,996	May 31	3370	850	59	1345
Lighting. Incandescent.....	J. Landin.....	485,281	Nov. 1	188	54	61	612
Lighting. System of arc.....	H. A. Foster.....	472,346	Apr. 5	535	139	59	100
Lightning-arrester.....	G. M. Bacon.....	470,736	Mar. 15	1706	440	58	1446
Lightning-arrester.....	J. E. Browne and F. H. Tidnam.....	475,482	May 24	2545	648	59	1172
Lightning-arrester.....	M. Dickerson.....	474,469	May 10	944	243	59	829
Lightning-arrester.....	T. A. Edison.....	476,988	June 14	1183	286	59	1686
Lightning-arrester.....	W. R. Garton.....	488,002	Dec. 13	1257	313	61	1588
Lightning-arrester.....	F. Haselwander.....	477,656	June 28	2290	573	59	1933
Lightning-arrester.....	E. G. Miller.....	472,135	Apr. 5	198	53	59	37
Lightning-arrester.....	H. G. Osburn.....	486,498	Nov. 22	2095	554	61	1045
Lightning-arrester.....	L. Searing.....	484,466	Oct. 18	1450	370	61	318
Lightning-arrester.....	C. F. Scott and A. Wurts.....	470,013	Mar. 1	553	137	58	1206
Lightning-arrester.....	G. W. Spittle.....	467,023	Jan. 12	1161	294	58	229
Lightning-arrester.....	E. Thomson.....	468,497	Feb. 9	928	295		
Lightning-arrester.....	E. Thomson.....	470,721	Mar. 15	1682	236	58	714
Lightning-arrester.....	E. Thomson.....	470,721	Mar. 15	1682	434	58	1442
Lightning-arrester.....	E. Thomson.....	470,721	Mar. 15	1682	435		
Lightning-arrester.....	C. S. Van Nuis.....	478,383	July 5	501	121	60	99
Lightning-arrester.....	C. S. Van Nuis.....	478,383	July 5	501	122		
Lightning-arrester.....	A. G. Waterhouse.....	475,645	May 24	2797	709	59	1221
Lightning-arrester.....	M. M. Wood.....	473,045	Apr. 19	1599	407	59	330
Lightning-arrester.....	A. Wurts.....	476,855	June 14	967	235	59	1643
Lightning-arrester cut-out.....	J. P. Freeman.....	481,617	Aug. 30	3034	741	60	1219
Lightning-conductor.....	H. Simpson.....	470,514	Mar. 8	1384	362	58	1372
Limb. Artificial.....	H. F. Ehle.....	487,697	Dec. 6	743	190	61	1467
Limb. Artificial.....	G. E. Marks.....	470,431	Mar. 8	1263	324	58	1349
Line. Apparatus for making bisulphite of.....	W. H. Howell.....	487,887	Dec. 13	1070	268	61	1550
Line-holder.....	D. Sweeney.....	480,351	Aug. 9	971	245	60	778
Line. Plow.....	G. H. Jordan.....	475,570	May 24	2688	682	59	1199
Link-lifter.....	J. Finney.....	478,932	July 12	1324	329	60	277
Link. Separable.....	C. S. Kershaw.....	487,841	Dec. 13	996	251	61	1536
Link. Sleeve.....	T. W. F. Smitten.....	486,904	Nov. 29	2795	725	61	1200
Links. Die for making.....	W. M. Boyles.....	476,514	June 7	440	104	59	1523
Links. Method of and apparatus for equalizing.....	T. Murphy.....	478,454	July 5	601	146	60	119
Linoleum floor-cloth. Device for manufacturing.....	T. Mitchell.....	482,948	Sept. 20	1683	423	60	1690
Linoleum, &c. Manufacturing.....	T. Mitchell.....	467,378	Jan. 19	1745	445	58	347
Linseed-cake stripper.....	F. O. Swannell.....	476,327	June 7	153	38	59	1467
Lint package.....	J. W. Johnson.....	466,892	Jan. 12	959	245	58	192
Liquid-agitator.....	J. D. Stephens.....	485,753	Nov. 8	920	246	61	778
Liquid-cooler.....	E. Fehr.....	468,647	Feb. 9	1155	295	58	759
Liquid-cooler.....	H. C. Gardner.....	484,955	Oct. 25	2252	580	61	493
Liquid-cooling apparatus.....	P. Bender.....	479,778	Aug. 2	7	2	60	583
Liquid-dispensing apparatus.....	R. H. Little.....	481,698	Aug. 30	3156	770	60	1243
Liquid-dispensing apparatus.....	R. H. Little.....	481,698	Aug. 30	3156	771		
Liquid-dispensing apparatus.....	J. C. Mayrhofer.....	471,821	Mar. 29	3366	857	58	1782
Liquid-dispensing apparatus.....	R. A. Pauchaud and W. G. Temple.....	476,760	June 7	797	196	59	1596
Liquid-distributing machine. Automatic.....	E. B. Lundy.....	480,598	Aug. 9	1359	338	60	853
Liquid-gage.....	C. Pinel.....	483,485	Sept. 27	2512	632	60	1864
Liquid-heating device.....	A. Selkirk.....	481,151	Aug. 16	2257	557	60	1042
Liquid-level-indicator system.....	H. A. McGrory.....	480,736	Aug. 16	1586	397	60	912
Liquid-meter. Automatic.....	M. E. Reisert.....	469,793	Mar. 1	203	53	58	1140
Liquid-purifying device.....	F. K. Way.....	479,381	July 19	2042	510	60	426
Liquid receptacle and pump. Combined.....	J. H. Bullard.....	480,068	Aug. 2	494	126	60	676
Liquid-regulator.....	M. Poschinger.....	485,563	Nov. 1	624	166	61	701
Liquid-separator. Centrifugal.....	C. von Bechtolsheim.....	466,444	Jan. 5	277	70	58	53
Liquid-separator. Centrifugal.....	H. F. Beimpling.....	487,943	Dec. 13	1160	290	61	1567
Liquid-separator. Centrifugal.....	J. E. Folk.....	488,672	Dec. 27	2365	585	61	1840
Liquid transferring device for vessels.....	E. A. Franklin.....	466,336	Jan. 5	42	11	58	11
Liquids. Apparatus for separating solid matter from.....	G. Sobotka and W. Ahrens.....	488,583	Dec. 27	2222	550	61	1213
Liquids. Apparatus for separating solid matter from.....	G. Sobotka and W. Ahrens.....	488,956	Dec. 27	2808	692	61	1931
Liquids. Apparatus for storing, handling, and transporting.....	A. Cirkel.....	486,690	Nov. 22	2400	636	61	1105
Liquids. Apparatus for storing, handling, and transporting.....	A. Cirkel.....	486,691	Nov. 22	2401	637	61	1105
Liquids. Centrifugal apparatus for cooling or heating.....	C. G. Bjorlin.....	476,441	June 7	335	76	59	1502
Liquids. Elevating.....	J. G. Pohlé.....	487,639	Dec. 6	649	167	61	1450
Liquids from vessels. Means for regulating the flow of.....	F. E. Baldwin.....	487,817	Dec. 13	954	241	61	1528
Liquids. Purifying.....	C. W. Brunson.....	479,781	Aug. 2	11	3	60	584
Liquids. Receptacle for aerated.....	J. D. Her.....	473,006	Apr. 19	1533	391	59	318
Liquids with carbonic acid. Apparatus for impregnating.....	C. H. Frings.....	486,225	Nov. 15	1667	440	61	945
Liquids with gases. Apparatus for treating.....	G. Lunge.....	485,126	Oct. 25	2512	646		
Liquids with ozone. Treating.....	J. C. Dittrich and F. M. Grumbacher.....	487,089	Nov. 29	3083	792	61	1257
Liquor purifying and aging apparatus.....	C. Heintz.....	482,843	Sept. 20	1505	374	60	1656
Liquor tester. Spirituous.....	K. Taylor.....	476,093	May 31	3517	855	59	1376
Liquors. Apparatus for cooling and aerating malt.....	H. E. Deckeback.....	474,630	May 10	1197	304	59	878
Liquors. Cooling and dispensing device for.....	J. Neumann.....	473,333	Apr. 19	2086	534	59	422
Liquors. Cooling and dispensing device for.....	J. Neumann.....	473,333	Apr. 19	2086	525		
Liquors in bottles. Apparatus for impregnating.....	E. Stern.....	478,652	July 12	896	222	60	193
Liquors or distilled spirits. Process of and apparatus for purifying and maturing.....	I. B. Cushing.....	485,341	Nov. 1	292	78, 79	61	631
Lithographic plate.....	F. F. Hagenmuller.....	487,121	Nov. 29	3137	804	61	1267
Lithographic plates. Manufacturing.....	O. Kindermann.....	469,704	Mar. 1	51	58	1108	
Loads. Hydraulic apparatus for moving.....	R. Middleton.....	475,588	May 24	2709	687	59	1204
Loads. Hydraulic apparatus for moving.....	R. Middleton.....	475,588	May 24	2709	688		

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lobster-shipping apparatus	A. McGray	485,422	Nov. 1	422	113	61	659
Lobster-trap	J. S. Palmer and C. R. Watrous	483,471	Sept. 27	2495	628	60	1861
Lock:							
See Alarm-lock. Loom-shuttle bobbin-							
Bag-lock. lock.							
Bicycle-lock. Magnetic lock.							
Bicycle-wheel lock. Nut-lock.							
Bolt-lock. Nut and bolt lock.							
Bolt and nut lock. Oar-lock.							
Bottle-stopper lock. Permutation-lock.							
Buggy-top lock. Railway nut-lock.							
Carriage-lock. Railway-switch lock.							
Check-controlled Registering-lock.							
lock. Rowlock.							
Coin-operated lock. Safe-lock.							
Combination-lock. Seal-lock.							
Cylinder-lock. Show-case lock.							
Door-lock. Switch-lock.							
Electric lock. Till-lock.							
Galley-lock. Time-lock.							
Gun-lock. Trace-lock.							
Hasp-lock. Trunk-lock.							
Hinge-lock. Umbrella-lock.							
Indicator-lock. Wagon-lock.							
Lamp-lock. Whip-lock.							
Lock	G. F. Abbott	486,420	Nov. 22	1985	527	61	1023
Lock	A. Arens	471,594	Mar. 29	3003	764	58	1715
Lock	A. Arens	471,595	Mar. 29	3004	764	58	1715
Lock	A. Arens	475,914	May 31	3246	819	59	1320
Lock	R. R. Ball	484,392	Oct. 18	1332	339	61	295
Lock	W. R. Ballou	474,221	May 3	609	151	59	756
Lock	C. A. Berry	474,790	May 10	1448	367	59	928
Lock	W. H. Blaney	481,889	Aug. 30	3483	853	60	1306
Lock	H. Bruns	483,298	Sept. 27	2261	569	60	1815
Lock	C. E. Candee	474,519	May 10	1022	262	59	845
Lock	C. E. Candee	478,781	July 12	1099	272	60	234
Lock	C. E. Candee	478,782	July 12	1102	273	60	234
Lock	C. E. Candee	478,783	July 12	1104	273	60	234
Lock	C. E. Candee	478,784	July 12	1108	273	60	235
Lock	C. E. Candee	478,916	July 12	1298	323	60	272
Lock	C. E. Candee	478,917	July 12	1301	324	60	272
Lock	A. C. Colley	470,474	Mar. 8	1328	346	58	1361
Lock	C. E. Déný	487,945	Dec. 13	1163	290	61	1568
Lock	G. Fleischel and J. Bertrand	479,104	July 19	1595	399	60	339
Lock	H. Flynn	474,955	May 17	1716	436	59	995
Lock	J. R. Forster and T. S. Rackliff	466,918	Jan. 12	997	255	58	199
Lock	B. Goldenberg	483,147	Sept. 27	1985	503	60	1763
Lock	A. C. Hough	486,107	Nov. 15	1491	392	61	910
Lock	J. B. Lighton	473,401	Apr. 19	2204	553	59	445
Lock	J. Loch	481,235	Aug. 23	2398	592	60	1084
Lock	S. R. Long	487,878	Dec. 13	1059	265	61	1548
Lock	F. F. and L. F. Marshall	478,754	July 12	1050	258	60	224
Lock	L. Mouat, Jr., and E. W. Pratt	484,443	Oct. 18	1415	361	61	311
Lock	W. Nehring	482,970	Sept. 20	1714	433	60	1696
Lock	B. Piers	473,125	Apr. 19	1729	437	59	352
Lock	R. G. Ping and H. Mendenhall	467,235	Jan. 19	1525	389	58	307
Lock	J. B. Price	481,422	Aug. 23	2718	668	60	1142
Lock	C. Richtmann	478,239	July 5	284	70	60	58
Lock	J. Roche	470,412	Mar. 8	1227	313	58	1341
Lock	J. Roche	470,413	Mar. 8	1228	314	58	1342
Lock	J. Roche	476,559	June 7	500	118	59	1537
Lock	J. Roche	481,736	Aug. 30	3231	787	60	1257
Lock	J. F. Schlossstein	428,091	Dec. 13	1414	352	61	1621
Lock	J. H. Shaw	469,950	Mar. 1	459	114	58	1188
Lock	J. H. Shaw	469,951	Mar. 1	461	115	58	1188
Lock	E. C. Smith	473,857	Apr. 26	2942	742	59	609
Lock	E. C. Smith	476,086	May 31	3505	884	59	1374
Lock	N. G. Sørensen	481,597	Aug. 30	3003	735	60	1213
Lock	W. E. Sparks	480,973	Aug. 16	1953	488	60	985
Lock	E. T. Starr	471,344	Mar. 22	2631	669	58	1637
Lock	C. M. Stiner	484,759	Oct. 18	1915	488	61	413
Lock	G. C. Suero	476,575	June 7	523	123	59	1540
Lock	A. O. Tannenbergl	485,899	Nov. 8	1133	300	61	821
Lock	W. H. Taylor	474,783	May 10	1437	364	59	926
Lock	T. Wohlmutl	471,453	Mar. 22	2804	715	58	1669
Lock	P. Zimmermann, Jr	480,359	Aug. 9	979	247	60	779
Lock and alarm. Combination	R. Baumann	484,577	Oct. 18	1617	411	61	351
Lock and latch.	J. W. Koons	475,121	May 17	1982	502	59	1046
Lock-case	L. Luger	468,017	Feb. 2	167	41	58	557
Lock-case	J. Roche	485,885	Nov. 8	1117	295	61	817
Lock for adjustable machine-tables	W. A. Greaves	475,553	May 24	2664	678	59	1194
Lock for bag, purse, and pocket-book frames	F. R. Deck	486,701	Nov. 22	2423	631	61	1109
Lock for trunks, valises, boxes, &c	J. J. Sager	471,277	Mar. 22	2538	644	58	1618

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Lock mechanism. Time.....	E. and H. C. Stockwell.....	479,379	July 19	2037	{ 508 509	{ 60	425
Lock-strike.....	J. A. Burns.....	469,398	Feb. 23	2324	592	58	1005
Lock-strike.....	F. E. Ranney.....	475,000	May 17	1797	456	59	1009
Lock-trimming.....	L. W. Gould and F. Bartleet.....	466,341	Jan. 5	53	13	58	13
Locks. Dial-knob for combination.....	G. H. Williams.....	473,686	Apr. 26	2678	674	59	558
Locker for apparel, &c.....	J. M. Cotton.....	483,282	Sept. 27	2235	562	60	1811
Locket.....	W. J. Faulkner.....	486,033	Nov. 8	1351	359	61	866
Locket.....	J. Graff.....	487,480	Dec. 6	411	106	61	1402
Locking-rack for umbrellas, coats, hats, &c.....	E. J. Colby.....	475,720	May 24	2909	738	59	1242
Locomotive.....	P. Brown.....	486,555	Nov. 22	2170	573	61	1059
Locomotive.....	C. L. Heisler.....	482,828	Sept. 20	1480	{ 368 369	{ 60	1651
Locomotive.....	J. B. Mahana.....	471,009	Mar. 15	2129	546	58	1528
Locomotive.....	B. F. Taylor.....	471,281	Mar. 22	2544	646	58	1619
Locomotive ash-pan.....	J. W. Eads.....	482,235	Sept. 6	508	121	60	1434
Locomotive ash-pan.....	C. J. W. Johnson.....	476,147	May 31	3608	912	59	1394
Locomotive-ash-pan scraper.....	H. T. Carrington.....	473,692	Apr. 26	2638	{ 676 677	{ 59	560
Locomotive attachment for signals.....	T. E. Hill.....	470,877	Mar. 15	1932	494	58	1489
Locomotive bell-ringer.....	E. D. Bangs.....	485,445	Nov. 1	456	122	61	665
Locomotive-boiler.....	J. T. Connelly.....	488,919	Dec. 27	2750	678	61	1919
Locomotive-boiler.....	L. W. Lester.....	479,648	July 26	2481	618	60	523
Locomotive-brake.....	W. H. Ford.....	473,112	Apr. 19	1710	433	59	349
Locomotive. Compound.....	H. C. Reagan, Jr.....	473,437	Apr. 19	2251	{ 567 568	{ 59	454
Locomotive. Compound.....	H. C. Reagan, Jr.....	481,149	Aug. 16	2253	556	60	1041
Locomotive draw-bar.....	S. R. Heidelberg.....	480,923	Aug. 16	1867	466	60	969
Locomotive draw-bar coupling.....	W. P. Prendergast.....	470,897	Mar. 15	1955	{ 500 501	{ 58	1495
Locomotive-driver brake.....	J. E. Normand.....	468,254	Feb. 2	527	130	58	627
Locomotive. Electric.....	T. E. Adams.....	476,437	June 7	328	75	59	1501
Locomotive. Electric.....	W. E. Allington.....	486,068	Nov. 15	1408	{ 373 374	{ 61	895
Locomotive. Electric.....	N. C. Bassett.....	483,204	Sept. 27	2088	{ 529 530	{ 60	1784
Locomotive. Electric.....	C. Brown and G. J. Melms.....	474,984	May 17	1769	448	59	1005
Locomotive. Electric.....	J. I. Conklin.....	473,693	Apr. 26	2689	677	59	560
Locomotive. Electric.....	C. M. Conradson.....	482,863	Sept. 20	1534	382	60	1662
Locomotive. Electric.....	C. M. Conradson.....	487,114	Nov. 29	3123	801	61	1266
Locomotive. Electric.....	T. A. Edison.....	475,491	May 24	2559	652	59	1175
Locomotive. Electric.....	T. A. Edison.....	475,492	May 24	2562	652	59	1175
Locomotive. Electric.....	T. A. Edison.....	475,493	May 24	2563	653	59	1175
Locomotive. Electric.....	T. A. Edison.....	476,987	June 14	1182	286	59	1686
Locomotive. Electric.....	R. Eickemeyer.....	480,918	Aug. 16	1857	463	60	967
Locomotive. Electric.....	J. Gray.....	478,591	July 12	814	201	60	177
Locomotive. Electric.....	S. P. Hollingsworth.....	470,627	Mar. 8	1540	401	58	1405
Locomotive. Electric.....	S. H. Short.....	473,674	Apr. 26	2661	670	59	554
Locomotive. Electric.....	S. H. Short.....	478,242	July 5	293	71	60	59
Locomotive. Electric.....	S. H. Short.....	478,477	July 5	637	{ 155 156	{ 60	127
Locomotive. Electric.....	W. H. Soley and W. W. Perkins.....	482,594	Sept. 13	1127	272	60	1569
Locomotive. Electric.....	E. A. Sperry.....	470,516	Mar. 8	1386	362	58	1373
Locomotive. Electric.....	E. A. Sperry.....	478,139	July 5	93	24	60	21
Locomotive. Electric.....	C. J. Van Depoele.....	488,930	Dec. 27	2763	682	61	1922
Locomotive. Electric.....	T. L. Willson.....	469,799	Mar. 1	215	55	58	1143
Locomotive. Electric.....	T. L. Willson.....	483,822	Oct. 4	451	{ 112 113	{ 61	93
Locomotive-engine.....	A. R. Cagner.....	469,844	Mar. 1	286	75	58	1156
Locomotive-engine.....	A. R. Cagner.....	478,681	July 12	939	233	60	201
Locomotive-engine.....	A. R. Cagner.....	478,682	July 12	940	{ 233 234	{ 60	202
Locomotive-engine.....	A. R. Cagner.....	478,684	July 12	943	234	60	203
Locomotive-engine.....	A. R. Cagner.....	478,685	July 12	945	234	60	203
Locomotive-engine.....	M. N. Forney.....	485,344	Nov. 1	297	79, 80	61	632
Locomotive-engine.....	J. Richards.....	488,774	Dec. 27	2514	625	61	1870
Locomotive-engines. Apparatus for lighting.....	A. R. Cagner.....	478,683	July 12	942	234	60	202
Locomotive-engines. Construction of.....	F. C. Winby.....	466,546	Jan. 5	377	95, 96	58	73
Locomotive-engines. Draft-regulator for.....	E. E. Winkley.....	470,733	Mar. 15	1701	{ 438 439	{ 58	1445
Locomotive-engines. Speed and whistle recorder for.....	B. F. Stockford.....	482,393	Sept. 13	799	{ 192 193	{ 60	1506
Locomotive feed apparatus.....	I. H. Raynor.....	485,056	Oct. 25	2414	621	61	525
Locomotive feed-water supply.....	F. L. McGahan.....	466,360	Jan. 5	77	20, 21	58	17
Locomotive fire-boxes. Brick arch for.....	F. W. Johnstone.....	481,232	Aug. 23	2396	591	60	1083
Locomotive. Road.....	J. F. Hanscom.....	467,095	Jan. 12	1283	325	58	252
Locomotive. Road.....	H. White.....	480,757	Aug. 16	1612	405	60	919
Locomotive safety smoke-stack.....	J. J. Sullivan.....	477,389	June 21	1850	455	59	1830
Locomotive steam-boiler.....	G. J. Perkins.....	483,473	Sept. 27	2497	629	60	1861
Locomotive steam-engine. Compound.....	H. Monk.....	480,668	Aug. 9	1476	368	60	876
Locomotive. Street.....	E. Dederick.....	477,889	June 28	2670	668	59	2006
Locomotives and cars. Pilot or guard for.....	R. A. Crawford.....	480,713	Aug. 16	1553	387	60	905
Locomotives. Arresting electric.....	S. H. Short.....	474,031	May 3	231	56	59	682
Locomotives. Automatic signal and brake mechanism for.....	S. J. K. Hassall.....	488,892	Dec. 27	2696	{ 667 668	{ 61	1908
Locomotives. Motor-frame for electric.....	S. H. Short.....	479,469	July 26	2207	554	60	473
Locomotives. Propelling-gear for tramway.....	C. D. Scott.....	470,078	Mar. 1	652	161	58	1225
Locomotives. Propelling-gear for tramway.....	C. D. Scott.....	488,484	Dec. 20	2062	512	61	1766
Locomotives. Sanding device for.....	W. F. McCreedy.....	469,263	Feb. 23	2117	544	58	965
Locomotives. Smoke-exhausting apparatus for.....	C. Anderson.....	470,965	Mar. 15	2058	527	58	1514
Locomotives. Smoke-exhausting apparatus for.....	C. Anderson.....	471,458	Mar. 22	2813	717	58	1671
Locomotives. Spark-arrester for.....	C. Cooper.....	468,169	Feb. 2	396	98	58	601
Locomotives. Starting-gear for compound.....	R. Lindner.....	481,181	Aug. 23	2306	{ 568 569	{ 60	1065

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Log-binder.....	R. J. Thompson.....	478,972	July 12	1386	{ 341 342 }	60	288
Log-carrier.....	R. E. Terry.....	481,314	Aug. 23	2550	{ 626 702 }	60	1110
Log-carrier. Portable.....	D. S. Stombs.....	475,628	May 24	2775	{ 703 358 359 }	59	1217
Log-carrier track.....	A. T. Kelliher.....	484,436	Oct. 18	1406	{ 358 359 }	61	309
Log-carriers, &c. Hanger or support for.....	G. W. Cole.....	482,163	Sept. 6	398	94	60	1413
Log-loader.....	E. J. Fulghum.....	484,788	Oct. 25	1979	505	61	439
Log loader and turner.....	W. E. Hill.....	466,682	Jan. 5	586	152	58	114
Log loader and turner.....	W. E. Hill.....	484,013	Oct. 11	745	{ 186 187 }	61	167
Log-turner.....	W. E. Hill.....	485,696	Nov. 8	830	223	61	759
Log-turner.....	G. E. Thurston.....	471,200	Mar. 22	2424	617	58	1596
Logs. Rafting.....	A. Van Kooij.....	476,106	May 31	3544	891	59	1380
Logging-machine. Cable.....	J. Buckley.....	481,927	Sept. 6	9	3	60	1336
Longitude and time. Machine for calculating and illustrating.....	W. W. Hallett.....	480,367	Aug. 9	997	250	60	783
Loom.....	T. J. Corcoran.....	476,918	June 14	1069	{ 257 258 }	59	1663
Loom.....	F. J. Gallagher.....	468,133	Feb. 2	342	85	58	591
Loom.....	E. Hollingworth.....	469,210	Feb. 16	2041	521	58	941
Loom.....	J. W. and A. C. Maurer.....	488,569	Dec. 27	2199	544	61	1808
Loom.....	J. H. Northrop.....	470,590	Mar. 8	1485	{ 386 387 }	58	1394
Loom.....	R. E. Rhoades.....	467,644	Jan. 26	2180	554	58	437
Loom.....	H. Widmer.....	477,094	June 14	1357	330	59	1722
Loom.....	H. Wyman and J. A. Clark.....	480,684	Aug. 9	1503	374	60	881
Loom-batten.....	O. W. Schaum.....	485,886	Nov. 8	1118	295	61	817
Loom drop-box mechanism.....	H. P. Mallison.....	478,621	July 12	854	{ 210 211 }	60	185
Loom for weaving cane, &c.....	A. Hay.....	469,473	Feb. 23	2445	{ 627 628 }	58	1028
Loom for weaving chenille carpets.....	L. Letalle.....	473,261	Apr. 19	1963	493	59	398
Loom for weaving chenille webs.....	R. Hartley.....	470,426	Mar. 8	1251	321	58	1346
Loom for weaving chenille webs.....	L. Letalle.....	473,260	Apr. 19	1961	492	59	397
Loom for weaving double pile fabrics.....	T. I. Shuttleworth, and C. H. and J. Burt.....	470,452	Mar. 8	1295	{ 332 333 }	58	1355
Loom for weaving fringe.....	K. Engsborg.....	477,204	June 21	1539	{ 376 377 }	59	1771
Loom for weaving ornamental fabrics.....	A. Urbahn.....	474,882	May 17	1602	{ 409 410 411 }	59	972
Loom for weaving pile fabrics.....	G. Poole.....	467,726	Jan. 26	2317	583	58	463
Loom for weaving pile fabrics.....	W. Terry and F. Rawnsley.....	471,835	Mar. 29	3383	{ 662 863 }	58	1786
Loom for weaving tufted fabrics.....	A. Bollentin.....	468,479	Feb. 9	892	{ 227 228 229 }	58	707
Loom for weaving tufted fabrics.....	H. Dixon.....	482,446	Sept. 13	885	213	60	1521
Loom friction let-off motion.....	T. S. Brown.....	478,045	June 28	2908	726	59	2053
Loom harness-leveling device.....	R. J. Risk.....	488,286	Dec. 20	1740	438	61	1701
Loom Jacquard connection.....	J. Vaucher.....	472,513	Apr. 5	793	203	59	151
Loom Jacquard mechanism.....	G. W. Stafford.....	476,428	June 7	315	72	59	1499
Loom let-off.....	W. H. Miley.....	475,590	May 24	2714	668	59	1205
Loom let-off and take-up mechanism.....	E. Maertens.....	467,036	Jan. 12	1179	{ 298 299 }	58	232
Loom let-off mechanism.....	I. Fontaine.....	484,002	Oct. 11	727	{ 182 183 }	61	163
Loom let-off mechanism.....	J. Morton.....	475,595	May 24	2723	690	59	1206
Loom let-off motion.....	W. Begg.....	483,626	Oct. 4	163	40	61	34
Loom let-off motion.....	J. M. Linscott.....	485,330	Nov. 1	274	74	61	628
Loom pattern-chain.....	J. Hill.....	486,336	Nov. 15	1847	486	61	952
Loom pattern-chain and barrel therefor.....	E. Hill.....	466,337	Nov. 15	1848	486	61	952
Loom pattern mechanism.....	G. W. Stafford.....	466,875	Jan. 12	930	238	58	186
Loom pattern mechanism.....	G. W. Stafford and W. Evans.....	466,873	Jan. 12	923	236	58	185
Loom pattern mechanism.....	G. W. Stafford and W. Evans.....	466,874	Jan. 12	927	237	58	185
Loom-picker.....	L. Teweles and T. A. Robinson.....	479,903	Aug. 2	192	47, 48	60	620
Loom-picker.....	R. Wharton.....	481,339	Aug. 23	2587	635	60	1116
Loom picker-check.....	F. A. Gansey.....	466,560	Jan. 5	403	102	58	77
Loom picker-check.....	S. Greenwood.....	485,686	Nov. 8	815	218	61	756
Loom picker-staff buffer.....	E. Hamilton.....	482,977	Sept. 20	1724	{ 435 436 }	60	1698
Loom picker-staffs. Means for operating.....	A. Murch.....	478,453	July 5	600	146	60	118
Loom-picker strap.....	W. H. Chace.....	470,984	Mar. 15	2089	534	58	1521
Loom-pickers. Machine for punching leather.....	W. Wadsworth.....	480,419	Aug. 9	1082	271	60	798
Loom pile-wire.....	C. Ford.....	487,417	Dec. 6	309	80	61	1382
Loom pile-wire.....	G. Segschneider.....	478,368	July 5	481	116	60	95
Loom pile-wire.....	G. Segschneider.....	478,369	July 5	483	116	60	95
Loom positive shuttle-motion.....	E. H. Graham.....	466,851	Jan. 12	879	225	58	176
Loom positive shuttle-motion.....	E. H. Graham.....	474,555	May 10	1080	276	59	855
Loom shedding mechanism.....	F. Lacey.....	481,326	Oct. 11	1228	{ 313 314 }	61	262
Loom shedding mechanism.....	G. W. Stafford.....	466,876	Jan. 12	933	239	58	186
Loom shedding mechanism.....	G. W. Stafford.....	475,625	May 24	2770	701	59	1216
Loom shedding mechanism.....	G. W. Stafford.....	475,712	May 24	2898	{ 733 734 }	59	1240
Loom shedding mechanism.....	G. W. Stafford.....	484,922	Oct. 25	2209	568	61	484
Loom shedding mechanism.....	H. Terloth.....	466,635	Jan. 5	513	{ 132 133 134 }	58	99
Loom-shuttle.....	J. C. Brooks.....	473,414	Apr. 19	2226	559	59	449
Loom-shuttle.....	T. Cross.....	486,087	Nov. 15	1438	381	61	901
Loom-shuttle.....	F. J. Hall.....	467,803	Jan. 26	2435	618	58	426

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Loom-shuttle	A. Isherwood	486,109	Nov. 15	1495	393	61	911
Loom-shuttle	L. Letalle	475,125	May 17	1987	503	59	1047
Loom-shuttle	G. C. Moore	488,214	Dec. 20	1628	406	61	1680
Loom-shuttle	H. K. Swinscoe	473,677	Apr. 26	2665	671	59	555
Loom-shuttle-binder	F. Baynes and J. Whalley	475,380	May 24	2384	610	59	1142
Loom-shuttle-binder	V. Thorpe	475,069	May 17	1898	482	59	1029
Loom-shuttle-bobbin-lock	R. P. Pearson	470,703	Mar. 15	1655	429	58	1436
Loom-shuttle-box	C. Illing and A. Stoppenbach	473,878	Apr. 26	2978	751	59	615
Loom-shuttle-box-operating mechanism	A. Insinger	473,507	Apr. 26	2380	603	59	500
Loom-shuttle-guard	H. E. Hamilton and N. Boisvert	487,183	Nov. 29	3228	827	61	1286
Loom-shuttle-guard	C. McCarty	471,522	Mar. 22	2895	736	58	1688
Loom-shuttle-tension device	H. Bardsley	479,084	July 19	1565	392	60	333
Loom-shuttle-tension device	O. A. Steere	466,631	Jan. 5	509	131	58	98
Loom-shuttle-tension device	J. P. Thompson	478,895	July 12	1264	312	60	265
Loom-shuttle-threader	J. M. Moyets	473,849	Apr. 26	2928	737	59	606
Loom-stop-motion	W. M. Aikley	481,292	Aug. 23	2513	618	60	1103
Loom-stop-motion	J. J. Shanahan	482,930	Sept. 20	1645	414	60	1683
Loom-stopping mechanism	G. W. Stafford	466,872	Jan. 12	919	235	58	184
Loom. Swivel	E. Barton	467,272	Jan. 19	1585	404	58	318
Loom. Swivel	J. C. Brooks	471,665	Mar. 29	3099	{ 788 789 }	58	1732
Loom. Swivel	J. B. Faisant	467,321	Jan. 19	1656	{ 421 422 }	58	331
Loom. Swivel	G. F. Hutchins	474,170	May 3	438	{ 106 107 }	59	723
Loom. Swivel	G. F. Hutchins	477,180	June 14	1489	365	59	1749
Loom. Swivel	W. J. Lutton	467,262	Jan. 19	1568	{ 399 400 }	58	315
Loom. Swivel	J. Wadsworth	466,866	Jan. 12	908	{ 232 233 }	58	182
Loom. Swivel	A. Wagner	473,563	Apr. 26	2479	627	59	520
Loom. Swivel	A. Wagner	488,511	Dec. 20	2103	522	61	1774
Loom. Swivel	A. Wagner	488,512	Dec. 20	2104	522	61	1775
Loom take-up arrester	G. W. Walker	470,961	Mar. 15	2052	525	58	1513
Loom take-up mechanism	G. F. Hutchins	480,851	Aug. 16	1760	440	60	948
Loom-temple	J. C. Ayer	488,916	Dec. 27	2745	677	61	1918
Loom-temple	J. C. Ayer	488,917	Dec. 27	2748	677	61	1918
Loom-temple	F. A. Garnsey	469,467	Feb. 23	2435	625	58	1026
Loom-temple	C. J. Hatch	484,364	Oct. 11	1283	327	61	273
Loom-temple	W. Knight	468,349	Feb. 9	697	173	58	668
Loom weft-fork	E. L. Hersom	485,346	Nov. 1	305	81	61	634
Loom weft-hammer	R. Derbyshire and C. H. Mullen	478,413	July 5	546	133	60	107
Loom weft stop-motion	H. Wyman and J. A. Clark	477,731	June 28	2406	601	59	1958
Looms. Attachment for the filling motions of	W. O'Brien	470,253	Mar. 8	933	{ 231 232 }	58	1289
Looms. Automatic stopping and restarting mechanism for	E. Hollingworth	466,754	Jan. 5	713	184	58	135
Looms. Automatic stopping and restarting mechanism for	G. F. Hutchins	466,525	Jan. 5	346	86	58	67
Looms. Electric stop-motion for	J. C. Brooks	473,378	Apr. 19	2166	{ 544 545 }	59	437
Looms for cross-weaving. Shedding mechanism for	J. Coldwell	488,497	Dec. 20	2082	517	61	1770
Looms for weaving chenille webs. Jacquard mechanism for	R. Hartley	470,427	Mar. 8	1254	{ 321 322 }	58	1347
Looms for weaving pile-fabrics. Method of and means for lubricating the wires in	G. Marchetti and H. N. Mellor	483,073	Sept. 20	1870	{ 473 474 }	60	1730
Looms. Friction let-off for	H. Wyman and A. A. Gordon. (Re-issue.)	11,288	Nov. 29	3347	852	61	1306
Looms. Heddle for cross-weaving	H. Topham	472,412	Apr. 5	633	162	59	118
Looms. Heddle or harness frame for	J. G. and J. Cuthbert, Jr.	467,733	Jan. 26	2327	591	58	465
Looms. Let-off mechanism for double-pile-fabric	M. Leach, J. Heaton, and J. Bentley	479,372	July 19	2026	506	60	422
Looms. Lingo or heddle-weight for Jacquard	S. G. Miller	487,537	Dec. 6	500	130	61	1419
Looms. Mechanism for operating the shuttle-boxes and picking mechanism of	F. Leeming	467,753	Jan. 26	2359	{ 597 598 }	58	471
Looms. Picker-check for	R. W. Andrews	469,671	Mar. 1	2	1	58	1099
Looms. Positive let-off mechanism for	G. Park	469,267	Feb. 23	2123	546	58	966
Looms. Selvage-forming mechanism for double-pile-fabric	R. Kellett	468,770	Feb. 9	1343	339	58	797
Looms. Shuttle-operating mechanism for narrow-ware	G. C. Moore	488,213	Dec. 20	1625	406	61	1680
Looms. Shuttle-supplying mechanism for	J. C. Brooks	473,377	Apr. 19	2162	{ 543 544 }	59	437
Looms. Stop-motion device for revolving-box	T. F. Warrington	475,477	May 24	2537	646	59	1170
Loop. Billet	T. G. Nelson and W. P. Gelabert	476,673	June 7	668	162	59	1569
Loop-fastener	H. Green	483,672	Oct. 4	225	56	61	47
Loop-taker and actuating mechanism therefor	H. R. Tracy	470,796	Mar. 15	1800	{ 462 463 }	58	1464
Loss by accident. Means for securing travelers against	E. N. Hill	467,872	Jan. 26	2544	645	58	506
Loss by accident. Means for insuring travelers against	E. N. Hill. (Reissue)	11,270	Sept. 13	1306	319	60	1604
Lounge	W. S. Bowie	482,673	Sept. 13	1233	301	60	1589
Lounge. Folding or bed	T. Q. Hall	468,297	Feb. 2	606	{ 151 152 }	58	640
Low-water alarm	T. A. Delaney and R. E. Hills	474,631	May 10	1199	305	59	878
Low-water alarm	J. T. Hayden	477,004	June 14	1205	{ 292 293 }	59	1691
Low-water alarm	W. H. Westerman	468,390	Feb. 9	759	188	58	680
Low-water alarm. Electric	E. Rothlisberger	480,673	Aug. 9	1424	369	60	877
Lowering-jack	A. P. Gould	484,587	Oct. 18	1631	414	61	354
Lubricant	D. Harmon	482,249	Sept. 6	533	.....	60	1438
Lubricant	S. Heimann	484,635	Oct. 18	1714	.....	61	370
Lubricant	J. Ketchum	467,938	Feb. 2	55	.....	58	536

Alphabetical list of inventions—Continued.

Invention	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Lubricant.....	C. H. Ridsdale and A. Jones	486,196	Nov. 15	1620	.....	61	936
Lubricant.....	W. H. Strickler	476,574	June 7	522	.....	59	1540
Lubricating compound. Antifriction.....	J. B. Wallace and J. W. Stemm	487,203	Nov. 29	3260	.....	61	1291
Lubricating cup.....	I. J. Briggs	482,674	Sept. 13	1235	301	60	1589
Lubricating gland.....	J. N. Elliott	471,269	Mar. 22	2530	642	58	1617
Lubricator:							
See Axle-lubricator. Propeller-shaft lubricator.							
Elevator-guide lubricator. Pulley-lubricator.							
Force-feed lubricator. Shaft-lubricator.							
Guide-lubricator. Sight-feed lubricator.							
Journal-lubricator. Spindle-lubricator.							
Piston-lubricator. Trolley-lubricator.							
Windmill-lubricator.							
Lubricator.....	E. D. Bangs	468,289	Feb. 2	587	146	58	637
Lubricator.....	D. Best	484,729	Oct. 18	1862	473	61	401
Lubricator.....	J. V. Clark	485,454	Nov. 1	467	125	61	668
Lubricator.....	J. L. Cory	487,661	Dec. 6	686	176	61	1457
Lubricator.....	J. L. Cory	488,163	Dec. 13	1536	385	61	1645
Lubricator.....	W. H. Craig	479,116	July 19	1621	{ 405 406 }	60	343
Lubricator.....	W. B. Curtis and E. Long	476,253	June 7	39	9	59	1445
Lubricator.....	G. S. Duncan	473,064	Apr. 19	1624	414	59	334
Lubricator.....	W. A. Downes	467,734	Jan. 26	2328	591	58	405
Lubricator.....	A. B. Faunce and M. S. Cabell	469,236	Feb. 23	2078	534	58	957
Lubricator.....	M. H. Fine	482,346	Sept. 13	716	171	60	1489
Lubricator.....	N. Foley	473,921	May 3	57	10	59	647
Lubricator.....	J. B. Fondu	486,969	Nov. 29	2896	748	61	1220
Lubricator.....	J. Greer	484,195	Oct. 11	1006	257	61	219
Lubricator.....	J. Greer	484,196	Oct. 11	1007	257	61	219
Lubricator.....	O. W. Griffiths	469,419	Feb. 23	2365	607	58	1012
Lubricator.....	N. Guyer	471,001	Mar. 15	2117	544	58	1526
Lubricator.....	J. P. Kealy	475,690	May 24	2863	724	59	1233
Lubricator.....	F. Keller	474,089	May 3	327	78	59	700
Lubricator.....	H. E. Lejeune	488,438	Dec. 20	1984	495	61	1749
Lubricator.....	F. S. Livingston	486,676	Nov. 22	2379	622	61	1100
Lubricator.....	L. L. Malm	476,886	June 14	1017	246	59	1653
Lubricator.....	J. J. Martin and W. H. Brownfield	482,559	Sept. 13	1078	261	60	1559
Lubricator.....	F. W. Marvin and G. B. Essex	479,911	Aug. 2	200	50	60	621
Lubricator.....	J. W. McCorkle	486,292	Nov. 15	1782	468	61	969
Lubricator.....	E. McCoy	470,163	Mar. 1	779	193	58	1249
Lubricator.....	E. McCoy	472,066	Apr. 5	85	24	59	18
Lubricator.....	G. H. Musgrave	466,572	Jan. 5	422	{ 108 109 }	58	81
Lubricator.....	H. Myers	467,595	Jan. 26	2111	535	58	425
Lubricator.....	A. Ness	482,560	Sept. 13	1078	262	60	1559
Lubricator.....	A. Obermeyer	483,860	Oct. 4	505	126	61	105
Lubricator.....	F. Prinz	468,262	Feb. 2	547	134	58	630
Lubricator.....	F. W. Rock	468,727	Feb. 9	1280	326	58	785
Lubricator.....	J. Sandall	472,827	Apr. 12	1244	319	59	248
Lubricator.....	W. B. Snow	467,879	Jan. 26	2550	648	58	509
Lubricator.....	A. A. Taylor and W. C. Edwards	470,085	Mar. 1	663	164	58	1228
Lubricator-cup.....	H. Ives	473,755	Apr. 26	2782	699	59	577
Lubricator-gland.....	F. G. Kellogg	476,747	June 7	780	192	59	1593
Lubricator-gland.....	C. C. Jerome	470,397	Mar. 8	1205	308	58	1338
Lubricators. Sight-feed connection for.	E. Haycox	466,785	Jan. 12	771	200	58	156
Luggage-carrier.....	A. S. Comstock	483,346	Sept. 27	2325	585	60	1827
Lumber. Barbed strap for bunching.....	E. C. Binet	481,040	Sept. 20	1826	464	60	1720
Lumber-carrier.....	P. A. Chauvin	486,189	Nov. 15	1610	427	61	934
Lumber-carriers. Hanger for.....	J. E. Harder	481,355	Aug. 23	2606	640	60	1120
Lumber, &c. Conveyer for handling.....	M. Garland	480,496	Aug. 9	1201	301	60	822
Lumber-drier.....	J. C. Hay	473,116	Apr. 19	1714	434	59	349
Lumber-drier.....	J. W. Piver	487,965	Dec. 13	1187	{ 296 297 }	61	1573
Lumber-drying kiln.....	A. T. Bemis	472,600	Apr. 12	917	236	59	188
Lumber-drying kiln.....	H. C. Zappert	483,412	Dec. 20	1949	487	61	1742
Lumber-elevator.....	H. McKinnon	480,824	Aug. 16	1720	430	60	939
Lumber puller and washer.....	J. D. Hills	485,935	Nov. 8	1185	{ 312 313 313 }	61	831
Lumber pulling, washing, and assorting machine.....	J. D. Hills	485,936	Nov. 8	1188	{ 314 315 316 }	61	831
Lumber-sorter.....	F. S. Farr	472,016	Mar. 29	3630	928	58	1836
Lumber-sorter.....	C. R. Little	486,584	Nov. 22	2229	{ 585 586 }	61	1069
Lung-testing machine. Coin-controlled.....	L. Donne	469,936	Mar. 1	430	108	58	1183
Machine-motor.....	E. S. Reed	484,238	Oct. 11	1083	274	61	234
Machinery. Adjustable connection for.....	C. De Kalb	487,721	Dec. 13	794	203	61	1495
Machinery. Electro-mechanical apparatus for starting or reversing.....	A. Piat	478,816	July 12	1165	{ 288 289 }	60	246
Machinery. Starting and stopping mechanism for.....	J. Patten	469,713	Mar. 1	63	18	58	1111
Machinery. Step and bearing for.....	R. Brewster	474,286	May 3	617	153	59	757
Magazine-camera.....	S. C. Fay and H. Willis	479,587	July 26	2388	595	60	506
Magazine-camera.....	A. L'Epplattenier	472,442	Apr. 5	674	173	59	127
Magazine. Firearm.....	C. W. Sponsel	487,432	Dec. 6	333	86, 87	61	1387
Magnesium-light composition.....	E. Hackl	476,264	June 7	55	.....	59	1448
Magnet. Electro.....	A. D. Ayres	469,672	Mar. 1	3	1, 2	58	1049
Magnet. Electro.....	A. D. Ayres	476,236	June 7	1	1	59	1439
Magnet for dynamo-electric machines. Field.....	L. S. M. Pyke and E. S. Harris	476,819	June 14	909	222	59	1631
Magnet for dynamos. Field.....	G. E. Dormau	470,749	Mar. 15	1727	445	58	1450
Magnets. Measuring the strength of.....	C. H. Rudd	483,168	Sept. 27	2030	513	60	1772
Magnetic attraction. Application of.....	A. de Bovet	486,393	Nov. 15	1935	513	61	1000
Magnetic brake.....	A. de Bovet	481,842	Aug. 30	3409	837	60	1292

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Magnetic extractor	H. W. Southworth	468,706	Feb. 9	1253	318	58	779
Magnetic lock	A. E. Kintner	468,807	Feb. 16	1404	356	58	818
Magnetic lock	H. V. Smith	478,245	July 5	298	72	60	60
Magnetic separator	C. M. Ball and S. Norton	478,551	July 12	759	186	60	166
Magnetic separator	H. S. Chase	488,064	Dec. 13	1379	{ 342 343 }	61	1614
Magnetic separator	G. Conkling	481,474	Aug. 23	2800	689	60	1158
Magnetic separator	T. A. Edison	470,929	Mar. 15	2000	512	58	1503
Magnetic separator	E. Ferraria	468,599	Feb. 9	1084	277	58	745
Magnetic separator	T. J. Lovett	486,879	Nov. 29	2715	708	61	1184
Magnetic separator	T. J. Lovett	487,073	Nov. 29	3052	{ 783 784 }	61	1250
Magnetic separator	T. J. Lovett	487,074	Nov. 29	3055	784	61	1251
Magnetic separator	F. H. Richards	467,645	Jan. 26	2180	554	58	437
Magnetic separator	F. H. Richards	467,833	Jan. 26	2475	629	58	494
Mail-bag	J. F. Allen	473,603	Apr. 26	2552	644	59	534
Mail-bag	J. L. Bassett	470,169	Mar. 1	788	195	58	1252
Mail-bag	C. Dickenson	467,681	Jan. 26	2235	569	58	447
Mail-bag	J. W. Du Laney	473,616	Apr. 26	2573	648	59	537
Mail-bag	W. A. Johnston	469,028	Feb. 16	1775	453	58	891
Mail-bag	C. Weltner	466,814	Jan. 12	819	210	58	166
Mail-bag	C. C. Wilson	468,715	Feb. 9	1263	321	58	781
Mail-bag and lock therefor	W. F. Beasley	471,166	Mar. 22	2370	606	58	1587
Mail-bag and lock therefor	W. F. Beasley	471,167	Mar. 22	2372	606	58	1587
Mail-bag catcher	J. Gleason	475,307	May 24	2358	582	59	1118
Mail-bag catcher	J. W. Horton	478,604	July 12	835	206	60	161
Mail-bag catcher	G. W. Moore, Jr.	481,654	Aug. 30	3089	753	60	1230
Mail-bag catcher	C. B. Winsor and G. W. Cummings	470,160	Mar. 1	775	191	58	1249
Mail-bag catcher and deliverer	A. P. Hauss	480,385	Aug. 9	1027	258	60	769
Mail-bag-catching fork	J. F. Mains	468,811	Feb. 16	1410	357	58	819
Mail-bag fastener. Automatic	G. B. Johnson	473,258	Apr. 19	1958	491	59	397
Mail-bag hanger	D. D. Gott	471,270	Mar. 22	2531	643	58	1617
Mail-bag protector	J. E. Mattson	470,645	Mar. 8	1565	407	58	1410
Mail-bag thrower	C. B. Winsor and G. W. Cummings	481,322	Aug. 23	2561	{ 628 629 }	60	1112
Mail-bags. Crane for suspending	E. A. Ray	481,673	Aug. 30	3116	761	60	1234
Mail-box	G. S. Light	481,621	Aug. 30	3039	742	60	12.0
Mail-canceling and postmarking machine	W. R. Landfear	487,278	Dec. 6	63	19, 20	61	1334
Mail-catcher	A. T. Bacon	486,658	Nov. 22	2350	614	61	1094
Mail-catcher	H. A. Stevens	468,607	Feb. 9	1094	279	58	746
Mail-crane	W. H. Ellis	486,032	Nov. 8	1349	359	61	866
Mail-crane	R. A. Ogden	484,641	Oct. 18	1722	438	61	372
Mail-elevator	E. A. Keeler	470,622	Mar. 8	1535	400	58	1404
Mail-matter. Machine for marking	M. V. B. Ethridge	468,774	Feb. 9	1349	{ 340 341 }	58	798
Mail-matter. Machine for marking	M. V. B. Ethridge	468,775	Feb. 9	1356	342	58	800
Mail-matter. Machine for marking	E. Woodward	469,004	Feb. 16	1742	443	58	884
Mail-matter. Packing device for machines for marking	M. V. B. Ethridge	473,660	Apr. 26	2641	666	59	551
Mail-pouch	B. Edgar and L. T. Rohrbach	472,963	Apr. 12	1447	{ 369 370 }	59	289
Mail-pouch. Expandible hinged mouth	G. F. Windfelder	480,645	Aug. 9	1440	359	60	869
Mail-pouch loop	J. Taylor and W. J. Purdy	469,727	Mar. 1	93	25	58	1117
Mail-pouch-releasing device	H. B. Hewitt	484,499	Oct. 18	1503	382	61	328
Mail-pouches. Means for locking and unlocking	A. J. Shaw	477,963	June 28	2775	695	59	2029
Mailing attachment for books, &c.	C. S. Hardy	480,582	Aug. 9	1332	332	60	848
Mailing-case	G. J. Johnson	466,688	Jan. 5	595	154	58	115
Mailing-case	G. J. Johnson	483,287	Sept. 27	2241	564	60	1812
Mailing or salesman's box	J. H. Barker	475,918	May 31	3251	821	59	1321
Main. Water or gas	H. F. Dunham	481,935	Sept. 6	24	6	60	1339
Malt-cleaning machine	E. Richter	488,403	Dec. 20	1927	483	61	1738
Malt drying and germinating apparatus	J. H. E. Rathmann	485,355	Nov. 1	319	85, 86	61	637
Malt-drying kiln	C. G. Bosch	481,667	Aug. 30	3139	765	60	1239
Malt for brewing. Preparing	E. Richter and A. Schaefer	477,823	June 28	2555	595	59	1985
Malt-kiln	J. F. Dornfeld	467,747	Jan. 26	2351	595	58	469
Malt-kiln floor	F. B. Giesler	483,781	Oct. 4	392	97, 98	61	82
Malt liquors. Apparatus for cooling	C. C. Hanford and C. D. Stanford	479,419	July 26	2116	529	60	454
Malt liquors. Heater and cooler for fermented	J. H. Kersenbrock	480,928	Aug. 16	1873	467	60	970
Malt liquors. Hopping	C. H. and B. O. Frings	478,169	July 5	185	60	30	
Malt-making apparatus	W. A. Peters	485,748	Oct. 4	338	85	61	71
Malt-manufacturing apparatus	C. Hauptman and J. Schwarz	479,421	July 26	2122	531	60	455
Malt-plov	A. Muntzenberger	476,293	June 7	95	21, 22	59	1456
Malting apparatus	A. Deininger	469,851	Mar. 1	297	77	58	1158
Malting apparatus	G. A. Krause	481,958	Sept. 6	54	13	60	1345
Malting apparatus	J. Saladin	485,986	Nov. 8	1274	337	61	850
Malting apparatus. Pneumatic	F. Knüttel	470,580	Mar. 8	1471	353	58	1390
Malting-drum. Pneumatic	F. B. Giesler and H. Smith	476,997	June 14	1195	{ 290 291 }	59	1689
Malting system. Pneumatic	F. B. Giesler	475,550	May 24	2656	675	59	1193
Mandrel	W. O. Dixon	479,634	July 26	2461	613	60	519
Mandrel for barrel-shaped springs	W. Fertil	477,525	June 21	2068	515	59	1873
Mandrels for electrolytic deposit of tubes. Manufacture of	F. E. Elmore	485,919	Nov. 8	1165	307	61	827
Manger	E. S. Hall	476,265	June 7	56	12	59	1448
Mangle	A. Cousen	476,004	May 31	3381	852	59	1347
Mangle	C. A. Ovesson	482,410	Sept. 13	823	198	60	1510
Mangle	M. E. Wendell	487,872	Dec. 13	1050	263	61	1546
Mangle	T. S. Wiles and M. E. Wendell	473,804	Apr. 26	2853	717	59	591
Mangle. Steam	F. Baldwin	482,609	Sept. 13	1151	278	60	1573
Mangles. Compound doffer for	T. S. Wiles and M. E. Wendell	487,592	Dec. 6	572	146	61	1435
Manhole and sewer connection	J. P. Bates	476,440	June 7	334	76	59	1502
Manhole. Adjustable	E. B. Benbow	482,333	Sept. 13	694	166	60	1486
Manual motor	P. Baldensperger	486,020	Nov. 8	1332	354	61	863

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Manual motor.....	M. Johnson.....	482,180	Sept. 6	427	{ 101 102 }	60	1419
Manure-distributor.....	R. J. Morris and R. L. Wiggins.....	488,445	Dec. 20	1997	499	61	1752
Manure-distributor and grain-drill.....	C. Naumann.....	467,517	Jan. 26	1979	502	58	400
Manure-spreader.....	W. Compton.....	482,785	Sept. 20	1429	354	60	1840
Manuscript-cover.....	G. H. Kent.....	485,814	Nov. 8	993	266	61	793
Manuscript-holder for speakers.....	C. C. Bowen.....	471,067	Mar. 15	2213	568	58	1544
Manuscripts. Device for moving and displaying speakers'.....	C. C. Bowen.....	471,066	Mar. 15	2211	568	58	1544
Maps. Manufacture of contour relief.....	J. E. Blanthier.....	473,901	May 3	7	2	59	638
Marble. Artificial.....	J. G. Maardt.....	483,565	Oct. 4	73		61	17
Marbles. Machine for making playing.....	H. Mishler.....	471,243	Mar. 22	2458	631	58	1609
Marbleizing glass, paper, and the like. Apparatus for.....	A. Butterfield.....	471,288	Mar. 22	2553	649	58	1622
Marker. Corn.....	A. Ewer.....	471,214	Mar. 22	2451	{ 622 623 }	58	1602
Marker. Gore.....	W. B. Kinsley.....	481,305	Aug. 23	2531	621	60	1106
Marker. Land.....	H. C. McBroom.....	482,062	Sept. 6	226	54	60	1379
Marking-gage.....	J. A. Traut.....	481,515	Aug. 23	2861	703	60	1170
Marking goods. Device for.....	S. H. Brown.....	474,079	May 3	310	75	59	697
Marking material. Package of.....	E. C. Hunt.....	483,453	Sept. 27	2476	622	60	1857
Marking, or impressing machine. Hand continuous self-inking rolling.....	W. E. T. Bennett.....	469,668	Feb. 23	2739	704	58	1088
Mash-stirrer.....	G. Schock.....	484,883	Oct. 25	2128	547	61	469
Mashing apparatus.....	A. C. Wagner.....	478,667	July 12	916	227	60	197
Mashing-machine. Brewer's.....	C. Kaestner.....	479,189	July 19	1737	{ 435 436 }	60	365
Mashing-machines. Adjusting device for.....	C. Kaestner.....	471,613	Mar. 29	3023	{ 769 770 }	58	1719
Mashing potatoes or other vegetables. Device for.....	D. Aigler.....	467,488	Jan. 26	1919	491	58	391
Mask for firemen, &c.....	J. M. Jacobs.....	474,500	May 10	989	255	59	838
Masonry. Pointing mechanism for.....	E. R. Kruck.....	482,369	Sept. 13	757	183	60	1498
Mason's hawk.....	C. W. Blay.....	483,132	Sept. 27	1963	498	60	1759
Massage apparatus.....	A. Kahn.....	481,359	Aug. 23	2611	642	60	1121
Mast-arm.....	A. Wright.....	481,381	Aug. 23	2649	649	60	1128
Masts. Lift or hoist for placing ships'.....	F. Uhlig.....	477,477	June 21	1986	493	59	1856
Mat: <i>See</i> Door-mat. Wire mat. Stove-mat.							
Mat.....	S. S. Dreisbach.....	468,940	Feb. 16	1613	408	58	859
Mat.....	W. M. Marshall.....	482,980	Sept. 20	1730	437	60	1700
Mats. Resilient frame attachment for.....	A. J. Worrall.....	470,614	Mar. 8	1525	398	58	1402
Match and toothpick machine.....	J. Boulard.....	481,522	Aug. 23	2871	706	60	1173
Match-board.....	J. Wright.....	469,879	Mar. 1	342	88	58	1167
Match-box and holder. Combined.....	E. C. Bachert.....	472,022	Apr. 5	3	1	59	3
Match-card. Friction.....	J. Pusey.....	483,165	Sept. 27	2024	512	60	1771
Match. Flexible.....	J. Pusey.....	483,166	Sept. 27	2026	512	60	1771
Match-heading composition.....	J. Klein.....	485,103	Oct. 25	2483		61	540
Match-ignitor. Automatic.....	R. Senner.....	484,253	Oct. 11	1108	280	61	239
Match-lighter.....	G. Gregson.....	484,311	Oct. 11	1205	307	61	257
Match-machine.....	F. F. Gumaer.....	473,922	May 3	58	11, 12	59	647
Match-safe.....	M. R. Land.....	482,371	Sept. 13	759	{ 183 184 }	60	1499
Match-safe.....	H. K. White.....	467,869	Jan. 26	2540	644	58	506
Match-safe. Automatic.....	G. W. Hoffner.....	481,696	Aug. 30	3153	769	60	1242
Match-safe. Feeding.....	H. Croggon.....	483,543	Oct. 4	41	10	61	11
Match-splint-cutting machine.....	T. A. Cook.....	483,541	Oct. 4	38	9, 10	61	10
Match-splints. Machine for sticking.....	J. H. White.....	473,372	Apr. 19	2152	{ 541 542 }	59	435
Matches. Machine for wrapping block.....	G. Grisel and F. Severio.....	477,362	June 21	1807	442	59	1821
Matcher.....	E. Benjamin.....	476,221	May 31	3745	946	59	1419
Matching-machine gluing attachment.....	B. G. Luther.....	474,092	May 3	334	80	59	701
Matrices. Forming.....	C. L. Redfield.....	481,308	Aug. 23	2539	674	60	1107
Matrices. Means for justifying.....	M. Georgii.....	472,966	Apr. 12	1451	371	59	290
Matrix-making machine.....	S. C. Beckwith and W. W. Street.....	480,361	Aug. 9	983	248	60	780
Matrix-making machine.....	G. Calder, Jr.....	474,809	May 17	1484	{ 379 380 }	59	949
Matrix-making machine.....	G. A. Goodson.....	478,257	July 5	316	77	60	63
Matrix-making machine.....	G. A. Goodson.....	478,258	July 5	317	77	60	63
Matrix-making machine.....	G. A. Goodson.....	479,773	July 26	2715	{ 675 676 }	60	568
Matrix-making machine.....	G. A. Goodson and A. S. Capehart.....	479,772	July 26	2706	{ 674 675 }	60	565
Matrix-making machine.....	A. J. Kletzker and J. G. Goesel.....	485,702	Nov. 8	836	{ 225 226 227 }	61	761
Matrix-making machine.....	C. L. Redfield.....	468,973	Feb. 16	1677	{ 428 429 }	58	871
Matrix-making machine.....	C. L. Redfield.....	468,974	Feb. 16	1682	{ 429 430 }	58	872
Matrix-making machine.....	C. L. Redfield.....	468,975	Feb. 16	1686	{ 430 431 432 433 }	58	872
Matrix-making machine.....	C. Sears.....	475,804	May 31	3051	{ 773 774 775 }	59	1282
Matrix-making machine.....	C. Sears.....	475,805	May 31	3060	{ 774 775 776 }	59	1284
Matrix-making machine.....	C. Sears.....	475,806	May 31	3065	776	59	1285
Matrix-making machine.....	C. L. Travis.....	479,539	July 26	2321	580	60	494
Matrix-making-machine type-writing attachment.....	C. Sears.....	475,807	May 31	3067	776	59	1286
Matrix-making machines. Justifying attachment for.....	W. W. Street and C. L. Travis.....	480,350	Aug. 9	966	244	60	778
Matrix material.....	F. A. Johnson.....	478,333	July 5	425	103	60	85
Matrix press. Electrically-heated.....	W. Mitchell.....	474,964	May 17	1732	440	59	998

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Matte from slag. Apparatus for separating	D. Sheedy	475,522	May 24	2613	665	59	1185
Matte from slag. Separating	E. C. Pohle	484,570	Oct. 18	1606	408	61	349
Mattes and ores. Treating	H. L. Herrenschmidt	475,558	May 24	2672		59	1196
Mattress-making device	J. E. Beasley	473,204	Apr. 19	1871	471 472	59	378
Mattress. Sanitary	F. Maussner	468,353	Feb. 9	703	174	58	669
Mattress. Spring	G. W. Murray	468,018	Feb. 2	167	41	58	557
Mattress. Woven-wire	A. Bell	488,378	Dec. 20	1895	474	61	1731
Measure and funnel. Combined	D. T. Holt	485,545	Nov. 1	600	160	61	696
Measure. Ammunition	H. O. French	482,120	Sept. 6	323	77	60	1398
Measure. Grade	J. M. Haise	479,803	Aug. 2	44	11	60	590
Measure. Grain	L. Bronson	479,551	July 26	2342	564	60	498
Measure. Liquid	J. J. Hove	469,805	Mar. 1	226	57	58	1145
Measure. Liquid	L. Poh	474,048	May 3	266	65	59	689
Measure reel. Tape	J. Roe	475,470	May 24	2527	643	59	1168
Measure register. Grain	J. A. and D. James	473,465	Apr. 26	2315	566	59	488
Measure. Rotary	R. F. Gillin	468,318	Feb. 2	639	159	58	648
Measure. Tailor's	I. Geraci	480,579	Aug. 9	1327	330 331	60	847
Measure. Tailor's	C. Gunkel	486,670	Nov. 22	2370	619	61	1098
Measure. Tape	S. B. Laue	467,280	Jan. 19	1600	408	58	320
Measures. Device for repairing tape	C. Kingsbury	475,944	May 31	3294	831	59	1330
Measures. Rack for holding and draining liquid	A. R. Aborn	483,664	Oct. 4	216	53, 54	61	44
Measurement of electrical resistances. Apparatus for the	S. Evershed	478,098	July 5	34	11	60	10
Measurer and bagger. Grain	G. Anderson	468,091	Feb. 2	271	66	58	577
Measurer. Automatic grain	F. M. Sommer and R. A. McGirr	467,691	Jan. 26	2251	573	58	451
Measuring and drafting device for garments	C. Mannebach	482,748	Sept. 20	1368	339	60	1628
Measuring and drawing off liquids. Apparatus for	W. and E. Mumbrauer	472,625	Apr. 12	957	248	59	195
Measuring and registering instrument. Distance	V. M. Armenta	467,847	Jan. 26	2505	634	58	499
Measuring and registering the measurement of lumber. Machine for	C. Kidder	485,946	Nov. 8	1210	319 320	61	836
Measuring angles or distances. Optical instrument for	T. W. Mayson	467,895	Jan. 26	2583	654 655	58	513
Measuring apparatus. Grain	K. G. Jensen	478,111	July 5	49	14	60	12
Measuring apparatus. Tailor's	J. H. Rensen	480,036	Aug. 2	446	113	60	667
Measuring apparatus. Tailor's	A. Trochu	483,271	Sept. 27	2220	557	60	1807
Measuring-band	R. Behuer	483,642	Oct. 4	184	46	61	38
Measuring-box	A. Wacker	468,961	Feb. 16	1654	423	58	867
Measuring-caddy	R. I. Jones and A. L. Agate	471,670	Mar. 29	3111	792	58	1735
Measuring can	L. G. Souder	480,146	Aug. 2	616	156	60	700
Measuring-canister	F. Espel	468,451	Nov. 22	2026	536	61	1031
Measuring device. Fabric	L. H. Huntton	479,091	July 19	1577	395	60	336
Measuring device. Liquid	W. H. Beecher	485,026	Oct. 25	2375	610	61	517
Measuring device. Liquid	J. W. Leslie	476,470	June 7	373	87	59	1510
Measuring device. Liquid	J. Roos	481,872	Aug. 30	3452	847	60	1300
Measuring electrical currents. Device for	C. H. Rudd	480,039	Aug. 2	451	114 115	60	668
Measuring-funnel	J. W. James	467,231	Jan. 19	1571	388	58	305
Measuring instrument and current-direction indicator. Electrical	J. J. Wood	468,020	Feb. 2	171	42	58	557
Measuring-instrument. Electric	S. Evershed	478,097	July 5	32	10	60	9
Measuring-instrument. Electrical	E. Weston	470,341	Mar. 8	1110	284	58	1320
Measuring-instrument. Electrical	E. Weston	473,538	Apr. 26	2433	616	59	510
Measuring-instrument. Electrical	E. Weston	473,539	Apr. 26	2434	616	59	510
Measuring-instrument. Electrical	E. Weston. (Reissue)	11,250	June 28	2954	738	59	2062
Measuring-instrument. Electrical	E. Weston	480,868	Aug. 16	1809	452	60	958
Measuring-instrument. Electrical	E. Weston	480,894	Aug. 16	1822	454	60	960
Measuring-instrument. Electrical	E. Weston	480,895	Aug. 16	1823	454	60	961
Measuring-instrument. Electrical	E. Weston	480,896	Aug. 16	1825	454 455	60	961
Measuring-instrument. Electrical	E. Weston	480,897	Aug. 16	1829	455	60	961
Measuring-instrument. Electrical	E. Weston	480,898	Aug. 16	1831	456	60	962
Measuring-instrument. Electrical	E. Weston	480,899	Aug. 16	1832	456	60	962
Measuring-instrument. Electrical	E. Weston	466,689	Nov. 22	2398	626	61	1104
Measuring instrument. Lens	M. J. Hinden	483,354	Sept. 27	2336	587	60	1890
Measuring instruments. Movable coil for	E. Weston	470,340	Mar. 8	1109	283	58	1320
Measuring machine. Bagging	D. J. Denton, W. L. Simpson, and S. W. Denton.	485,491	Nov. 1	519	138	61	678
Measuring machine. Cloth	G. L. Wilcox, H. F. Hallenbeck, and T. Wandell.	478,531	July 5	726	177 178	60	144
Measuring machine. Cloth	C. H. Young	473,103	Apr. 19	1679	426	59	344
Measuring machine. Fence	F. Hutchinson	481,792	Aug. 30	3329	812	60	1276
Measuring machine. Lumber	T. Marcotte	484,555	Oct. 18	1588	403	61	346
Measuring machine. Warp or line	W. H. Kynett	478,115	July 5	57	15	60	13
Measuring-receptacle	C. T. Menze	479,151	July 19	1673	418	60	353
Measuring-reel	H. L. Stull	475,630	May 24	2777	703	59	1218
Measuring shot. Device for	J. M. Heath	479,982	Aug. 2	326	80	60	644
Measuring store-case. Self	T. F. Crary	476,610	June 7	579	138	59	1551
Measuring the velocity of fluids. Gage for	S. W. Robinson	481,310	Aug. 23	2544	625	60	1108
Measuring-vessel	J. S. Camden	486,762	Nov. 22	2515	656	61	1128
Measuring-vessel	A. D. Hollis	474,959	May 17	1723	438	59	997
Measuring-vessel	J. Snorf	485,992	Nov. 8	1290	343	61	853
Measuring vessel. Dry	W. C. Hocking	467,101	Jan. 12	1296	329	58	255
Measuring-vessel. Graduated	J. P. Eustis	476,136	May 31	3593	908	59	1390
Meat and vegetable cutter	W. R. Ellis	480,569	Aug. 9	1307	327	60	844
Meat-block attachment	B. P. Cobb	488,870	Dec. 27	2669	661	61	1902
Meat-chopper	A. C. Rankin	473,719	Apr. 26	2817	708	59	584
Meat-chopper	E. Ubrig	484,525	Oct. 18	1543	391 392	61	336
Meat-chopping machine	J. Faber and C. Hans	468,531	Feb. 9	986	252	58	725
Meat-chopping machine	J. Sheargren	478,617	July 12	912	221	60	192
Meat-crusher, &c	S. Arnaud	472,973	Apr. 19	1466	375 376	59	305

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Meat-cutter	R. C. Ellrich	474,595	May 10	1142	291	59	868
Meat-cutter	J. H. Shaw	478,823	July 12	1176	291	60	248
Meat-cutter	A. Shepard	473,166	Apr. 19	1796	453	59	366
Meat-cutter	O. D. Woodruff	430,002	Aug. 2	374	93	60	652
Meat-cutter	O. D. Woodruff	481,882	Aug. 30	3468	851	60	1303
Meat-cutter	O. D. Woodruff	482,146	Sept. 6	365	87	60	1407
Meat-cutter	O. D. Woodruff	485,854	Nov. 8	1055	281	61	805
Meat-cutter	O. D. Woodruff and L. T. Snow	484,987	Oct. 25	2305	595	61	503
Meat-cutter	O. D. Woodruff and L. T. Snow	484,988	Oct. 25	2308	596	61	504
Meat-cutting machine	J. A. W. S. aberg	469,097	Feb. 16	1866	477	58	909
Meat. Device for salting	T. H. Curtis	466,659	Jan. 5	547	142	58	106
Meat-mixing apparatus	J. H. Schaefer	480,674	Aug. 9	1485	369	60	878
Meat-mixing machine	J. Tritz	488,098	Dec. 13	1425	356	61	1623
Meat-pickling apparatus	J. Fey	474,446	May 10	911	235	59	823
Meat. Preservation of	W. Laubheimer and H. Salzer	477,844	June 28	2597	59	59	1993
Meat. Preserving	J. Mariosa	474,581	May 10	1124	59	59	864
Meat. Preserving	H. Salzer	477,850	June 28	2603	59	59	1994
Meat-rack	F. Schraudner	478,025	June 28	2878	719	59	2048
Meat-slicer	J. V. Bohannan	481,199	Aug. 23	2277	561	60	1059
Meat-tenderer	O. M. Arnold	478,847	July 12	756	185	60	165
Meat-tenderer	J. Jefferson	487,672	Dec. 6	703	179	61	1460
Meat-tenderer	F. B. Jordan	483,002	Sept. 20	1766	446	60	1707
Meat-tenderer and ice-pick and making the same. Combined	J. W. Eshleman	484,518	Oct. 18	1534	389	61	334
Meat-tendering implement	P. A. Hause	471,973	Mar. 29	3572	912	58	1823
Meats or like substances. Machine for indenting and crushing	G. H. Purdy	470,258	Mar. 8	939	233	58	1290
Mechanical motor	G. F. Berg	488,260	Dec. 20	1695	{ 423 424 }	{ 61 61 }	1693
Mechanical motor	G. Cochins	478,088	July 5	21	7	60	7
Mechanical motor	D. J. Dean	483,046	Sept. 20	1833	466	60	1722
Mechanical motor	S. Hicks	480,724	Aug. 16	1567	392	60	908
Mechanical motor	W. M. Lewis	475,580	May 24	2700	684	59	1202
Mechanical movement	G. W. Amos	476,112	May 31	3555	894	59	1383
Mechanical movement	J. F. Appleby and J. F. Steward	472,972	Apr. 19	1464	375	59	305
Mechanical movement	W. H. Baker	475,379	May 24	2383	609	59	1142
Mechanical movement	P. A. Bouchet	483,041	Sept. 20	1827	464	60	1720
Mechanical movement	F. P. Burkhardt	470,176	Mar. 8	819	202	58	1267
Mechanical movement	C. B. Cottrell	471,786	Mar. 29	3313	844	58	1772
Mechanical movement	J. C. Githens	485,625	Nov. 8	721	189	61	736
Mechanical movement	J. Gregory	479,593	July 26	2397	597	60	508
Mechanical movement	J. W. Hill	472,539	Apr. 12	834	213	59	172
Mechanical movement	C. A. Holcomb	482,743	Sept. 20	1360	{ 336 337 }	{ 60 60 }	1626
Mechanical movement	F. P. Hummel	478,795	July 12	1129	278	60	239
Mechanical movement	W. S. Huson	475,771	May 31	2997	{ 760 761 }	{ 59 59 }	1272
Mechanical movement	W. S. Huson	475,772	May 31	3000	761	59	1273
Mechanical movement	R. C. Leedham	467,012	Jan. 12	1142	290	58	225
Mechanical movement	H. D. Mentzel. (Reissue)	11,271	Sept. 13	1307	{ 319 320 }	{ 60 60 }	1605
Mechanical movement	F. Mény	481,409	Aug. 23	2694	{ 661 662 }	{ 60 60 }	1136
Mechanical movement	J. B. Price	484,645	Oct. 18	1735	{ 440 441 }	{ 61 61 }	374
Mechanical movement	J. M. Price	468,923	Jan. 12	1006	257	58	201
Mechanical movement	G. H. Reynolds	479,526	July 26	2304	576	60	490
Mechanical movement	A. E. Rhoades	470,599	Mar. 8	1499	390	58	1397
Mechanical movement	J. H. Stonemetz	473,562	Apr. 26	2476	{ 626 627 }	{ 59 59 }	519
Mechanical movement	J. D. Westgate	477,191	June 14	1506	369	59	1752
Mechanical movement	A. B. Wilcox	476,715	June 7	726	{ 179 180 }	{ 59 59 }	1581
Mechanical movement	H. A. W. Wood	481,128	Aug. 16	2202	545	60	1032
Mechanical movement	S. B. Wortmann	468,167	Feb. 2	390	97	58	600
Mechanical movement	J. G. Young, Jr.	471,931	Mar. 29	3518	898	58	1813
Mechanical moving-power	C. B. Van Coughnet	483,861	Oct. 4	534	134	61	111
Mechanism	E. Patten	481,508	Aug. 23	2850	700	60	1168
Mechanisms. Means for controlling the operation of	H. E. Vineing	483,272	Sept. 27	2222	558	60	1808
Medal	W. W. Hume	476,538	June 7	470	112	59	1530
Medallion or plaque. Souvenir	S. May and L. M. Aron	488,826	Dec. 27	2595	644	61	1887
Medical and surgical cabinet	J. E. Wenman	478,830	July 12	1185	{ 293 294 }	{ 60 60 }	250
Medical battery	P. Hathaway	474,828	May 17	1521	388	59	955
Medical compound	T. L. Page and J. Apfel	481,815	Aug. 30	3366	60	60	1283
Medicinal extract	R. A. Chesebrough	469,850	Mar. 1	296	58	58	1158
Medicinal food	A. D. McKay	473,331	Apr. 19	2083	59	59	422
Medicine-bit	P. W. Cameron and F. J. Dillon	467,658	Jan. 26	2199	559	58	441
Medicine-case	H. D. Capitain	480,709	Aug. 16	1548	386	60	904
Medicine-stand. Automatic	C. A. Moriarty	483,574	Oct. 4	86	22	61	20
Melon-carrier	J. K. Fler	466,670	Jan. 5	570	147	58	111
Melting-furnace	W. Rebmann	488,661	Dec. 27	2346	581	61	1837
Melting-furnace	C. L. Wheeler	475,070	May 17	1899	482	59	1030
Melting-pot	R. S. Pease	484,161	Oct. 11	958	246	61	210
Melting-pot cover	J. A. St. John	482,880	Sept. 20	1569	392	60	1668
Membranoid	J. W. Deckert	487,067	Nov. 29	3044	781	61	1248
Memorials of deceased persons. Creating	L. N. Worthington	473,597	Apr. 26	2546	59	59	533
Merchandise. Apparatus for dispensing articles of	R. H. Little	481,908	Aug. 30	3515	{ 860 861 }	{ 60 60 }	1312
Merry-go-round	J. B. Batt	488,686	Dec. 27	2399	59	61	1845
Merry-go-round	W. D. Bennage	478,838	July 12	1196	297	60	252
Merry-go-round	A. Palmer	475,742	May 24	2952	748	59	1249
Merry-go-round	E. Pohl	476,551	June 7	488	116	59	1534
Mesquite-beans. Converting	T. H. Jacobs	479,512	July 26	2288	572	60	487

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Messenger's picket.....	J. C. Hays.....	481,867	Aug. 30	3446	846	60	1299
Metal bars. Machine for bending.....	H. A. Schneekloth.....	468,582	Feb. 9	1061	270 271	58	740
Metal bars. Machine for shearing.....	W. A. McCool and W. G. Algeo.....	488,659	Dec. 27	2342	579 580	61	1836
Metal beams and rails. Cooling-bed for.....	H. Aiken.....	486,364	Nov. 15	1886	496 497 498 499	61	989
Metal-bending apparatus. Electric.....	G. D. Burton and E. E. Angell.....	475,194	May 17	2089	528	59	1068
Metal-bending device.....	H. Symonds.....	468,584	Feb. 9	1065	272	58	741
Metal-bending machine.....	H. E. Fowler.....	473,455	Apr. 26	2290	578 579 580	59	483
Metal bracket and its manufacture.....	F. Recht.....	488,741	Dec. 27	2468	613	61	1861
Metal by electricity. Apparatus for refining.....	C. R. Fletcher.....	484,416	Oct. 18	1367	350	61	301
Metal charm or ornament.....	L. E. A. Dumont.....	471,235	Mar. 22	2470	630	58	1607
Metal. Coating with.....	I. Kennedy.....	470,492	Mar. 8	1357	578	58	1367
Metal cross-tie.....	G. W. Stevenson.....	470,705	Mar. 15	1709	461	58	1464
Metal-foil packages. Putting up.....	J. H. J. Haines.....	471,609	Mar. 29	3019	768	58	1718
Metal-heater. Electric.....	G. D. Burton.....	475,264	May 17	2194	559	59	1069
Metal-heater. Electric.....	G. D. Burton and E. E. Angell.....	475,185	May 17	2075	523 524	59	1064
Metal-heater. Electric.....	G. D. Burton and E. E. Angell.....	475,192	May 17	2087	528	59	1067
Metal-heater. Electrical.....	G. D. Burton.....	475,181	May 17	2068	521	59	1063
Metal-heating apparatus.....	G. D. Burton and E. E. Angell.....	475,188	May 17	2081	526	59	1066
Metal-heating apparatus. Electric.....	G. D. Burton.....	486,025	Nov. 22	2298	599 600	61	1084
Metal-heating apparatus. Electric.....	G. D. Burton and E. E. Angell.....	488,467	Dec. 20	2030	507	61	1759
Metal-heating apparatus. Electric.....	G. D. Burton and E. E. Angell.....	488,469	Dec. 20	2034	507	61	1760
Metal-heating. Arc and incandescent.....	C. L. Coffin.....	487,007	Dec. 6	595	152	61	1440
Metal-heating. Converting system for electric.....	G. D. Burton, A. H. Eddy, and G. T. Briggs.....	475,232	May 17	2145	544 545	59	1079
Metal-heating. Electric.....	C. L. Coffin.....	483,426	Sept. 27	2442	614	60	1850
Metal lattice-work.....	E. Kuechle.....	483,358	Sept. 27	2342	589	60	1831
Metal melting and casting apparatus.....	C. C. Carroll.....	480,232	Aug. 2	765	193	60	727
Metal pipes or tubes. Making.....	W. S. McManus.....	479,952	Aug. 2	277	68	60	634
Metal-planer.....	J. S. Detrick.....	472,804	Apr. 12	1212	311 312	59	242
Metal-planer.....	J. S. Detrick.....	475,542	May 24	2642	672	59	1190
Metal-planer.....	J. S. Detrick.....	475,543	May 24	2643	672	59	1191
Metal-planers. Work-holder for.....	W. Honscheid.....	469,815	Mar. 1	242	62	58	1148
Metal planing and shaping machines. Key-seating attachment for.....	F. J. Feldt.....	483,714	Oct. 4	285	71	61	60
Metal-planing machine.....	G. F. McIndoe.....	479,606	July 26	2416	603	60	511
Metal-plate-bending machine.....	L. C. Crowell.....	478,090	July 5	23	7	60	7
Metal-plate-bending machine.....	S. D. Tucker.....	477,390	June 21	1851	455	59	1830
Metal-plate fastening.....	W. C. Hunter.....	481,566	Aug. 30	2954	725	60	1204
Metal plates. Apparatus for coating.....	E. R. Jones.....	472,502	Apr. 5	778	199	59	147
Metal plates. Apparatus for pickling.....	W. H. Atkinson and D. M. Somers.....	473,106	Apr. 19	1688	428 429 430	59	345
Metal plates. Apparatus for pickling.....	D. M. Somers and W. H. Atkinson.....	482,489	Sept. 13	950	231 232	60	1533
Metal plates, &c. Apparatus for pickling and washing.....	G. Mesta.....	484,664	Oct. 18	1769	450	61	383
Metal plates, bars, &c. Means for shaping.....	N. B. Trist.....	484,264	Oct. 11	1129	287 288	61	243
Metal plates. Machine for shaping and flanging.....	A. C. A. Holzapfel.....	474,661	May 10	1249	318	59	888
Metal plates with tin. Apparatus for coating.....	P. Rogers and J. Player.....	471,437	Mar. 22	2781	110 111	58	1665
Metal reeds. Device for heating.....	A. D. Williamson.....	475,651	May 24	2806	711	59	1223
Metal-sawing machine.....	C. Spofford.....	486,169	Nov. 15	1588	421	61	930
Metal-shears.....	H. Aiken.....	479,392	July 26	2069	519	60	445
Metal-shears.....	H. Aiken.....	482,113	Sept. 6	310	73	60	1396
Metal-shears.....	C. J. Colling.....	472,107	Apr. 5	150	40	59	29
Metal-shears.....	E. T. Horner.....	484,203	Oct. 11	1025	261	61	222
Metal-shears.....	E. T. Horner.....	484,370	Oct. 11	1290	329	61	275
Metal. Shears for cutting hot.....	W. T. Cleveland.....	469,078	Feb. 16	1841	471	58	904
Metal sheets. Machine for drying and flxing.....	E. Norton and J. G. Hodgson.....	488,025	Dec. 13	1296	323 324	61	1596
Metal strips. Apparatus for hardening.....	J. Logan and M. H. Stevens.....	484,968	Oct. 25	2274	586 587	61	497
Metal strips. Machine for twisting.....	E. Kuechle.....	483,357	Sept. 27	2339	588	60	1830
Metal tie and automatic clamp for fastening same.....	W. W. Pitts.....	488,904	Dec. 27	2730	673	61	1915
Metal tubes. Apparatus for making.....	P. Keil, Jr.....	482,364	Sept. 13	752	181 182	60	1497
Metal tubes. Apparatus for manufacturing.....	E. F. Hartshorn.....	479,507	July 26	2282	570	60	486
Metal tubes. Shopping.....	J. Robertson.....	481,060	Aug. 16	2096	522 523	60	1013
Metal washers. Machine for making.....	S. J. Shimer.....	466,705	Jan. 5	619	160 161 162	58	120
Metal wheel.....	F. L. Bailey.....	476,118	May 31	3564	896	59	1384
Metal wheel.....	P. Gelin.....	484,586	Oct. 18	1630	414	61	354
Metal wheel.....	J. R. Little.....	470,941	Mar. 15	2021	517	58	1507
Metal wheel.....	J. R. Little.....	475,582	May 24	2703	685	59	1202
Metal wheel.....	J. R. Little.....	475,583	May 24	2704	685	59	1203
Metal wheel.....	J. R. Little.....	487,280	Dec. 6	66	20	61	1335
Metal wheel.....	J. R. Little.....	487,281	Dec. 6	67	20	61	1335
Metal wheel.....	J. R. Little.....	488,439	Dec. 20	1984	495 496	61	1749
Metal wheel.....	N. O. Starks.....	469,606	Feb. 23	2646	679	58	1067
Metal wheel.....	H. E. West.....	483,703	Oct. 4	273	67	61	5

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Metal wheel. Composite	J. L. Follett	475,335	May 24	2356	581	59	1117
Metal wheels. Constructing	J. R. Little	475,584	May 24	2705	686	59	1203
Metal wheels. Die for making	J. R. Little	488,127	Dec. 13	1470	371	61	1632
Metal wheels. Machine for making	J. R. Little	488,124	Dec. 13	1463	369	61	1631
Metal wheels. Making	J. R. Little	488,126	Dec. 13	1467	370	61	1632
Metal wheels. Making	E. H. Scott	478,644	July 12	888	220	60	191
Metal wheels. Manufacture of	J. R. Little	488,440	Dec. 20	1987	496	61	1749
Metal wheels. Manufacturing	J. R. Little	487,282	Dec. 6	67	21	61	1335
Metal wheels. Manufacturing	J. R. Little	487,283	Dec. 6	69	21	61	1335
Metal work. Structural	A. Coffin	485,489	Nov. 1	518	137	61	677
Metal-working apparatus. Arc	H. Howard	467,752	Jan. 26	2355	597	58	470
Metal-working apparatus. Electric	G. D. Burton and E. E. Angell	488,468	Dec. 20	2032	507	61	1760
Metal-working apparatus. Electrical	G. D. Burton	486,818	Nov. 22	2612	680	61	1148
Metal-working device. Electric	C. L. Coffin	483,424	Sept. 27	2440	614	60	1850
Metal-working. Electric	G. D. Burton	475,133	May 17	2071	522	59	1064
Metal-working. Electric	C. L. Coffin	483,427	Sept. 27	2443	615	60	1850
Metal-working. Electric	C. L. Coffin	483,428	Sept. 27	2444	616	60	1851
Metal-working. Electric	H. Lemp and W. S. Moody	467,233	Jan. 19	1519	388	58	306
Metal-working. Electrical	G. D. Burton	475,182	May 17	2070	521	59	1063
Metal-working machines. Bed for	J. McKenna	472,712	Apr. 12	1087	279	59	218
Metals and alloys with oxides. Coating	A. E. and A. G. Haswell	476,639	June 7	621		59	1560
Metals. Cold-saw for	C. S. Simmers	473,430	Apr. 26	2336	591	59	493
Metals from copper alloys. Recovering	M. W. Iles	484,021	Oct. 11	756	190	61	170
Metals from their ores or compounds. Obtaining	C. S. Bradley	473,866	Apr. 26	2955	745	59	611
Metals. Method of and apparatus for deoxidizing	M. Waddell, J. B. Entz, and W. A. Phillips	475,260	May 17	2188	558	59	1087
Metals. Method of and apparatus for electro-deposition of	C. R. Fletcher	485,343	Nov. 1	295	79	61	632
Metals. Method of and apparatus for recarburizing	W. A. Koneman	485,392	Nov. 1	378	102	61	650
Metals. Plating	L. A. Levez	470,623	Mar. 8	1536	400	58	1404
Metals. Process of and apparatus for purifying, refining, and carburizing	B. Brazelle	462,001	Sept. 6	123	31	60	1359
Metals. Process of and device for reducing volatilized	C. E. Seymour	487,100	Nov. 29	3102	796	61	1261
Metals. Purifying	B. Talbot	476,091	May 31	3514		59	1375
Metals. Reducing	H. S. Blackmore	478,907	July 12	1282	319	60	269
Metals. Refining	B. Talbot	476,092	May 31	3516		59	1376
Metals. Tempering and hardening	J. S. Durning	475,725	May 24	2925		59	1244
Metals. Treating materials containing	R. F. Nenninger	488,898	Dec. 27	2705	669	61	1910
Metallic articles by electrolysis. Apparatus for the manufacture of	A. S. Elmore	484,704	Oct. 18	1821	464	61	393
Metallic casing	A. D. Cunney	488,601	Dec. 27	2253	559	61	1819
Metallic covering-plate	R. G. Westphalen	483,243	Sept. 27	2145		60	1795
Metallic facing for buildings	L. L. Sagendorph	471,722	Mar. 29	3204	816	58	1751
Metallic facing-plates. Manufacture of	L. L. Sagendorph	484,508	Oct. 18	1518	386	61	331
Metallic strips. Method of and apparatus for twisting	T. V. Allis	486,174	Nov. 15	1593	422	61	931
Metallic structure	H. G. Wynne	468,924	Feb. 16	1587	402	58	854
Metallic vessel	L. Sturges	466,957	Jan. 12	1056	263	58	209
Metallic-vessel closure	T. C. Hogle	476,745	June 7	778	191	59	1592
Metallic-vessel seam	E. G. West	469,761	Mar. 1	147	38	58	1129
Metallic vessels. Bottom for	D. A. Lisk and T. D. Brown	476,280	June 7	74	16	59	1452
Metallic vessels. Breast or top for	H. J. Vogel	473,274	Apr. 19	1983	497	59	402
Metallurgical furnace	G. W. Brier	483,985	Oct. 4	696	174	61	144
Metallurgical furnace	M. R. Conley	477,623	June 21	2236	559	59	1906
Metallurgical furnace	C. Siemens	470,712	Mar. 15	1672	433	58	1440
Metallurgical furnace	C. Siemens	475,351	May 24	2337	599	59	1134
Metallurgical furnace. Regenerative	E. C. Rew	472,076	Apr. 5	98	26	59	20
Metallurgical plant	H. L. Ford	468,533	Feb. 9	988	253	58	726
Metallurgical process	J. B. Alzugaray	472,432	Apr. 5	644		59	121
Metaphone or transposition-indicator	W. B. Smith	475,233	May 17	2179	555	59	1085
Meter:							
See Air and gas meter. Gas-meter.							
Air or gas meter. Grain-meter.							
Diaphragm meter. Liquid-meter.							
Electric meter. Piston meter.							
Electric-current meter. Proportional meter.							
ter. Water-meter.							
Electrical meter. Water or gas meter.							
Fluid-meter.							
Meter-diaphragm	W. N. Milsted	482,185	Sept. 6	437	104	60	1421
Meter-registers. Art of and mechanism for recording the state of	H. A. Tobey	487,909	Dec. 13	1107	277	61	1557
Metric model	J. McCourt	480,119	Aug. 2	571	145	60	691
Micrometer	E. C. Clapp	468,642	Feb. 9	1145	241	58	756
Micrometer-gage	R. B. Haines, Jr.	468,519	Feb. 9	964	245	58	721
Micrometer-gage	J. P. Lavigne	488,240	Dec. 20	1730	436	61	1699
Micrometer-gage	J. P. Lavigne	488,281	Dec. 20	1732	436	61	1700
Micrometer-gages. Automatic stop for	G. Sylvia	487,410	Dec. 6	302	78	61	1381
Microphone	C. Clamond	486,244	Nov. 15	1696	449	61	951
Microphone	E. Noriega	481,048	Aug. 16	2064	515	60	1007
Microphone	E. Noriega	481,050	Aug. 16	2066	516	60	1008
Microphone	C. Vogt	476,582	June 7	534	127	59	1543
Microphone. Adjustable	H. O. Henneberg	472,806	Apr. 12	1215	312	59	243
Microscope. Compound	L. Thomas	475,362	May 24	2350	602	59	1136
Microscopes. Tweezers for	R. E. Rowland	467,630	Jan. 26	2155	548	58	433
Middlings. Apparatus for separating and purifying	A. Steiger	471,318	Mar. 22	2596	659	58	1630
Middlings-purifier	S. H. Baker and J. H. Verity	474,354	May 10	764	199	59	795
Middlings-purifier	A. L. Bauhard	467,597	Dec. 6	580	148	61	1437
Middlings-purifier	J. H. Goodall	484,633	Oct. 18	1709	434	61	369

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Middlings-purifier	A. Hunter	466,962	Jan. 12	1061	269	58	210
Middlings-purifier	E. B. Whitmore. (Reissue)	11,245	June 21	2246	{ 562 563 }	{ 59 59 }	1908
Milk aerator and cooler. Combined	R. Wherry	467,965	Feb. 2	86	21	58	541
Milk. Apparatus for aerating	J. Dover	469,500	Feb. 23	2491	638	58	1036
Milk-can	W. H. Buckley, Jr.	468,594	Feb. 9	1076	275	58	743
Milk-can	G. W. Evans	466,281	Nov. 15	1767	465	61	966
Milk-can	E. S. Hatch and J. P. Hutchinson	468,768	Feb. 9	1340	339	58	796
Milk-can attachment	H. Windle	476,502	June 7	421	98	59	1519
Milk-can bolt	N. P. Rutter	483,982	Oct. 4	693	173	61	143
Milk-can holder and support	W. G. Robinson	477,454	June 21	1948	483	59	1848
Milk-cooler	W. C. Eberhardt	479,494	July 26	2261	507	60	482
Milk-cooler	S. M. Heulings, Jr., and E. Evans	471,974	Mar. 29	3573	912	58	1823
Milk-cooler	J. W. Ledbetter	470,849	Mar. 15	1891	484	58	1481
Milk-cooler	O. Leonard	471,646	Mar. 29	3073	781	58	1728
Milk-cooler	M. D. Main	467,376	Jan. 26	2550	646	58	508
Milk-cooler	H. Nicholson	469,407	Feb. 23	2345	602	58	1009
Milk-cooler	S. W. Tobey	478,482	July 5	643	158	60	128
Milk-elevator	C. J. Jeppesen	478,161	July 5	135	34	60	29
Milk-jar and closing device therefor	H. P. Barnhart	474,436	May 10	890	232	59	821
Milk or fruit preserving jar and sealed stopper therefor	F. K. Ward	471,448	Mar. 22	2799	714	58	1669
Milk-receiver	E. Batters	477,289	June 21	1691	415	59	1799
Milk-receiver	S. J. Morgan	482,264	Sept. 6	560	133	60	1444
Milk-receptacle	J. M. O'Neill	469,711	Mar. 1	60	18	58	1110
Milk-sterilizing apparatus	F. Krämer	475,132	May 17	1984	503	59	1046
Milk-tester	F. B. Fargo	478,099	July 5	35	11	60	10
Milk-tester	R. Messenger	472,382	Apr. 5	591	150	59	111
Milk-tester Centrifugal	R. Stoddard	484,685	Oct. 18	1799	457	61	388
Milk. Testing	H. Leffmann and W. Beam	479,193	July 19	1742	60	366	
Milk-testing apparatus	M. J. Cushman	478,737	July 12	1030	253	60	220
Milker. Cow	J. Hoover and A. W. Jay	474,830	May 17	1527	369	59	956
Milker. Cow	W. M. Mehring	488,282	Dec. 20	1734	436	61	1700
Milker. Cow	W. Murchland	473,770	Apr. 26	2799	704	59	581
Milking-machine	J. H. Krom and W. H. Biggs	469,577	Feb. 23	2610	669	58	1060
Milking-machine	J. C. McCollum	484,505	Oct. 18	1513	384	61	330
Mill:							
See Attrition-mill. Gig-mill.							
Cane-mill. Grinding-mill.							
Cement-mill. Pug-mill.							
Chasing-mill. Pulverizing-mill.							
Coffee-mill. Roller-mill.							
Crushing-mill. Rolling-mill.							
Crushing and grind- Saw-mill.							
ing mill. Stamp-mill.							
Fanning-mill. Windmill.							
Fulling-mill. Wire-rod mill.							
Mill appliance	J. A. Burns	482,861	Sept. 20	1530	{ 380 381 178 }	{ 60 60 60 }	1661
Mill appliance	W. H. Maddock	480,300	Aug. 2	703	{ 179 180 639 640 }	{ 60 60 59 59 }	715
Mill appliance	J. A. Potter	477,822	June 28	2553	640	59	1985
Mills. Feed-regulator for	W. Deering	467,278	Jan. 19	1596	407	58	320
Mills. Means for preventing explosions in	C. Kaestner	479,188	July 19	1736	435	60	365
Milling-machine	J. Becker	474,898	May 17	1628	416	59	977
Milling-machine	W. R. Fox	483,838	Oct. 4	474	118	61	98
Milling-machine	F. Kempfsmith and T. L. Smith	480,198	Aug. 2	699	177	60	714
Milling-machine	C. H. Phillips	484,455	Oct. 18	1430	365	61	314
Milling-machine	E. Rivett	487,160	Nov. 29	3196	{ 818 819 }	{ 61 61 }	1279
Milling-machine. Twist-drill	P. Hoenschoid	486,970	Nov. 29	2898	748	61	1220
Milling-machines. Tail-stock for	F. Kempfsmith and T. L. Smith	470,245	Mar. 8	922	228	58	1287
Milling machinery	H. J. Woolcott	468,735	Feb. 9	1291	328	58	787
Millstone and making the same	T. L. Sturtevant and W. H. Ellis	483,504	Sept. 27	2544	639	60	1871
Millstones. Making composite	T. L. Sturtevant	483,179	Sept. 27	2048	517	60	1776
Mince-meat machine	G. L. Merrell	470,692	Mar. 15	1636	{ 424 425 }	{ 58 58 }	1432
Mine-door	G. D. Warren	483,883	Oct. 4	536	135	61	111
Mine-elevator	S. Hamilton	478,595	July 12	820	{ 202 203 }	{ 60 60 }	178
Mine-shafts. Electric signal for	F. W. Bacorn	467,985	Feb. 2	119	29	58	547
Mine-shafts. Electric signal for	F. W. Bacorn	479,046	July 19	1509	376	60	323
Miner's candlestick	F. Muenger	471,998	Mar. 29	3605	921	58	1830
Miner's register	B. Gately and D. Skinner	480,843	Aug. 16	1742	435	60	944
Miner's tool	N. W. Wooley	479,444	July 26	2161	539	60	464
Mining-cage attachment	J. W. Cauty	472,159	Apr. 5	233	62	59	44
Mining cage or car	E. Schillo	481,592	Aug. 30	2991	733	60	1211
Mining cages or elevators. Safety device for	T. Fullen	469,346	Feb. 23	2244	576	58	990
Mining-cars. Elevator for	T. Wakefield	473,275	Apr. 19	1983	{ 497 498 }	{ 59 59 }	402
Mining coal	P. C. Forrester	473,734	Apr. 26	2758	693	59	572
Mining drills and stamps. Operating mechanism for	G. M. Gross	483,842	Oct. 4	480	119	61	99
Mining engineering method and apparatus. Hydraulic	A. M. Rawson	486,897	Nov. 29	2783	722	61	1198
Mining-machine	A. Keil and A. R. Westerdahl	472,363	Apr. 5	555	144	59	104
Mining-machine	A. Keil and A. R. Westerdahl	472,503	Apr. 5	779	199	59	148
Mining-machine	J. L. Lechner	483,156	Sept. 27	2006	508	60	1768
Mining-machine	B. A. Legg	482,045	Sept. 6	200	48	60	1374
Mining-machine	B. A. Legg	482,046	Sept. 6	204	48, 49	60	1375
Mining-machine	J. L. Mitchell	469,260	Feb. 23	2108	{ 542 543 }	{ 58 58 }	963
Mining-machine	G. F. Myers	481,187	Aug. 23	2317	570	60	1068

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Mining-machine.....	C. O. Palmer.....	472,177	Apr. 5	259	68, 69	59	49
Mining-machine.....	J. C. Robertson.....	471,434	Mar. 22	2777	709	58	1664
Mining-machine.....	E. A. Sperry.....	478,141	July 5	95	24, 25	60	21
Mining-machine.....	F. W. Syler.....	480,418	Aug. 9	1079	{ 270 271 }	60	798
Mining-machine.....	A. J. White.....	474,110	May 3	356	85	59	706
Mining-machine. Coal.....	A. Bailey.....	473,604	Apr. 26	2553	644	59	534
Mining-machine. Coal.....	J. Taylor.....	469,608	Feb. 23	2648	679	58	1068
Mining-machine truss.....	L. H. Bradley.....	488,349	Dec. 20	1846	461	61	1722
Mining pick and drill. Electric.....	J. Fish.....	472,444	Apr. 5	678	174	59	127
Minerals. Apparatus for cutting.....	L. B. Atkinson, H. W. Ravenshaw, and F. Mori.....	481,921	Sept. 6	1	1	60	1335
Minerals, mattes, speiss, or other substances contain- ing nickel. Treating.....	J. de Coppet.....	486,594	Nov. 22	2244	.....	61	1073
Minerals, mattes, speiss, or other substances contain- ing nickel. Treating.....	J. de Coppet.....	486,595	Nov. 22	2247	.....	61	1073
Mirror. Hand.....	W. A. Julian.....	479,092	July 19	1579	395	60	336
Mirror. Portable.....	W. Q. Prewitt.....	484,818	Oct. 25	2026	519	61	449
Mirrors, &c. Frame for.....	A. Martyn.....	473,706	Apr. 26	2711	682	59	563
Miter-box.....	R. Maroske.....	469,159	Feb. 16	1946	498	58	926
Miter-clamp.....	F. W. Hedgeland.....	477,254	June 21	1636	399	59	1788
Miter-cutter.....	W. R. Fox.....	476,045	May 31	3439	968	59	1360
Miter-cutter.....	W. R. Fox.....	477,526	June 21	2069	515	59	1873
Miter-cutter.....	W. R. Fox.....	483,436	Sept. 27	2455	618	60	1853
Miter-cutting machine.....	D. H. Brenner.....	484,874	Oct. 25	2117	545	61	467
Miter-gage. Adjustable.....	A. H. Buckelew.....	467,852	Jan. 26	2512	636	58	500
Miter-machine.....	A. L. Maxim.....	478,449	July 5	596	145	60	117
Miter-machine.....	A. H. Soukup.....	477,233	June 21	1596	301	59	1780
Miter-tool.....	A. Van Bibber.....	482,107	Sept. 6	302	71	60	1394
Mitering-machine.....	C. F. Marquard.....	486,724	Nov. 22	2451	639	61	1115
Mitering-machine.....	P. Phillips.....	473,429	Apr. 19	2244	{ 564 565 }	59	453
Mitten.....	F. J. Kahn.....	480,852	Aug. 16	1761	441	60	948
Mixer: See Gas-mixer. Paint-mixer. Gas and air mixer.							
Mixer and depositor. Batter-cake.....	E. Stempel.....	488,721	Dec. 27	2439	605	61	1855
Mixing-machine.....	C. W. Hottman.....	468,805	Feb. 16	1402	356	58	818
Mixing-machine.....	W. B. Wheeler.....	472,092	Apr. 5	117	32	59	24
Mixing or separating machine.....	H. M. Gabel.....	478,587	July 12	808	199	60	176
Moistening-pad.....	H. L. Keeler.....	466,783	Nov. 22	2550	665	61	1134
Moistening the fingers or adhesive surfaces. Port- able device for.....	J. Chase.....	474,812	May 17	1489	381	59	950
Molasses from sugar. Separating.....	E. A. Ellis.....	487,323	Dec. 6	143	41	61	1349
Mold: See Bottle-mold. Glass-mold. Butter-mold. Glassware-mold. Candy-mold. Ice-cream mold. Cigar-mold. Ingot-mold. Coffin-shell mold. Joint-mold. Cylinder-mold. Printer's roller-mold. Dumping-mold.							
Mold.....	F. F. Ingram.....	481,952	Sept. 6	47	11	60	1343
Mold-board-shaping press.....	W. H. Hodgson.....	476,271	June 7	63	13	59	1450
Mold flask-weight.....	J. Anderson.....	488,513	Dec. 20	2105	522	61	1775
Molds and castings formed thereby. Gate for.....	S. J. Adams.....	477,320	June 21	1741	426	59	1809
Molder's flask.....	F. Baugh.....	483,596	Oct. 4	119	29	61	25
Molder's flask.....	C. M. Conradson.....	471,324	Mar. 22	2605	660	58	1631
Molder's flask.....	G. J. Keenan.....	485,764	Nov. 8	936	250	61	781
Molder's flask.....	F. Morris.....	487,851	Dec. 13	1009	{ 254 255 }	61	1539
Molder's flask clamp.....	W. W. Archibald.....	474,352	May 10	763	199	59	795
Molder's flask guide.....	H. H. Garrett.....	477,300	June 21	1709	418	59	1802
Molding.....	J. M. Glover.....	485,377	Nov. 1	353	95	61	645
Molding.....	F. E. Gordon.....	482,901	Sept. 20	1611	.....	60	1675
Molding and blind-slat-planing machine.....	E. B. Hayes.....	487,348	Dec. 6	176	49	61	1355
Molding articles in sand. Machine for.....	J. Forbes.....	467,930	Feb. 2	41	9, 10	58	534
Molding-cutter.....	R. E. Linham.....	472,675	Apr. 12	1027	265	59	207
Molding-cutter.....	R. E. Linham.....	472,676	Apr. 12	1027	265	59	207
Molding-cutter.....	R. E. Linham.....	472,677	Apr. 12	1028	265	59	207
Molding-cutter.....	R. E. Linham.....	472,678	Apr. 12	1029	265	59	207
Molding-cutter.....	R. E. Linham.....	472,679	Apr. 12	1030	266	59	207
Molding-cutter and head therefor.....	F. E. Byerly.....	487,402	Dec. 6	283	73	61	1377
Molding-flask.....	S. S. Caskey and J. M. Dodge.....	474,210	May 3	500	120	59	734
Molding-flask.....	J. G. Newbury.....	482,063	Sept. 6	227	54	60	1379
Molding-flask adjusting-pin.....	A. Montgomery.....	475,088	May 17	1937	490	59	1036
Molding-machine.....	H. A. Billings.....	488,055	Dec. 13	1361	{ 337 338 }	61	1609
Molding-machine.....	W. Edgar.....	480,566	Aug. 9	1302	326	60	843
Molding-machine.....	W. Evans.....	479,755	July 26	2672	663	60	558
Molding-machine.....	J. A. Field.....	481,017	Aug. 16	2012	{ 503 504 }	60	996
Molding-machine.....	P. O. Connor and J. F. McNamara.....	472,312	Apr. 5	479	{ 123 124 }	59	90
Molding-machine.....	S. Smith.....	478,377	July 5	494	{ 119 120 }	60	97
Molding-machine.....	F. H. Van Houten.....	480,444	Aug. 9	1118	280	60	805
Molding-machine attachment.....	D. B. M. Shelley.....	487,007	Nov. 29	2957	762	61	1231
Molding-machine presser foot or bar.....	F. L. Creighton.....	485,153	Oct. 25	2558	657	61	555
Molding-machines. Work-holder for variety.....	F. Flint, Jr.....	469,938	Mar. 1	433	109	58	1184
Moldings. Apparatus for coating.....	S. J. Carter.....	476,002	May 31	3377	851	59	1347
Moldings, &c. Composition for use as ornamental.....	O. von Sisma.....	474,865	May 17	1581	.....	59	967
Moldings. Means for hanging.....	N. Hoffend.....	482,742	Sept. 20	1359	336	60	1526
Mole, dike, or dam for silt-bearing streams.....	W. W. Carson.....	478,154	July 5	122	31	60	27

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Mole-trap	H. Durston	472,038	Apr. 5	40	8	59	10
Mole-trap	G. Nelson	488,448	Dec. 20	2002	500	61	1754
Mole-trap	C. Oerther and J. W. Dillingham	481,585	Aug. 30	2382	732	60	1210
Molten material. Machine for centrifugally treat- ing	O. B. Peck	473,473	Apr. 26	2327	589	59	491
Molten materials of different specific gravity. Appa- ratus for separating	O. B. Peck	484,452	Oct. 18	1428	364	61	314
Money-box. Registering	J. C. F. Dick	482,004	Sept. 6	131	32	60	1360
Money-changer	J. Adams	483,973	Oct. 4	679	169 170	61	140
Money-changer	M. B. Lowrey	469,088	Feb. 16	1854	474	58	907
Money-changer	W. H. Staats	472,719	Apr. 12	1096	282	59	220
Money-drawers. Cash-recording attachment for	H. M. Baker	467,777	Jan. 26	2392	608	58	478
Monocycle	J. D. Mattison	479,825	Aug. 2	80	20, 21	60	597
Monocycle	J. T. Quealey	473,959	May 3	119	28	59	660
Monument	F. M. Hawkins	471,758	Mar. 29	3256	829	58	1761
Monument	J. A. Treat	475,003	May 17	1801	456	59	1010
Monument. Memorial	J. Mitchell	481,367	Aug. 23	2620	644	60	1123
Moon's orbit. Apparatus for delineating the	J. Troll	487,800	Dec. 13	933	235	61	1524
Mop holder	L. A. Tarring	478,657	July 12	903	224	60	194
Mop-holder	H. W. White	469,309	Feb. 23	2194	562	58	979
Mop-tub and mop-wringer. Combined	B. F. Warner	480,303	Aug. 9	895	227	60	765
Mop-wringer	C. O. Allen	467,351	Jan. 19	1706	436	58	341
Mop-wringer	W. H. Betts	487,821	Dec. 13	958	242	61	1529
Mop-wringer	A. H. Hafer	480,192	Aug. 2	691	175	60	713
Mop-wringer	J. B. Sweetland	484,688	Oct. 18	1803	458	61	389
Mortar. Apparatus for heating	H. Petrie	466,425	Jan. 5	185	48	58	35
Mortar-carriage	H. A. Spiller	480,215	Aug. 2	740	187	60	722
Mortar. Making	E. T. Warner and J. F. Curry	473,860	Apr. 26	2946	743	59	609
Mortar-mounting	W. H. Morgan	479,445	July 26	2162	539 540	60	464
Mortar-mounting	W. H. Morgan	479,446	July 26	2164	540 541	60	464
Mortar-mounting	T. R., Sr., J. R., T. R., Jr., and W. H. Morgan	479,764	July 26	2692	669 670	60	562
Mortises. Machine for bushing	F. H. Wright	470,276	Mar. 8	974	241 242	58	1297
Mortising device	A. E. Randle	483,869	Oct. 4	519	130	61	107
Mortising-machine	L. A. Belmont and A. C. Cload	482,224	Sept. 6	494	118	60	1431
Mortising-machine	J. M. Farmer	468,417	Feb. 9	769	199	58	689
Mortising-machine	E. J. Gisvold	482,242	Sept. 6	522	125	60	1436
Mortising-machine	L. Houston	478,431	July 5	571	138	60	112
Mortising-machine	D. Jenkins	486,473	Nov. 22	2059	545 546	61	1037
Mortising-machine	W. F. Larish	481,039	Aug. 16	2049	511 512	60	1004
Mortising-machine attachment	J. B. Nichols	484,225	Oct. 11	1058	268 269	61	229
Mortising-machines. Mandrel and adjustable bit- socket for	E. D. De Fahn	469,025	Feb. 16	1771	452	58	890
Mosquito-bar frame	E. G. Holden	472,879	Apr. 12	1316	338	59	263
Mosquito-canopy	A. H. Eva	467,163	Jan. 19	1419	362	58	286
Mosquito-canopy	A. T. Vernon	485,117	Oct. 25	2498	642	61	543
Mosquito-canopy for folding beds	A. H. Eva	485,494	Nov. 1	523	139	61	679
Moss and fiber brake, hackling, and washing machine	S. B. Allison	468,632	Feb. 9	1131	288 289	58	751
Moth-proof bag	F. O. Paige	473,337	Apr. 19	2093	526	59	423
Mother-of-pearl articles and making the same	O. C. Eckert and L. Cohen	482,548	Sept. 13	1058	257	60	1556
Motion. Apparatus for transmitting	C. H. F. Russmann	485,597	Nov. 1	679	180	61	714
Motion. Device for converting	G. E. Morrison and W. A. Dye, Jr.	482,584	Sept. 13	1109	268	60	1566
Motion. Device for converting	S. Sloan	483,177	Sept. 27	2042	516	60	1775
Motion. Device for converting	M. C. Wilson	473,720	Apr. 26	2731	687	59	567
Motion. Device for converting oscillatory into re- ciprocating	T. A. Briggs	480,449	Aug. 9	1136	284	60	809
Motion. Device for transmitting	G. S. Strong	471,655	Mar. 29	3082	784 785	58	1729
Motion. Device for transmitting	G. S. Strong	471,656	Mar. 29	3086	785	58	1730
Motion. Device for transmitting rotary	F. W. Gordon	478,959	July 12	1363	336	60	284
Motion. Electric mechanism for reciprocating	H. S. McKay	475,410	May 24	2426	619	59	1149
Motion. Mechanism for converting reciprocating into rotary	D. S. Correll	466,369	Nov. 15	1898	502	61	992
Motive-power engine	J. R. da Costa	484,629	Oct. 18	1702	432 433	61	368
Motive-power-machine attachment	J. L. Weaver and H. Brencke, Jr.	477,391	June 21	1854	456	59	1830
Motor:							
See Air-compressor mo- tor. Machine-motor.							
Car-motor. Manual motor.							
Churn-motor. Mechanical motor.							
Clock-motor. Powder-motor.							
Current-motor. Pump-motor.							
Electric motor. Railway-motor.							
Electro-magnetic motor. Railway electric motor.							
Fan-motor. Rotary motor.							
Fluid-motor. Rotating motor.							
Gas and petroleum motor. Sewing-machine motor.							
Gravity-motor. Spring-motor.							
Hose-motor. Steam-motor.							
Hydraulic motor. Water-motor.							
Motor	L. C. Atwood	470,095	Mar. 1	676	166	58	1230
Motor	J. C. Leneburg	485,419	Nov. 1	418	112	61	658
Motor	G. J. Altham	475,958	May 31	3315	837	59	1334

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Motor.....	G. W. Mings.....	473,328	Apr. 19	2068	{ 520	} 59	419
Motor.....	C. J. Neef.....	472,906	Apr. 12	1354	{ 521		
Motor.....	R. F. Nichols, Sr.....	479,570	July 26	2368	{ 348	} 60	502
Motor.....	B. S. Partridge.....	487,584	Dec. 6	560	{ 590		
Motor.....	S. Peterson.....	478,068	June 28	2943	{ 591	} 59	1432
Motor.....	J. C. Renter.....	475,799	May 31	3042	{ 770		
Motor.....	J. Sands.....	469,306	Feb. 23	2191	{ 771	} 58	978
Motor.....	W. H. Scheer.....	469,094	Feb. 16	1863	{ 561		
Motor.....	G. B. Sellers.....	480,972	Aug. 16	1951	{ 476	} 58	908
Motor.....	E. C. Wheat.....	478,774	July 12	1084	{ 488		
Motor fluids. Increasing the efficiency of.....	W. L. Saunders.....	486,411	Nov. 15	1965	{ 269	} 60	231
Motor or treadle-power.....	J. Charlton.....	474,054	May 3	278	{ 522		
Motto-plate.....	C. M. Underwood.....	482,662	Sept. 13	1216	{ 67	} 59	691
Mower.....	W. R. Baker.....	481,219	Aug. 23	2373	{ 297		
Mower.....	G. A. Farrall.....	472,754	Apr. 12	1146	{ 584	} 60	1079
Mower.....	H. Lindeström.....	469,019	Feb. 16	1764	{ 595		
Mower.....	K. S. Nygaard.....	474,798	May 10	1466	{ 294	} 59	229
Mower.....	J. Stephani.....	475,823	May 31	3097	{ 450		
Mower and header.....	A. D. Marble.....	480,730	Aug. 16	1575	{ 373	} 59	932
Mower attachment. Lawn.....	J. L. Bieder.....	469,916	Mar. 1	398	{ 784		
Mower clutch. Lawn.....	G. D. Leadle.....	479,192	July 19	1741	{ 394	} 60	910
Mower clutch. Lawn.....	F. M. Waters.....	477,030	June 14	1247	{ 100		
Mower cutter-bar.....	M. C. Ayer.....	486,816	Nov. 22	2609	{ 437	} 59	365
Mower. Gang lawn.....	G. W. Dake and E. U. Loose.....	488,669	Dec. 27	2361	{ 302		
Mower grass-receiver. Lawn.....	F. L. Golibart.....	481,277	Aug. 23	2485	{ 679	} 61	1147
Mower grass-receptacle. Lawn.....	S. B. Arment.....	474,804	May 17	1476	{ 584		
Mower grass-receptacle. Lawn.....	C. Even.....	474,234	May 3	540	{ 584	} 61	1009
Mower. Horse-power lawn.....	A. B. Robbins.....	480,831	Aug. 16	1730	{ 376		
Mower. Lawn.....	J. Braun and H. Deck.....	476,184	May 31	3675	{ 59	} 948	948
Mower. Lawn.....	H. Broom.....	487,711	Dec. 13	769	{ 197		
Mower. Lawn.....	T. Coldwell.....	475,976	May 31	3344	{ 843	} 59	1339
Mower. Lawn.....	T. and W. H. Coldwell.....	475,669	May 24	2829	{ 717		
Mower. Lawn.....	H. L. Freeman.....	483,913	Oct. 4	586	{ 147	} 61	121
Mower. Lawn.....	W. L. Frisbie.....	483,685	Oct. 4	243	{ 148		
Mower. Lawn.....	E. Z. Kidd.....	470,578	Mar. 8	1468	{ 60, 61	} 61	51
Mower. Lawn.....	N. Lombard.....	473,845	Apr. 26	2920	{ 382		
Mower. Lawn.....	W. A. Loud.....	483,157	Sept. 27	2011	{ 734	} 59	604
Mower. Lawn.....	W. E. and F. J. Prindle.....	482,752	Sept. 20	1374	{ 735		
Mower. Lawn.....	J. V. Rowlett.....	479,843	Aug. 2	102	{ 508	} 60	1768
Mower. Lawn.....	T. J. Tucker.....	476,908	June 14	1054	{ 340		
Mower. Lawn.....	C. Wiberg.....	475,649	May 24	2802	{ 341	} 60	1629
Mower. Lawn.....	T. T. Wood.....	468,075	Feb. 2	251	{ 26		
Mowers and reapers. Sickie-bar movement for.....	A. W. Lanphere.....	480,104	Aug. 2	546	{ 60	} 60	602
Mowers. Cutter-bar for.....	J. A. Noel.....	472,000	Mar. 29	3607	{ 255		
Mowers. Foot-lever for the cutter-bars of.....	L. L. Folsom.....	482,347	Sept. 13	718	{ 710	} 59	1223
Mowers. Grass-catching attachment for lawn.....	W. J. O. Astrup.....	483,599	Nov. 8	685	{ 251		
Mowers. Grass-catching attachment for lawn.....	A. L. Hughes.....	471,386	Mar. 22	2706	{ 61	} 58	686
Mowing-machine.....	C. M. Brown.....	480,706	Aug. 16	1543	{ 921		
Mowing-machine.....	T. S. Brown.....	488,495	Dec. 20	2077	{ 384	} 60	902
Mowing-machine.....	O. Cooley.....	472,654	Apr. 12	993	{ 385		
Mowing-machine.....	J. Farrington.....	470,331	Mar. 8	1095	{ 516	} 61	1769
Mowing-machine.....	H. E. Fridmore.....	488,905	Dec. 27	2731	{ 259		
Mowing-machine.....	D. R. Rupert and W. H. Worst.....	468,264	Feb. 2	549	{ 279	} 59	202
Mowing-machine.....	W. Scott.....	475,472	May 24	2530	{ 279		
Mowing-machine.....	J. F. Seiberling.....	476,318	June 7	135	{ 674	} 61	1915
Mowing-machine.....	J. F. Seiberling.....	485,891	Nov. 8	1122	{ 644		
Mowing-machine.....	I. F. Bassford.....	476,030	May 31	3418	{ 39	} 59	1464
Mowing-machine.....	J. W. Watson.....	470,905	Mar. 15	1967	{ 297		
Mowing-machine knife-grinder.....	T. Clark.....	487,403	Dec. 6	284	{ 61	} 58	818
Mowing-machine pitman connection.....	G. H. Spaulding.....	474,707	May 10	1410	{ 863		
Mowing-machine pitman connection.....	W. B. Gwyn.....	487,182	Nov. 29	3227	{ 503	} 58	1497
Mucilage-holder.....	F. H. Palmer.....	482,750	Sept. 20	1371	{ 73		
Mucilage, &c. Receptacle for.....	C. Daler.....	476,254	June 7	41	{ 358	} 61	1377
Muff.....	C. C. Ashbaugh.....	482,432	Sept. 13	861	{ 9		
Muff.....	C. Booss.....	470,100	Mar. 1	685	{ 207	} 60	1517
Muff-bed.....	E. Goldman.....	470,044	Mar. 1	600	{ 168		
Mules. Nosing-motion for self-acting.....	R. Drabble.....	470,479	Mar. 8	1336	{ 58	} 58	1232
Multiple-signal transmitter.....	C. E. Nash.....	466,620	Jan. 5	495	{ 149		
Multiple-switchboard.....	W. Moseley.....	468,818	Feb. 16	1422	{ 58	} 58	821
Multiple-switchboard busy-test apparatus.....	J. L. McQuarrie.....	487,854	Dec. 13	1020	{ 256		
Multiple-switchboard busy-test circuit and apparatus.....	J. L. McQuarrie.....	487,853	Dec. 13	1015	{ 255	} 61	1540
Multiple-switchboard busy-test circuit and apparatus.....	F. A. Pickernell.....	466,702	Jan. 5	613	{ 159		
Multiple-switchboard circuit.....	A. H. McCulloch.....	487,852	Dec. 13	1010	{ 160	} 58	119
Multiple-switchboard signal.....	G. Taintor.....	487,795	Dec. 13	923	{ 255		
Multiple-switchboard system.....	C. E. Scribner.....	484,612	Oct. 18	1675	{ 426	} 61	363
Multiple-switchboard system.....	C. E. Scribner.....	487,096	Nov. 29	3094	{ 795		
Multiple-switchboard systems. Test-circuit for.....	C. E. Scribner.....	484,867	Oct. 25	2105	{ 543	} 61	464
Multiple-switchboard test-circuit.....	O. A. Bell.....	488,053	Dec. 13	1357	{ 337		
Multiple-switchboard test-circuit.....	C. E. Scribner.....	467,901	Jan. 26	2594	{ 657	} 58	516
Multiple-switchboard test-circuit.....	C. E. Scribner.....	467,902	Jan. 26	2597	{ 657		
Multiple switchboards. Circuit for test-batteries and cords of.....	C. E. Scribner.....	476,492	June 7	409	{ 95	} 59	1517
Multiple switchboards. Keyboard-circuit for.....	O. A. Bell.....	476,509	June 7	430	{ 101		

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Multiple switchboards. Means for preventing induction in cables of	C. E. Scribner	488,034	Dec. 13	1317	329	61	1600
Multiple switchboards. Test-circuit for	C. E. Scribner	477,579	June 21	2142	532	59	1888
Multiple switchboards. Test system for	O. A. Bell	483,506	Sept. 27	2549	640	60	1871
Multiple switchboards. Test system for	C. E. Scribner	483,175	Sept. 27	2039	515	60	1774
Multiple switchboards. Test system for	C. E. Scribner	486,507	Nov. 22	2106	557	61	1048
Multitubular boiler	M. Seipp	485,507	Nov. 1	543	144	61	683
Muscle-roller	W. E. Forest	472,572	Apr. 12	875	225	59	181
Music. Apparatus for turning over the leaves of	C. Pittrich	487,769	Dec. 13	872	221	61	1511
Music. Apparatus for writing	A. Tessaro	484,262	Oct. 11	1120	284 285 286 287	61	242
Music-books, &c. Rest or support for	E. C. Fales and H. Prendiville	473,150	Apr. 19	1769	447	59	361
Music-box	F. H. Corbell	474,370	May 10	790	205	59	800
Music-box	E. Tuller	467,388	Jan. 19	1756	448	58	349
Music-box	E. Tuller	467,485	Jan. 19	1909	488 489	58	380
Music-box	A. Wolff	470,610	Mar. 8	1518	396	58	1400
Music-box. Coin-controlled	G. Raab	473,342	Apr. 19	2102	528	59	425
Music-box damping device	G. A. Brachhausen and P. Riessner	480,993	Aug. 16	1982	496	60	991
Music-boxes. Coin-controlled starting mechanism for	A. Sueur	466,586	Jan. 5	440	113	58	85
Music-chart	H. S. Sutton	479,902	Aug. 2	191	47	60	619
Music-desk	W. A. Lorenz	475,126	May 17	1988	504	59	1047
Music. Extension-key for transposing	J. Bracken	471,713	Mar. 29	3187	813	58	1748
Music-holder	H. D. Wheeler	473,540	Apr. 26	2435	616	59	510
Music-leaf turner	H. and G. Bogumil	467,632	Jan. 26	2157	548 549	58	434
Music-leaf turner	H. S. Brewington	470,151	Mar. 1	753	187 188	58	1246
Music-leaf turner	J. N. Camp	485,255	Nov. 1	153	45	61	604
Music-leaf turner	O. W. Catlin	469,831	Mar. 1	268	69	58	1153
Music-leaf turner	E. G. Gillespie	472,170	Apr. 5	248	65, 66	59	47
Music-leaf turner	C. H. Huff	475,317	May 24	2271	585	59	1121
Music-leaf turner	J. S. and G. S. Knowels	475,322	May 24	2281	587	59	1123
Music-leaf turner	M. A. McMartin	469,587	Feb. 23	2625	673	58	1063
Music-leaf turner	T. F. Petit	474,458	May 10	933	239 240	59	827
Music-leaf turner	E. von Trautvetter	477,828	June 28	2565	642 643	59	1987
Music-leaf turner	A. F. Vorce	486,573	Nov. 22	2206	580	61	1065
Music-leaf turner	J. H. Ward	473,802	Apr. 26	2851	716	59	591
Music-leaves. Tab for	C. F. Pidgin	481,735	Aug. 30	3229	787	60	1257
Music or like engravings. Producing	C. A. Ker	482,871	Sept. 20	1551	387	60	1665
Music-rack	I. W. Zavadil	483,244	Sept. 27	2147	544	60	1795
Music-rack and telescopic stand therefor. Folding	H. W. Potter	478,460	July 5	612	149	60	121
Music-rack attachment for guitars, &c.	P. Benson	487,820	Dec. 13	958	242	61	1529
Music-rack for musical-instrument cases	J. A. Weser	475,369	May 24	2363	605	59	1138
Music-rack for musical-instrument cases	J. A. Weser	484,481	Oct. 18	1477	376	61	322
Music rest or holder. Detachable	I. Rothschild and E. F. Van Cott	475,249	May 17	2174	553	59	1084
Music-stand attachment	H. C. Straley	487,165	Nov. 29	3203	821	61	1280
Music turner. Sheet	J. H. Terhune	467,211	Jan. 19	1486	380 381	58	300
Musical box	S. Cuendet	474,520	May 10	1024	263 264	59	845
Musical box	H. A. Gantschi	476,458	June 7	357	83	59	1506
Musical box	O. P. Lochmann	468,503	Feb. 9	937	238	58	715
Musical cigar-stand	A. Sueur	467,359	Jan. 19	1718	439	58	343
Musical instrument	C. Bozza	480,315	Aug. 9	918	232	60	769
Musical instrument	W. Carter	477,167	June 14	1469	360	59	1744
Musical instrument	J. B. Galloway	481,694	Aug. 30	3149	768	60	1241
Musical instrument	C. E. Guerre and G. H. Martin	472,453	Apr. 5	695	177	59	131
Musical instrument	A. Gylfe	485,932	Nov. 8	1181	311	61	830
Musical instrument	R. Hageman	488,890	Dec. 27	2693	667	61	1907
Musical instrument	F. G. Haney	480,816	Aug. 16	1705	425	60	936
Musical instrument	J. Harrington	485,542	Nov. 1	596	159	61	695
Musical instrument	J. E. Henning	478,933	July 12	1325	329	60	277
Musical instrument	D. Kempton	481,035	Aug. 16	2037	508	60	1002
Musical instrument	M. Kurth	469,331	Feb. 23	2227	571	58	985
Musical instrument	G. W. Lyon	466,501	Jan. 5	310	78	58	59
Musical instrument	C. S. Mudge	488,828	Dec. 27	2597	644	61	1887
Musical instrument	R. W. Pain	488,482	Dec. 20	2057	511	61	1765
Musical instrument	P. Peynaud	471,225	Mar. 22	2465	626	58	1605
Musical instrument	J. S. F. Pizutti	467,521	Jan. 26	1983	503	58	401
Musical instrument	H. S. Saroni	468,265	Feb. 2	551	135	58	631
Musical instrument	C. Sucker	469,509	Feb. 23	2505	642	58	1039
Musical instrument	A. P. Venen	473,981	May 3	150	35	59	666
Musical instrument	C. G. Zimmermann	471,370	Mar. 22	2677	681	58	1646
Musical instrument. Electrically-operated stringed.	W. H. Gilman	488,520	Dec. 20	2126	526	61	1777
Musical-instrument key	L. K. Fuller	483,378	Sept. 27	2378	597	60	1837
Musical-instrument key	C. E. Whitney	477,830	June 28	2570	644	59	1988
Musical instrument. Mechanical	C. Kretschmar	471,559	Mar. 29	2947	750 751	58	1705
Musical instrument. Mechanical	F. Pietschmann	474,999	May 17	1792	454 455	59	1009
Musical instrument. Multiplex	J. H. Wheeler	481,451	Aug. 23	2760	679	60	1150
Musical-instrument rack	F. W. Hedgeland	478,602	July 12	833	205	60	181
Musical instrument. Stringed	W. J. Christy	483,136	Sept. 27	1972	500	60	1760
Musical instrument. Stringed	F. A. Cross	475,541	May 24	2641	671	59	1190
Musical instrument. Stringed	H. Dahlman	469,548	Feb. 23	2572	659	58	1052
Musical instrument. Stringed	F. J. Hafner	467,802	Jan. 26	2434	618	58	485
Musical instrument. Stringed	F. J. Hafner	474,242	May 3	550	135	59	744
Musical-instrument strings. Impervious case for containing	F. H. Griffith	488,005	Dec. 13	1261	314	61	1589
Musical instruments. Accompaniment-indicator for	G. P. O. Héronx	478,107	July 5	45	13	60	11

Alphabetical list of inventions—Continued.

Invention.		Name.	No.	Date.	Monthly volume.		Official Gazette.			
					Spec.	Dr'g.	Vol.	Page.		
Musical instruments.	Action for mechanical	J. L. Müller	480,854	Aug. 16	1763	441	60	949		
Musical instruments.	Bow for stringed	E. A. Kretschmer	482,255	Sept. 6	547	130	60	1441		
Musical instruments.	Coin-controlled device for	D. Genovese	470,041	Mar. 1	595	148	58	1215		
Musical instruments.	Cut-off valve for	V. Seidel	468,308	Feb. 2	626	156	58	645		
Musical instruments.	Keyboard for	P. v. Jankó	474,016	May 3	209	49	59	678		
Musical instruments.	Mechanical attachment for ...	J. Cecchi and F. A. Zeitler	467,572	Jan. 26	2077	{ 524 525 526	58	418		
Musical instruments.	Mouthpiece for	J. E. Fowler	474,118	May 3	364	87				
Musical instruments.	Mute for	D. Genese	480,578	Aug. 9	1326	330			60	847
Musical instruments.	Pedal for	L. Haas	468,656	Feb. 9	1169	298	58	762		
Musical instruments.	Recording mechanism for	J. B. Calcaño I Paniza	467,854	Jan. 26	2514	{ 636 637 638	58	501		
Musical instruments.	Tail-pieces for stringed	C. J. Cook	475,674	May 24	2837	718			59	1228
Musical instruments.	Transposing keyboard for	M. Philipps	466,907	Jan. 12	980	251			58	195
Musical instruments.	Vibrator for reed	H. Jones	477,661	June 28	2296	575	59	1934		
Musical instruments.	Wire string for	L. A. Subers	467,061	Jan. 12	1226	310	58	241		
Musical notation		J. W. Robberson	482,442	Sept. 13	880	{ 211 212	60	1519		
Musical tones by electro-magnetism. Method of and apparatus for producing		E. C. Ohmart	472,019	Mar. 29	3633	929			58	1837
Musk and making the same. Artificial		A. Baur	481,685	Aug. 30	3136	.....	60	1239	
Muzzle		M. S. Moremen	478,882	July 12	1242	308	60	261		
Muzzle. Calf		J. J. Smith	488,719	Dec. 27	2437	605	61	1854		
Nail:										
See Shoe-nail.										
Nail-arranging device		C. K. Wead	477,093	June 14	1355	330	59	1722		
Nail-drawing implement		J. Reid, Jr.	474,859	May 17	1570	401	59	965		
Nail-driving machine		R. Ashe	470,137	Mar. 1	735	183	58	1242		
Nail-extractor		M. D. Converse	482,338	Sept. 13	702	167	60	1487		
Nail-extractor		R. C. Ellrich	474,594	May 10	1141	291	59	867		
Nail-extractor		F. X. Zahringer	488,595	Dec. 27	2244	556	61	1817		
Nail-machine		J. M. E. Baackes and C. Richards	468,399	Feb. 9	775	{ 192 193	58	684		
Nail-machine		J. M. E. Baackes and C. Richards	481,997	Sept. 6	114	28, 29			60	1357
Nail-machine		J. S. Blackburn and F. G. Bartholomew	467,362	Jan. 19	1721	440	58	343		
Nail-machine		S. E. Groff	476,632	June 7	613	147	59	1559		
Nail-machine		C. E. Houghton	470,132	Mar. 1	729	{ 181 182	58	1241		
Nail-machine		C. E. Houghton	472,604	Apr. 12	922	{ 237 238 239			59	189
Nail-machine		C. E. Houghton	472,605	Apr. 12	924	238	59	189		
Nail-machine		C. E. Houghton	472,882	Apr. 12	1321	339	59	264		
Nail-machine		C. E. Houghton	483,720	Oct. 4	290	72, 73	61	61		
Nail-machine		C. E. Houghton	487,567	Dec. 6	541	139	61	1428		
Nail-machine attachment. Cut-		C. F. Roth	483,085	Sept. 20	1889	{ 478 479	60	1733		
Nail-machine feed mechanism		M. Altmeyer	470,149	Mar. 1	749	187			58	1245
Nail machines. Die for cut		C. E. Houghton	475,768	May 31	2993	759	59	1271		
Nail-making machine		L. Goddu	478,054	June 28	2919	{ 729 730	59	2055		
Nail or spike		W. Taylor	472,913	Apr. 12	1370	351			59	275
Nail-puller		M. Loftin	471,873	Mar. 29	3435	877	58	1796		
Nail-puller		C. M. Spencer	480,974	Aug. 16	1954	489	60	985		
Nail-puller		F. G. Stark	474,698	May 10	1307	334	59	900		
Nail-puller		A. F. Street	483,587	Oct. 4	109	26	61	23		
Nail-rolling machinery		M. Altmeyer	470,150	Mar. 1	752	187	58	1245		
Nail-strip. Comb		F. F. Raymond, 2d	467,237	Jan. 19	1529	390	58	307		
Nails. Comb-strip of heel		F. F. Raymond, 2d	474,858	May 17	1570	400	59	965		
Nails. Machine for making hob		J. W. Ellis	476,191	May 31	3684	{ 930 931	59	1408		
Nailing implement. Hand		W. J. Brown	482,540	Sept. 13	1044	252			60	1553
Nailing-jack		J. and W. Busfield	474,081	May 3	318	76	59	698		
Nailing-machine		J. Hyslop, Jr.	467,104	Jan. 12	1309	{ 331 332	58	258		
Nailing-machine		F. F. Raymond, 2d	475,417	May 24	2439	622			59	1152
Nailing machine. Box		B. M. Gunston	481,863	Aug. 30	3438	{ 844 845	60	1297		
Nailing machine. Box		F. J. Hawley	469,139	Feb. 16	1917	491			58	920
Name-plate for monuments, signs, &c		R. H. Follenius	482,237	Sept. 6	511	122	60	1435		
Napkin-adjuster		W. P. Burnett	488,140	Dec. 13	1490	375	61	1636		
Napkin-holder		I. T. Brown	481,161	Aug. 23	2282	562	60	1060		
Napkin ring and holder. Combined		A. M. Spaulding	483,331	Sept. 27	2310	580	60	1824		
Napkin-supporter		W. H. Kochler	488,924	Dec. 27	2755	680	61	1920		
Nautical course-indicator		J. A. Miller, T. S. and H. G. Lester	474,846	May 17	1549	396	59	961		
Nautical signal or sea-telephone		E. Huber and F. J. Kneuper	467,102	Jan. 12	1297	{ 329 330	58	255		
Necklace-clasp		J. H. Maxheimer and G. C. Beresford	468,077	Feb. 9	1205	306			58	769
Neckscarf		J. O. Nightingale	483,693	Oct. 4	256	63	61	4		
Necktie		J. B. Beam	485,447	Nov. 1	459	{ 122 123	61	666		
Necktie		H. Heath	478,008	June 28	2853	713			59	2043
Necktie-bows. Stretcher for		J. W. Ashworth	473,687	Apr. 26	2620	675	59	558		
Necktie-fastener		L. Greenwald	483,215	Sept. 27	2103	533	60	1787		
Necktie-fastener		L. Greenwald	488,275	Dec. 20	1720	434	61	1698		
Necktie-fastener		J. Hayden	473,154	Apr. 19	1777	449	59	362		
Necktie-fastener		B. Kersting	479,884	Aug. 2	166	41	60	614		
Necktie-fastener		H. S. Pullman	486,956	Nov. 29	2879	744	61	1217		
Necktie-fastener		F. R. Scofield	483,947	Oct. 4	632	159	61	130		
Necktie-fastener		L. Uechting	480,754	Aug. 16	1609	404	60	918		
Neck tie or band		C. S. Cole	482,547	Sept. 13	1058	257	60	1555		
Needle		J. Wieseckel	487,040	Nov. 29	3004	773	61	1249		

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Needle employed in the manufacture of felted fabrics	C. A. Whipple	469,762	Mar. 1	148	38	58	1129
Needle. Ribbon	G. G. Weigand	481,338	Aug. 23	2586	635	60	1116
Needle-swaging machine	I. T. Smith	483,815	Oct. 4	439	109	61	91
Needle. Tape	E. Stott	478,827	July 12	1181	293	60	249
Needle-threader	R. Spengler	471,150	Mar. 22	2354	602	58	1583
Net bow or hoop	A. G. Benson	481,461	Aug. 23	2788	685	60	1155
Net. Dip	F. Hanish	482,635	Sept. 13	1182	286	60	1579
Net fabrics. Knot for	R. Semmler, Sr.	483,291	Sept. 27	2250	566	60	1813
Net. Fish	H. F. Smith	483,400	Sept. 27	2406	605	60	1843
Net. Fly	M. W. Bach	486,421	Nov. 22	1986	527	61	1023
Net. Fly	W. J. Erdmann	475,496	May 24	2568	654	59	1176
Net. Fly	W. H. Osmer	478,708	July 12	971	241	60	209
Net. Fly	G. Sollenberger	482,417	Sept. 13	837	201	60	1512
Net frame. Landing	J. Reed	479,157	July 19	1682	420 421 552 553 554	60	355
Net-making machine	W. J. Hooper	484,893	Oct. 25	2151	553 554	61	474
Net. Mosquito or fly	V. D. Collins	474,947	May 17	1706	434	59	993
Net. Portable mosquito	E. Wenigmann	473,599	Apr. 26	2548	642	59	533
Net. Pound	G. Williams and A. A. Cleveland	481,990	Sept. 6	104	26	60	1355
Nets. Machine for making fish or other	H. W. Thurston	477,085	June 14	1343	326 327	59	1719
Nether garment	T. Field	474,550	May 10	1075	275	59	854
Newspaper-elevator	A. R. Stone	487,791	Dec. 13	911	230 231	61	1519
Newspaper-holder	W. H. Turner	486,139	Nov. 15	1546	408	61	921
Newspaper-holder and door-plate. Combined	H. Metz	475,460	May 24	2512	640 381 382 383 384 384 385 386	59	1165
Newspaper-wrapping machine	L. C. Crowell	486,088	Nov. 15	1439	381 382 383 384	61	901
Newspaper-wrapping machine	L. C. Crowell	486,090	Nov. 15	1459	384 385 386	61	904
Newspapers and other publications. Preventing fraud in the sale of	L. C. Crowell	480,423	Aug. 9	1090	273	60	799
Newspapers and other publications. Preventing fraud in the sale of	L. C. Crowell	480,424	Aug. 9	1093	273	60	800
Newspapers. Automatic apparatus for the sale of	A. Begg	472,492	Apr. 5	755	192	59	143
Nickel from its ores. Separating	H. L. Heirenschmidt	466,495	Jan. 5	301	58	57	
Nickel from ores. Extracting	T. Macfarlane	484,033	Oct. 11	772	61	173	
Nickel-matte. Treating	P. Manhès	479,290	July 19	1883	472	60	395
Nickel. Treating minerals containing	J. de Coppet	484,875	Oct. 25	2118	61	467	
Nippers	G. A. Lowry	470,643	Mar. 8	1563	406	58	1409
Nipple-holding machine	L. J. Mundelin	468,304	Feb. 2	621	155	58	644
Nitro-cellulose. Making	H. Maxim	474,778	May 10	1431	363	59	925
Nitroglycerine. Absorbent of	L. Brown	466,900	Jan. 12	971	58	194	
Nitroglycerine blasting-powder	L. Brown	478,844	July 12	1203	60	254	
Nitroglycerine from waste acids. Recovering	J. Lawrence	482,372	Sept. 13	760	60	1499	
Non-conducting casing for heaters, flues, pipes, &c.	T. W. Jenkins	474,639	May 10	1215	311	59	881
Non-conducting covering for steam-pipes, &c.	B. J. Christie	477,647	June 28	2279	59	1931	
Non-conducting material	H. W. Johns	474,834	May 17	1532	59	957	
Non-heat-conducting covering	W. H. Norris	468,248	Dec. 20	1679	419	61	1688
Nose-bag	W. Ehrhardt	482,730	Sept. 20	1332	326	60	1621
Nose-ringer	P. C. Goodrich	468,174	Feb. 2	405	100	58	603
Nose-ringing tool	C. H. Marshall	467,422	Jan. 19	1806	461	58	359
Note and envelope. Combined promissory	C. Carroll	479,555	July 26	2348	586	60	499
Nozzle	R. K. Pangle	470,410	Mar. 8	1925	313	58	1341
Nozzle	C. V. Pollock	488,220	Dec. 20	1637	408	61	1681
Nozzle. Automatic	C. A. King	478,698	July 12	958	238	60	206
Nozzle. Exhaust	P. Swenson	481,334	Aug. 23	2579	633 634	60	1115
Nozzle. Exhaust	C. W. Umholtz	481,082	Aug. 16	2129	530	60	1019
Nozzle. Exhaust	C. W. Umholtz	487,137	Nov. 29	3156	809	61	1271
Nozzle-holder	A. Cuthbert	479,249	July 19	1827	458 459	60	383
Nozzle. Spray	W. C. Lockhart	487,628	Dec. 6	629	162	61	1446
Nozzle. Triple-exhaust	J. Y. Smith	487,299	Dec. 6	92	28	61	1340
Number device. Adjustable	J. F. Evert	480,841	Aug. 16	1740	435	60	943
Numbering and marking machine	J. D. Humphrey	475,688	May 24	2857	722 723	59	1233
Numbering checks, bonds, &c., in sheets. Machine for consecutively	E. G. Bates	484,390	Oct. 18	1326	338	61	294
Numbering head. Consecutive	F. Sanders	488,577	Dec. 27	2214	549	61	1811
Numbering machine	C. H. Shaw	478,241	July 5	290	71	60	59
Numbering machine. Consecutive	E. G. Bates	484,389	Oct. 18	1322	338	61	294
Numbering machine. Consecutive	E. G. Bates	484,391	Oct. 18	1323	339	61	295
Numbering machine. Consecutive	J. H. Reinhardt	469,198	Feb. 16	2006	512	58	937
Nursery-bag	M. J. Forshew	485,098	Oct. 25	2476	636	61	539
Nursery-chair	F. L. Hemmer	485,382	Nov. 1	360	96, 97	61	646
Nut	J. H. Burdick	469,678	Mar. 1	13	5	58	1101
Nut. Adjustable	H. W. Smith	466,582	Jan. 5	437	112	58	84
Nut. Adjustable spindle	W. L. Frazer and W. E. Brown	475,762	May 31	2984	757	59	1270
Nut and bolt lock	J. E. Arthur	479,131	July 19	1642	411	60	347
Nut and bolt lock	T. A. Flanagan	482,472	Sept. 13	926	226	60	1529
Nut and bolt wrench	J. Hoval	481,230	Aug. 23	2394	590	60	1083
Nut. Axle	J. Bernel	486,023	Nov. 8	1337	355	61	863
Nut. Axle	J. Gambetta	485,497	Nov. 1	527	140	61	679
Nut. Ball-bearing	C. R. Pratt	476,304	June 7	114	28	59	1461
Nut-blank-threading device	J. C. Stuchel	481,437	Aug. 23	2742	674 505 506 507	60	1146
Nut-blanks. Machine for cutting and bending	W. L. Clouse and W. R. Anderson	477,511	June 21	2037	505 506 507	59	1866
Nut-cracker	O. H. Robertson	484,049	Oct. 11	793	200	61	177

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Nut-cracker.....	D. C. Wheeler and W. W. Sperry...	483,334	Sept. 27	2313	581	60	1825
Nut-fastener.....	J. W. Grantland	467,750	Jan. 26	2354	596	58	470
Nut-fastening device.....	J. W. Grantland	473,788	Apr. 12	1193	306	59	238
Nut. Lock.....	V. E. Doremus.	478,742	July 12	1036	254	60	921
Nut. Lock.....	J. G. Netschert	471,492	Mar. 22	2861	727	58	1681
Nut-lock.....	W. J. Allason	476,769	June 14	817	201	59	1613
Nut-lock.....	C. A. Bartliff	479,162	July 19	1698	422	60	357
Nut-lock.....	J. Bender	482,610	Sept. 13	1152	278	60	1573
Nut-lock.....	I. F. Bissell	470,973	Mar. 15	2073	531	58	1518
Nut-lock.....	N. Bosmann	488,958	Dec. 27	2812	693	61	1932
Nut-lock.....	W. P. Brachmann	467,627	Jan. 26	2151	547	58	432
Nut-lock.....	J. Broadley	481,344	Aug. 23	2592	637	60	1117
Nut-lock.....	J. C. Brown	484,731	Oct. 18	1865	474	61	401
Nut-lock.....	T. H. Burke and R. D. Fassett	467,027	Jan. 12	1166	296	58	230
Nut-lock.....	R. K. Canfield	467,616	Jan. 26	2140	543	58	430
Nut-lock.....	W. Cokayne	482,518	Sept. 13	1009	244	60	1546
Nut-lock.....	J. Coleman	473,613	Apr. 26	2568	647	59	537
Nut-lock.....	S. G. Cowan	488,184	Dec. 20	1571	394	61	1669
Nut-lock.....	A. G. Cox	485,174	Nov. 1	31	11	61	579
Nut-lock.....	J. E. Crisp	488,472	Dec. 20	2038	507	61	1761
Nut-lock.....	D. B. Daniels	467,002	Jan. 12	1126	285	58	222
Nut-lock.....	C. C. Davison	467,925	Feb. 2	35	8	58	532
Nut-lock.....	A. Duer	474,315	May 3	681	176	59	768
Nut-lock.....	S. Durben	478,096	July 5	32	10	60	9
Nut-lock.....	B. Edgar	468,315	Feb. 2	636	158 159	58	647
Nut-lock.....	R. C. Elliott	472,111	Apr. 5	161	43	59	30
Nut-lock.....	B. Floersheim	472,637	Apr. 12	970	251	59	198
Nut-lock.....	H. Frobird	479,065	July 19	1535	383	60	328
Nut-lock.....	N. P. Garrett	474,380	May 10	803	210	59	803
Nut-lock.....	A. Goss	467,617	Jan. 26	2141	543	58	430
Nut-lock.....	A. J. Gould	471,608	Mar. 29	3018	768	58	1718
Nut-lock.....	I. J. Griffin	470,561	Mar. 8	1447	376	58	1385
Nut-lock.....	J. C. Grimes	478,997	July 19	1437	356	60	309
Nut-lock.....	T. Hibbs	483,921	Oct. 4	597	151	61	124
Nut-lock.....	S. C. Hickerson	476,382	June 7	243	59	59	1484
Nut-lock.....	E. M. Hill	472,706	Apr. 12	1080	277	59	216
Nut-lock.....	J. H. Huber and G. M. Ervin	484,204	Oct. 11	1026	261	61	223
Nut-lock.....	C. Ives	479,511	July 26	2287	572	60	487
Nut-lock.....	E. D. Jaynes and J. W. Hawkins	470,677	Mar. 15	1617	420	58	1429
Nut-lock.....	E. Johanson	484,894	Oct. 25	2157	554	61	474
Nut-lock.....	J. D. Jolley	477,941	June 28	2750	689	59	2023
Nut-lock.....	J. B. Jones	477,010	June 14	1216	295	59	1693
Nut-lock.....	R. Kilmer	470,493	Mar. 8	1358	353	58	1367
Nut-lock.....	J. P. Koontz	474,837	May 17	1538	391	59	958
Nut-lock.....	S. A. Lake	488,337	Dec. 20	1826	456	61	1717
Nut-lock.....	J. M. Lane and I. N. Phipps	477,555	June 21	2112	525	59	1882
Nut-lock.....	H. E. Lantz and S. L. Neely	486,565	Nov. 22	2192	577	61	1063
Nut-lock.....	W. L. Magee	466,793	Jan. 12	784	204	58	159
Nut-lock.....	W. Mansfield	473,193	Apr. 19	1855	467	59	376
Nut-lock.....	C. Mathie and E. A. Fletcher	471,875	Mar. 29	3440	878	58	1797
Nut-lock.....	J. C. McQuilkin	481,417	Aug. 23	2709	666	60	1140
Nut-lock.....	G. A. Miller	480,667	Aug. 9	1475	367	60	876
Nut-lock.....	A. P. Nelms	482,949	Sept. 20	1684	424	60	1690
Nut-lock.....	W. B. Parrot	477,149	June 14	1431	349	59	1737
Nut-lock.....	L. B. Peck and F. L. Sterner	477,222	June 21	1576	387	59	1777
Nut-lock.....	J. G. Perry	482,907	Sept. 20	1618	405	60	1676
Nut-lock.....	S. C. Pettigrew	478,019	June 28	2866	717	59	2045
Nut-lock.....	J. W. Pugh	484,745	Oct. 18	1893	482	61	409
Nut-lock.....	J. Putman	478,637	July 12	877	216	60	190
Nut-lock.....	B. S. Raybuck	467,324	Jan. 19	1660	424	58	332
Nut-lock.....	D. Rice and J. S. Kirk	468,578	Feb. 9	1057	269	58	739
Nut-lock.....	L. Rieger	468,420	Feb. 9	803	200	58	690
Nut-lock.....	W. D. Robinson	473,430	Apr. 19	2245	565	59	453
Nut-lock.....	W. D. Robinson	487,684	Dec. 6	728	186	61	1464
Nut-lock.....	W. D. Rodgers	476,316	June 7	132	32	59	1463
Nut-lock.....	W. Schauweker	470,708	Mar. 15	1666	431	58	1438
Nut-lock.....	W. Schauweker	473,642	Apr. 26	2614	658	59	545
Nut-lock.....	F. C. Shaw	469,602	Feb. 23	2642	678	58	1066
Nut-lock.....	A. Stockdale	483,241	Sept. 27	2143	543	60	1794
Nut-lock.....	H. L. Stone	469,924	Mar. 1	410	103	58	1180
Nut-lock.....	W. P. Sweetland	472,489	Apr. 5	751	191	59	143
Nut-lock.....	E. W. Taylor	475,094	May 17	1942	492	59	1038
Nut-lock.....	D. C. Terry	471,627	Mar. 29	3048	776	58	1723
Nut-lock.....	D. C. Terry and W. J. Maltby	475,636	May 24	2784	705	59	1219
Nut-lock.....	W. Timmis	470,520	Mar. 8	1393	364	58	1374
Nut-lock.....	A. G. Turner	477,318	June 21	1740	426	59	1808
Nut-lock.....	C. O. Vinyard	469,613	Feb. 23	2654	682	58	1069
Nut-lock.....	H. R. Wallis	472,413	Apr. 5	634	162	59	119
Nut-lock.....	L. F. Wankey	478,725	July 12	998	247	60	215
Nut-lock.....	D. O. Ward	468,754	Feb. 9	1320	334	58	792
Nut-lock.....	A. Warenskjold	481,214	Aug. 23	2361	582	60	1076
Nut-lock.....	V. E. Whitelock	472,242	Apr. 5	366	94	59	69
Nut-lock.....	C. D. Wiley	467,107	Jan. 12	1316	333	58	259
Nut-lock.....	J. W. Willcoxon	470,088	Mar. 1	668	165	58	1228
Nut-lock.....	J. W. Willcoxon	482,935	Sept. 20	1651	416	60	1684
Nut-lock.....	W. H. Willis	480,758	Aug. 16	1613	405	60	919
Nut-lock.....	I. Wolfe	485,120	Oct. 25	2504	643	61	545
Nut-lock.....	W. Z. Woodstock	486,147	Nov. 15	1559	413	61	924
Nut-lock.....	C. G. Wrenshall	482,910	Sept. 20	1622	406	60	1677
Nut-lock.....	L. H. Young	478,300	July 5	379	92	60	76
Nut-lock and bolt-tightener.....	J. G. Perry	482,906	Sept. 20	1617	405	60	1676
Nut-lock for buggy-tops.....	W. L. Pike	470,630	Mar. 8	1546	403	58	1406
Nut-lock. Safety.....	A. M. Krone	471,796	Mar. 29	3129	848	58	1775
Nut-lock washer.....	D. O. Ward	468,488	Feb. 9	915	232	58	711

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Nut-locking washer.....	P. Nolau.....	477,020	June 14	1228	298	59	1696
Nut or pipe wrench.....	J. P. Hunt.....	487,742	Dec. 13	831	212	61	1553
Nut. Self-locking.....	W. S. Neil.....	483,676	Oct. 4	231	58	61	48
Nut. Self-locking.....	J. F. Plummer and H. P. Chapman.	472,465	Apr. 5	713	182	59	135
Nut shearing and punching machine.	J. Altmann.....	467,908	Feb. 2	3	1, 2	58	527
Nut-warmer.....	C. E. Raper.....	471,021	Mar. 15	2147	552	58	1531
Nut-wrench.....	H. D. Fisk.....	467,401	Jan. 19	1778	453	58	354
Nut-wrench.....	E. P. Scigliano.....	485,775	Nov. 8	947	254	61	784
Nuts. Ratchet-washer for bolt.	W. A. Galbraith.....	474,731	May 10	1356	344	59	910
Oar-lock.....	G. H. Haslop.....	471,546	Mar. 29	2933	746	58	1703
Oar-lock.....	W. F. Spence.....	474,194	May 3	479	116	59	730
Oar-lock attachment.....	J. R. Livingston.....	468,318	Dec. 20	1790	450	61	1710
Oarsman's recorder.....	J. and J. H. Banks and W. B. Peet.	478,270	July 5	334	80, 81	60	67
Oar-clipping machine.....	L. O. Stevens.....	487,686	Dec. 6	730	187	61	1465
Oat-screen.....	C. and J. Closz.....	471,071	Mar. 15	2219	570	58	1546
Observatory. Rotary.....	F. C. Crowe.....	474,220	May 3	519	{ 126 127 }	59	737
Odometer and speed-indicator. Electric	W. A. Phillips.....	473,341	Apr. 19	2099	527	59	424
Office-door indicator.....	J. Drew.....	453,908	Oct. 4	579	145	61	120
Oil and vapor burner.....	J. A. Lannert, W. R. Jeavons, and W. H. Wilder.	479,747	July 26	2662	661	60	556
Oil burner.....	W. H. Wilder, J. A. Lannert, and W. R. Jeavons.	479,690	July 26	2554	635	60	536
Oil-burner.....	J. Barrow.....	474,282	May 3	612	151	59	756
Oil-burner.....	J. Barrow.....	488,108	Dec. 13	1445	{ 362 363 }	61	1627
Oil-burner.....	C. F. Broström.....	476,445	June 7	341	77, 78	59	1504
Oil-burner.....	J. J. Buhoup.....	477,193	June 14	1509	370	59	1753
Oil-burner.....	J. F. Coates.....	479,558	July 26	2352	587	60	500
Oil-burner.....	C. T. Coates and W. R. Helton.....	475,297	May 24	2247	579	59	1116
Oil-burner.....	H. H. de Fernelmont.....	467,736	Jan. 26	2329	592	58	465
Oil-burner.....	A. E. Harper.....	488,355	Dec. 20	1855	464	61	1724
Oil-burner.....	W. R. Jeavons.....	475,401	May 24	2412	615	59	1147
Oil-burner.....	F. L. McGahan.....	476,294	June 7	97	22	59	1437
Oil-burner.....	W. F. Otis.....	488,660	Dec. 27	2344	580	61	1836
Oil-burner.....	E. M. Spalding and G. E. Willsie.....	488,744	Dec. 27	2471	614	61	1 63
Oil-burner.....	L. B. White.....	468,589	Feb. 9	1070	273	58	741
Oil burner. Coal.....	H. Stacey.....	473,858	Apr. 26	2944	742	59	609
Oil-burner for boiler-furnaces, &c.	D. Kline.....	469,211	Feb. 16	2042	{ 521 522 }	58	941
Oil burner. Fuel.....	C. Ball.....	483,730	Oct. 4	308	77	61	64
Oil-burner wick-fastener.....	B. F. Goodrich.....	488,788	Dec. 27	2540	630	61	1875
Oil-burning apparatus.....	G. H. Harvey.....	482,508	Sept. 13	587	239	60	1542
Oil-burning device.....	H. T. Russell.....	473,165	Apr. 19	1793	{ 452 453 }	59	365
Oil-can.....	C. W. Hart.....	470,837	Mar. 15	1877	481	58	1479
Oil-can.....	C. W. Hart.....	470,838	Mar. 15	1879	481	58	1479
Oil-can.....	J. W. Jackson.....	467,307	Jan. 19	1637	417	58	327
Oil-can.....	H. Kaplan.....	474,172	May 3	446	108	59	724
Oil-can.....	F. Maranville.....	473,516	Apr. 26	2398	607	59	503
Oil-can.....	R. McVicar, Jr.....	471,085	Mar. 15	2239	575	58	1550
Oil-can.....	N. G. Pomeroy.....	475,151	May 17	2023	511	59	1054
Oil-can.....	U. Reiffer and J. F. Stauffer.....	480,742	Aug. 16	1593	399	60	914
Oil-can.....	H. H. Thiellesen.....	479,318	July 19	1923	480	60	402
Oil-can.....	A. J. Tschantz. (Reissue).....	11,223	Feb. 9	1360	343	58	801
Oil-can.....	A. J. Tschantz.....	487,500	Dec. 6	444	114	61	1409
Oil-can and lamp-filler.....	C. W. Proctor.....	468,691	Feb. 9	1228	312	58	774
Oil-can and lamp-filler. Combined.	H. C. Atkinson.....	469,112	Feb. 16	1883	481	58	912
Oil-can and siphon-pump.....	T. Bumann.....	486,760	Nov. 22	2511	655	61	1127
Oil-can. Lamp-filling.....	J. Geary.....	482,680	Sept. 13	1248	304	60	1592
Oil-can. Safety.....	H. Kaplan.....	479,217	July 19	1777	446	60	372
Oil-can spout and stopper.....	J. C. and A. S. Ley.....	468,152	Feb. 2	369	91	58	596
Oil-can. Squirt.....	F. E. Small.....	477,581	June 21	2145	533	59	1889
Oil-cup.....	W. H. and A. J. Bailey.....	478,977	July 19	1400	347	60	303
Oil-cup.....	J. M. Coale.....	479,246	July 19	1823	457	60	3-2
Oil-cup.....	F. J. Cole and G. B. Hazlehurst.....	478,224	July 5	249	61	60	51
Oil-cup.....	J. M. Daugherty.....	475,387	May 24	2395	612	59	1144
Oil-cup.....	J. W. Morgan.....	477,379	June 21	1935	450	59	1826
Oil-cup.....	J. T. Smith.....	481,312	Aug. 23	2548	625	60	1109
Oil-cup.....	F. D. Winkley.....	470,734	Mar. 15	1702	439	58	1445
Oil-cup. Automatic.....	W. H. Wilkinson.....	468,489	Feb. 9	916	232	58	711
Oil. Desulphurizing.....	J. A. Drubbs.....	470,911	Mar. 15	1976	505	58	1499
Oil-extracting apparatus.....	G. Mann.....	482,581	Sept. 13	1104	267	60	1563
Oil-motor engine.....	H. Schumm.....	482,201	Sept. 6	457	110	60	1424
Oil or gas burner.....	G. S. Sanford.....	471,753	Mar. 29	3250	{ 827 828 }	58	1760
Oil. Paint.....	G. W. Banker.....	474,434	May 10	888	.....	59	820
Oil-press.....	A. Estrayer.....	480,867	Aug. 16	1781	445	60	952
Oil projectile.....	E. D. Moore.....	478,705	July 12	967	240	60	208
Oil-purifier.....	R. Metz.....	473,326	Apr. 19	2065	520	59	419
Oil purifier and reservoir.....	R. Metz.....	482,583	Sept. 13	1108	268	60	1565
Oil-purifying apparatus.....	E. Noppel.....	477,061	June 14	1297	315	59	1710
Oil-purifying apparatus.....	O. K. Thomassen.....	477,281	June 21	1675	410	59	1796
Oil. Purifying cocoonut.....	G. H. Weiss and E. N. Dickerson.....	468,498	Feb. 9	930	.....	58	714
Oil-receptacle filler-cap.....	W. Frosch.....	478,421	July 5	558	135	60	209
Oil-reservoir.....	F. W. Mosby, Jr.....	471,489	Mar. 22	2858	727	58	1680
Oil-spraying device.....	C. R. Collins.....	485,257	Nov. 1	155	45	61	605
Oil-tank.....	D. J., and W. D. Kelly.....	469,356	Feb. 23	2262	581	58	993
Oil. Treating cotton-seed.....	G. W. Scollay.....	474,864	May 17	1579	.....	59	967
Oil upon water. Device for distributing.	S. I. Prescott.....	481,818	Aug. 30	3370	826	60	1284
Oils, &c. Apparatus for burning petroleum.	O. R. Routh.....	476,560	June 7	503	118	59	1537
Oils. Apparatus for refining.....	C. Dorn.....	469,498	Feb. 23	2488	638	58	1033
Oils. Apparatus for the transference of hydrocarbon.	W. Buckwell.....	476,977	June 14	1166	282	59	1683
Oils. Compound of sulphureted.....	W. D. Field.....	473,306	Apr. 19	2031	.....	59	412

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Oils. Compound of sulphureted	W. D. Field	478,955	July 12	1353	.....	60	283
Oils. Decolorizing vegetable	W. N. Hartley and W. E. B. Blenkinsop.	467,992	Feb. 2	130	31, 32	58	519
Oils. Desulphurizing	O. P. Amend and J. H. Macy	480,311	Aug. 9	912	230	60	768
Oils. Desulphurizing	O. P. Amend and J. H. Macy	480,312	Aug. 9	914	231	60	768
Oils for lighting and heating. Apparatus for burning hydrocarbon or other	G. Rose	477,271	June 21	1659	{ 405 } { 406 }	{ 59 }	1793
Oils. Refining	T. Drake	471,963	Mar. 29	3561	.....	58	1821
Oils. Refining Canadian or similar petroleum	H. Frasch	487,119	Nov. 29	3130	803	61	1267
Oils. Removing sulphurous compounds from	J. B. Huston	486,406	Nov. 15	1956	519	61	1004
Oils. Safety-vessel for	C. J. Ryder	472,910	Apr. 12	1364	350	59	274
Oiler. Die-stock	G. L. Le Vesconte	487,847	Dec. 13	1005	253	61	1538
Oiler for handsaws	S. Parmele	480,621	Aug. 9	1401	348	60	862
Oiler. Force-feed	H. Jones	483,690	Oct. 4	252	62, 63	61	53
Oiler. Fountain tympan	H. S. Banta and W. I. Bamberger	470,460	Mar. 8	1311	338	58	1357
Oiler. Loose-pulley	J. H. Richards and A. W. Burr	476,173	May 31	3653	924	59	1403
Oiler. Watch	I. L. Green	487,732	Dec. 13	812	207	61	1493
Oiling device	C. F. Kellom	477,422	June 21	1895	467	59	1839
Oiling device. Loom	J. S. Giles	481,558	Aug. 30	2943	723	60	1202
Oiling device. Loom	J. S. Giles	481,559	Aug. 30	2944	723	60	1202
Open-hearth furnace	H. Aiken, F. W. Wood, and H. H. Campbell.	481,885	Aug. 30	3476	852	60	1305
Opera-chair	J. T. McKean	475,019	May 17	1824	{ 462 } { 463 }	{ 59 }	1015
Opera-glass	C. F. Glocker	468,337	Feb. 9	681	164	58	665
Opera-glass	C. F. Glocker	477,360	June 21	1804	442	59	1820
Opera-glass attachment	P. Moews	475,462	May 24	2513	641	59	1166
Opera-glass attachment	P. Moews	475,463	May 24	2515	641	59	1166
Opera-glass holder	A. W. Buchbinder, Jr	477,643	June 28	2274	570	59	1930
Opera-glass holder	A. B. Nicholson	478,350	July 5	455	111	60	91
Opera-glass holder. Detachable	J. P. Hinkel	471,082	Mar. 15	2236	574	58	1549
Opera-glass receptacle. Coin-operated	J. J. McDade	483,939	Oct. 4	619	156	61	128
Opera-glass-rental apparatus	J. W. Patterson	475,412	May 24	2431	620	59	1150
Opera or field glass	E. Lüddeckens	480,370	Aug. 9	1002	252	60	784
Operating-chair. Physician's	S. Longanecker	481,040	Aug. 16	2052	512	60	1005
Operator's seat	C. H. Colby	478,987	July 19	1415	350	60	305
Optician's trial-frame	A. G. McKeuzie	479,607	July 26	2419	603	60	512
Optometer	J. S. Sherman	484,615	Oct. 18	1681	427	61	364
Optometer. Focal-center	J. S. Sherman	484,655	Oct. 11	799	202	61	179
Orange-clipper	T. B. Langford	472,459	Apr. 5	705	180	59	133
Orange-sizer	E. E. Woodward	466,817	Jan. 12	823	211	58	166
Order-holder	F. F. Austin	484,625	Oct. 18	1695	430	61	367
Order-holder	G. A. Huewe	470,824	Mar. 15	1856	475	58	1475
Order-holder	J. S. McDonald, Jr	487,960	Dec. 13	1183	295	61	1572
Order-holder	J. A. Thuge	478,035	June 28	2893	723	59	2051
Ordinance	J. R. Haskell	484,012	Oct. 11	743	186	61	167
Ordinance	J. Mason	473,939	May 3	89	20	59	654
Ordinance. Breech-loading	J. B. G. A. Canet	474,289	May 3	622	{ 151 } { 155 } { 156 } { 157 }	{ 59 }	758
Ordinance. Breech-loading	R. B. Dashiell	468,331	Feb. 9	670	{ 166 } { 167 } { 673 } { 674 }	{ 58 }	663
Ordinance. Breech-loading	W. H. Driggs	475,545	May 24	2646	.....	59	1191
Ordinance. Breech-loading	G. Gerdorn	466,848	Jan. 12	873	224	58	176
Ordinance. Breech-loading	S. Seabury	483,267	Sept. 27	2213	556	60	1807
Ordinance. Gas-check for breech-loading	S. Seabury	487,380	Dec. 6	230	63	61	1366
Ordinance. Means for operating heavy	F. Bex	483,130	Sept. 27	1960	497	60	1758
Ordinance-operating mechanism	T. F. Rowland	488,838	Dec. 27	2617	{ 649 } { 650 }	61	1891
Ordinance. Tool for boring breech-loading	G. Gerdorn	466,869	Jan. 12	915	234	58	184
Ordinance. Tool for boring breech-loading	G. Gerdorn	481,300	Aug. 23	2525	620	60	1105
Ore and coal crusher and separator	S. B. Price, Jr., C. E. Martin, and B. Purser.	479,018	July 19	1466	365	60	315
Ore cleaning and concentrating apparatus	W. Clancy	476,035	May 31	3424	{ 864 } { 865 }	{ 59 }	1357
Ore-concentrating belts. Fluid-support for	F. G. Corning	478,502	July 5	675	165	60	133
Ore-concentrating machine	A. Fraser	487,261	Dec. 6	34	11, 12	61	1328
Ore-concentrator	W. H. H. Bowers	481,101	Aug. 16	2164	536	60	1024
Ore-concentrator	G. L. Cudner	469,202	Feb. 16	2028	518	58	939
Ore-concentrator	G. L. Cudner	470,781	Mar. 15	1775	457	58	1459
Ore-concentrator	G. L. Cudner	473,449	Apr. 26	2283	577	59	482
Ore-concentrator	A. Gonzalez	487,523	Dec. 6	477	125	61	1415
Ore-concentrator	H. F. Hicks	477,934	June 28	2737	686	59	2020
Ore-concentrator	E. A. Hockley	477,936	June 28	2741	687	59	2021
Ore-concentrator	G. D. Husemann	479,279	July 19	1868	468	60	391
Ore-concentrator	F. M. Iler	473,506	Apr. 26	2379	603	59	500
Ore-concentrator	T. T. McNary	485,972	Nov. 8	1254	331	61	846
Ore-concentrator	P. de Napoles	486,232	Nov. 15	1677	444	61	947
Ore-concentrator	G. J. Parker and C. B. Walker	467,569	Jan. 26	2072	{ 523 } { 524 }	{ 58 }	417
Ore-concentrator	H. Scovell	468,931	Feb. 16	1601	405	58	846
Ore-concentrator	C. E. Seymour	482,322	Sept. 6	670	{ 160 } { 161 }	{ 60 }	1467
Ore-concentrator	P. R. Stanhope and F. Wood	480,860	Aug. 16	1770	443	60	950
Ore-concentrator	J. M. Thompson	471,258	Mar. 22	2510	638	58	1613
Ore-concentrator	C. R. Townsend	474,272	May 3	595	148	59	753
Ore-concentrator	C. B. Walker	480,301	Aug. 9	892	226	60	764
Ore-concentrators and allied machines. Device for operating	C. E. Seymour	487,542	Dec. 6	505	132	61	1420
Ore-concentrators. Magnetic separator for	C. E. Seymour	482,323	Sept. 6	674	161	60	1468
Ore-conveyer and arranging thereon	T. A. Edison	471,268	Mar. 22	2528	642	58	1616
Ore-conveying apparatus	T. A. Edison	474,592	May 10	1139	290	59	867

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Ore-crusher	J. Brumbangh	469,120	Feb. 16	1891	484	58	914
Ore-crusher	E. R. Gale	478,588	July 12	809	199	60	176
Ore-crusher	F. A. Ross	475,347	May 24	2333	598	59	1132
Ore crusher and grinder	N. F. Acers	482,330	Sept. 13	689	165	60	1485
Ore-crushing mill	W. H. Coward	467,368	Jan. 19	1728	442	58	344
Ore-feeder	E. A. Langford	485,501	Nov. 1	534	142	61	681
Ore-feeder	J. R. Russell	466,881	Jan. 12	941	240	58	188
Ore-pulverizer	R. D. Gates	485,864	Nov. 8	1071	285	61	807
Ore-pulverizer	W. L. Morris	474,095	May 3	336	81	59	702
Ore-pulverizer	J. A. Pearce	469,065	Feb. 16	1823	466	58	900
Ore-pulverizer	J. J. Stuart	478,209	July 5	217	54	60	45
Ore-rake	J. C. Blair	487,511	Dec. 6	458	119	61	1411
Ore. Reduction of iron	C. E. Eames	479,408	July 26	2095	60	450	
Ore-roaster. Rotary	J. E. Shettle	466,882	Jan. 12	943	241	58	189
Ore-roasting furnace	C. M. Allen	468,736	Feb. 9	1294	328 329	58	787
Ore-roasting furnace	G. F. Bartlett and A. J. O'Neill	472,848	Apr. 12	1271	325 326 327	59	254
Ore-roasting furnace	H. F. Brown	471,264	Mar. 22	2521	640 641	58	1615
Ore-roasting furnace	H. F. Brown	474,573	May 10	1113	284 285	59	862
Ore-roasting furnace	R. Pearce	488,797	Dec. 27	2554	633 634	61	1878
Ore-sampling device	R. C. Hawley	475,557	May 24	2670	679	59	1195
Ore-screening apparatus	T. A. Edison	472,753	Apr. 12	1144	293	59	229
Ore-screening apparatus	T. A. Edison	476,532	June 7	462	110	59	1528
Ore-separating machinery	C. J. Reed	466,514	Jan. 5	332	83	58	64
Ore separation. Magnetic	T. A. Edison	485,842	Nov. 8	1038	61	801	
Ore-separator	H. Cane	468,540	Feb. 9	998	255	58	527
Ore-separator	S. G. Elliott	473,066	Apr. 19	1626	415	59	335
Ore-separator	C. A. E. Meinicke	485,962	Nov. 8	1238	327	61	842
Ore-separator	C. J. Reed	466,513	Jan. 5	331	83	58	64
Ore-separator	C. J. Reed	466,515	Jan. 5	333	83	58	64
Ore-separator	H. H. Taylor	482,853	Sept. 20	1519	377	60	1659
Ore separator and amalgamator	F. J. Hoyt	484,933	Oct. 25	2227	574	61	488
Ore separator and amalgamator. Combined	G. L. Cudner	473,450	Apr. 26	2284	577	59	482
Ore separator and concentrator	G. Carson	487,248	Dec. 6	17	5	61	1324
Ore-separator. Centrifugal	O. B. Peck	479,456	July 26	2184	546 547	60	468
Ore-separator. Centrifugal	O. B. Peck	479,954	Aug. 2	220	69, 70	60	635
Ore-separator. Centrifugal	O. B. Peck	479,955	Aug. 2	222	70, 71	60	636
Ore-separator. Centrifugal	O. B. Peck	485,475	Nov. 1	500	132	61	673
Ore-separator. Magnetic	C. T. Thompson and R. H. Sanders	470,455	Mar. 8	1304	335	58	1356
Ore-separator. Magnetic	C. T. Thompson and R. H. Sanders	470,456	Mar. 8	1306	336	58	1357
Ore-slimer	E. A. Hockley	466,753	Jan. 5	710	183	58	135
Ore-treating apparatus	O. Bilbarz	469,037	Feb. 16	1786	455 456	58	893
Ore-treating apparatus	H. B. Meech	484,861	Oct. 25	2097	540	61	463
Ore treating apparatus	W. H. B. Stout	477,026	June 14	1237	299 300	59	1698
Ore triturating and amalgamating apparatus	G. L. Cudner	471,163	Mar. 22	5277	585	58	1569
Ore-washer	E. E. Crepin	468,406	Feb. 9	785	195	58	666
Ore-washer	S. C. McLanahan and W. F. Kirk	470,587	Mar. 8	1481	385	58	1392
Ore washer and concentrator	A. L. Dana	481,550	Aug. 30	2925	719 720	60	1199
Ore-washers. Picking-table for	H. G. Merry	468,951	Feb. 2	516	128	58	626
Ore-washing-machine feeding device	C. A. E. Meinicke	482,582	Sept. 13	1106	268	60	1565
Ores and like materials. Machine for classifying or sizing	T. Clarkson	472,433	Apr. 5	663	169	59	124
Ores. Apparatus for desulphurizing	J. Leede	471,618	Mar. 29	3031	771 772	58	1720
Ores. Apparatus for treating	J. D. Coplen	467,158	Jan. 19	1412	361	58	285
Ores. Apparatus for treating refractory	J. Leede	471,617	Mar. 29	3030	771	58	1720
Ores. Apparatus for treating refractory	J. Leede	471,672	Mar. 29	3115	793 794	58	1735
Ores. Bricking fine iron	T. A. Edison	485,840	Nov. 8	1036	61	801	
Ores. Concentrating	C. B. Hebron	474,829	May 17	1523	388 389	59	956
Ores. Concentrating	C. B. Hebron and C. J. Everson	471,174	Mar. 22	2382	608 609	58	1589
Ores containing hydrated sesquioxide of iron. Treating	C. Jones	480,405	Aug. 9	1056	60	394	
Ores. Extracting iron or steel or other metals from	N. Lébédoff	468,546	Feb. 9	1005	58	730	
Ores. Extracting metals from refractory	H. R. Lewis and C. B. Phillips	487,188	Nov. 29	3236	828 829	61	1287
Ores. Magnetically separating	T. A. Edison	485,841	Nov. 8	1037	61	801	
Ores. Method of and apparatus for separating	T. A. Edison	476,991	June 14	1187	288	59	1657
Ores. Method of and apparatus for separating slime or fines from water used in milling	A. M. Rouse	469,599	Feb. 23	2638	676 677	58	1065
Ores of different specific gravity. Apparatus for washing, separating and concentrating	C. Lührig	474,023	May 3	221	53	59	680
Ores of precious metals. Chloridizing	C. A. Hoyt	467,171	Jan. 19	1432	58	288	
Ores of zinc and lead. Treating sulphide	G. T. Lewis and C. V. Petraeus	481,499	Aug. 23	2441	60	1166	
Ores. Reducing	A. J. Rossi	486,941	Nov. 29	2861	61	1213	
Ores. Reducing unsmelted	J. T. Wainwright	482,213	Sept. 6	478	115	60	1429
Ores. Reduction of complex	W. C. Wetherill	484,269	Oct. 11	1139	61	245	
Ores. Roasting	C. W. Stickney	475,824	May 31	3098	784 785	59	1292
Ores. Treating and concentrating pyritiferous	J. W. Neill	472,387	Apr. 5	597	152	59	112
Ores. Treating refractory	J. Leede	471,616	Mar. 29	3029	58	1720	
Ores. Treating sulphide	G. T. Lewis and C. V. Petraeus	481,500	Aug. 23	2842	60	1166	
Organ	J. Chilleen	487,716	Dec. 13	780	200	61	1492

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Organ.....	M. Clark.....	472,032	Apr. 5	32	7	59	8
Organ.....	C. S. and W. E. Haskell.....	488,559	Dec. 27	2177	538 539	61	1803
Organ.....	J. A. Hultman.....	470,868	Mar. 15	1914	489	58	1486
Organ.....	R. Hunter.....	487,222	Nov. 29	3291	839 840	61	1296
Organ.....	H. Janes.....	469,787	Mar. 1	192	50	58	1138
Organ. Cabinet.....	M. Clark.....	484,929	Oct. 25	2221	572	61	487
Organ-coupler.....	F. W. Hedgeland.....	476,267	June 7	58	12	59	1449
Organ. Electrical.....	R. P. Strand.....	478,032	June 28	2889	721 722	59	2050
Organ-key coupler.....	J. Lloyd, Jr.....	479,434	July 26	2141	535	60	459
Organ-pedals. Attachment for.....	R. B. Shaw.....	470,709	Mar. 15	1668	431	58	1439
Organ. Pipe.....	R. W. Jackson.....	480,949	Aug. 16	1906	477 478	60	977
Organ. Pipe.....	E. S. Votey.....	468,509	Feb. 9	945	241	58	717
Organ. Reed.....	M. Clark.....	473,383	Apr. 19	2174	546 547	59	439
Organ. Reed.....	J. B. Hamilton.....	472,789	Apr. 12	1194	306 307	59	239
Organ. Reed.....	G. B. Kelly.....	488,820	Dec. 27	2587	642	61	1885
Organ. Reed.....	J. H. Lane.....	479,555	July 26	2361	529	60	501
Organ. Reed.....	J. W. Trainer.....	472,201	Apr. 5	299	79	59	56
Organ stop-action.....	J. W. Trainer.....	474,881	May 17	1599	408	59	971
Organ stop-action. Combination.....	J. Woodberry.....	481,089	Aug. 16	2138	532 533	60	1021
Organ-tremolo.....	I. Bassett.....	478,552	July 12	762	186	60	166
Organs. Bellows for.....	F. W. Hedgeland.....	470,241	Mar. 8	917	226	58	1286
Organs. Blowing apparatus for.....	F. W. Hedgeland.....	470,242	Mar. 8	918	227	58	1286
Organs. Detachable keyboard for.....	F. W. Hedgeland.....	469,243	Feb. 23	2056	536	58	959
Organs. Flue-pipe in reed and pipe.....	G. W. Scribner.....	467,337	Jan. 19	1688	432	58	337
Organs. Folding keyboard for.....	F. W. Hedgeland.....	469,242	Feb. 23	2055	536	58	959
Organs. Fresh-wind box for pipe.....	E. S. Votey and W. D. Wood.....	475,832	May 31	3112	788 789	59	1294
Organs. Hydraulic motor for.....	J. W. Johnson.....	475,776	May 31	3007	763	59	1274
Organs into action. Device for throwing couplers of.....	F. W. Hedgeland.....	476,266	June 7	57	12	59	1449
Organs. Octave-coupler for folding keyboards for.....	F. W. Hedgeland.....	469,699	Mar. 1	45	14	58	1107
Organs. Pneumatic action for.....	F. W. Hedgeland.....	476,796	June 14	867	214	59	1623
Organs. Pneumatic action for.....	F. W. Hedgeland.....	488,607	Dec. 27	2259	560	61	1820
Organs. Pneumatic action for.....	J. Peloubet.....	487,767	Dec. 13	868	220 221	61	1511
Organs. Qualifying-box for bass-reeds of.....	F. W. Hedgeland.....	472,998	Apr. 19	1519	388	59	316
Organs. Swinging treadle for.....	W. E. Sleight.....	481,976	Sept. 6	83	21	60	1351
Organs. Wind-chest for pipe.....	E. S. Votey and W. D. Wood.....	475,831	May 31	3110	787 788	59	1294
Ornament. Ceiling.....	N. Therien.....	488,531	Dec. 26	2141	530	61	1740
Ornamental surfaces. Producing.....	J. S. Green.....	467,229	Jan. 19	1513	387	58	304
Oscillating engine.....	J. Moss.....	479,012	July 19	1458	362 363	60	313
Oscillating gate.....	C. Terry.....	466,381	Jan. 5	114	32	58	24
Oven.....	G. R. Moon.....	476,201	June 7	92	21	59	1456
Oven. Baker's.....	W. Lenderoth.....	475,403	May 24	2415	616	59	1147
Oven. Baker's.....	A. D. Ordway.....	475,045	May 17	1860	472	59	1022
Oven. Baker's.....	J. J. Pfenniger.....	473,018	Apr. 19	1550	395	59	321
Oven. Baker's.....	G. R. Skillman.....	487,431	Dec. 6	330	84 85 86	61	1387
Oven. Baking.....	P. Pfeiderer and H. Werner.....	487,638	Dec. 6	648	166 167	61	1450
Oven. Electric.....	J. V. Capek.....	470,419	Mar. 8	1237	316	58	1343
Oven. Electrically-heated.....	J. V. Capek.....	470,418	Mar. 8	1235	316	58	1343
Oven-plate.....	I. Brooke.....	487,911	Dec. 13	1109	277	61	1558
Oven. Portable.....	W. O. Silvey.....	475,161	May 17	2038	514	59	1057
Oven reels. Automatic stop for cracker.....	P. G. Forsberg.....	467,536	Jan. 26	2013	510	58	407
Oven. Rotary.....	P. C. H. Rudd.....	485,300	Nov. 1	217	61, 62	61	617
Oven screen or mat.....	J. E. Brusco.....	474,364	May 10	783	204	59	799
Oven shield. Baking.....	K. C. Munson.....	484,539	Oct. 18	1568	398	61	341
Overalls.....	J. H. Fitz.....	471,789	Mar. 29	3319	845	58	1773
Overalls.....	G. J. H. Frank.....	467,931	Feb. 2	46	11	58	534
Overcheck-bit.....	H. W. Sisson.....	469,190	Feb. 16	1997	509	58	935
Overseam.....	W. Raechle.....	480,783	Aug. 16	1635	414	60	927
Overseam for fabrics.....	J. G. Greene.....	472,117	Apr. 5	170	46	59	32
Overshoe.....	L. N. Garcia.....	471,476	Mar. 22	2842	723	58	1677
Overshoe retainer. Rubber.....	M. T. Frisbie.....	488,194	Dec. 20	1584	397	61	1671
Ox-shoe.....	W. Pearce.....	471,513	Mar. 22	2885	734	58	1685
Oxides of metals. Apparatus for manufacturing.....	W. H. Birge.....	468,216	Feb. 2	463	114 115	58	616
Oxidizing apparatus.....	E. A. Rusden.....	485,357	Nov. 1	323	86, 87	61	638
Oxychinoline sulphate. Preparing.....	J. Ziegler.....	466,708	Jan. 5	624	58	120	
Oyster-dredge windlass.....	J. C. and S. Lake.....	485,635	Nov. 8	735	193	61	739
Oyster-knife.....	J. S. Wood.....	469,312	Feb. 23	2197	563	58	979
Oyster-washing machine.....	W. N. Macqueen.....	477,134	June 14	1414	344	59	1732
Oysters. Apparatus for making fried.....	F. F. Warthen.....	481,337	Aug. 23	2585	635	60	1116
Ozone-generating apparatus.....	C. C. Sharp.....	481,676	Aug. 30	3120	762	60	1235
Ozone-machine.....	F. M. Grumbacher.....	470,425	Mar. 8	1250	320	58	1346
Ozone-tube.....	O. Frölich.....	487,390	Dec. 6	248	67	61	1369
Package.....	A. Baker.....	483,523	Oct. 4	6	2	61	4
Package adapted for automatic delivery.....	A. H. Fancher.....	474,167	May 3	433	104	59	722
Package-carrier.....	C. E. Baldwin.....	473,897	May 3	3	1	59	637
Package-carrier.....	F. H. Palmer.....	480,618	Aug. 9	1397	348	60	861
Package-carrier.....	W. Stone.....	473,531	Apr. 26	2417	613	59	507
Package-carriers. Machine for making.....	C. B. Morse.....	487,679	Dec. 6	717	163	61	1462
Package-case.....	W. Young.....	472,008	Mar. 29	3619	924	58	1833
Package for pulverized substances.....	J. Bina.....	481,521	Aug. 23	2870	705	60	1172

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Package-wrapper	W. J. Acheson	483,198	Sept. 27	2076	524	60	1782
Packages. Sling for	F. Hohorst	471,861	Mar. 29	3419	873	53	1793
Packing	R. G. Ferguson	487,260	Dec. 6	33	11	61	1328
Packing	J. C. F. Jones	475,870	May 31	3171	805	59	1307
Packing	T. W. Welsh	480,643	Aug. 9	1436	358	60	869
Packing-box and savings-bank. Combination-lock	J. B. Morris	472,136	Apr. 5	199	53, 54	59	37
Packing-case	G. W. Banker	482,715	Sept. 20	1315	321	60	1617
Packing-case	J. Chase	483,991	Oct. 11	709	178	61	160
Packing-case	G. B. Hussey	469,942	Mar. 1	440	110	58	1185
Packing-case	S. Mueller, A. R. Matchett, and W. Eggers.	474,755	May 10	1391	352	59	917
Packing-case. Folding	E. T. Stohlman and W. E. Windmiller.	467,728	Jan. 26	2320	569	58	463
Packing. Corrugated	R. H. Thompson	479,999	Aug. 2	371	92	60	451
Packing device. Valve	E. P. Holly	473,554	Apr. 26	2451	620	59	513
Packing for builders' use	S. Cabot	488,869	Dec. 27	2667	660	61	1902
Packing for piston or other rods	F. Pinch	483,013	Sept. 20	1790	451	60	1712
Packing goods	W. G. Chapin	484,628	Oct. 18	1700	431	61	368
Packing-jar	J. W. Meyer	483,258	Sept. 27	2202	553	60	1804
Packing. Lubricating	B. Edgar	485,265	Nov. 1	166	48	61	607
Packing-machine	E. M. Thompson	487,355	Dec. 6	192	52, 53	61	1359
Packing-machine sack-case	E. M. Thompson	486,960	Nov. 29	2885	745	61	1218
Packing material. Package of corrugated	W. G. Chapin	484,627	Oct. 18	1698	431	61	367
Packing. Metallic	W. H. Bodfish	480,943	Aug. 16	1892	474	60	974
Packing. Metallic	W. T. Harris	473,313	Apr. 19	2046	513	59	414
Packing. Metallic	S. H. Mosher and C. L. Anderson	471,185	Mar. 22	2401	612	58	1592
Packing. Metallic rod	J. C. Chapman	481,662	Aug. 30	3101	756	60	1232
Packing. Metallic rod	G. R. Dolf	477,741	June 28	2424	606	59	1962
Packing. Piston	F. N. Ethridge	484,188	Oct. 11	995	254	61	217
Packing. Piston	F. N. Ethridge	485,407	Nov. 1	401	107	61	654
Packing. Piston	J. Richards	487,494	Dec. 6	431	111	61	1406
Packing. Piston	A. A. Tripold and C. F. Davenport.	473,182	Apr. 19	1839	463	59	372
Packing. Piston-rod	J. B. Houston	488,434	Dec. 20	1979	494	61	1748
Packing. Piston-rod	C. C. Jerome	467,105	Jan. 12	1314	333	58	250
Packing-receptacle	H. L. Boswell	476,223	May 31	3747	946	59	1419
Packing. Rod	R. Carlin	478,919	July 12	1304	325	60	273
Packing. Rod	C. L. Cook	481,105	Aug. 16	2170	537	60	1026
Packing. Rod	G. W. Knowlton	487,019	Nov. 29	2974	766	61	1234
Packing. Rod	F. P. and J. T. Martin	470,301	Mar. 8	1030	254	58	1308
Packing. Rod	F. P. and J. T. Martin	470,302	Mar. 8	1036	264	58	1309
Packing. Rod	F. P. and J. T. Martin	470,303	Mar. 8	1038	265	58	1309
Packing. Rod	F. P. and J. T. Martin	470,304	Mar. 8	1042	265	58	1310
Packing. Rod	F. P. and J. T. Martin	470,305	Mar. 8	1045	266	58	1310
Packing. Rod	J. H. Shephard	468,730	Feb. 9	1283	326	58	766
Packing. Rod	E. H. Stone	471,577	Mar. 29	2973	758	58	1710
Packing. Steam-joint	J. G. Broman	477,640	June 28	2271	569	59	1929
Packing-tool	J. F. Lynch	473,008	Apr. 19	1535	391	59	319
Pad:							
See Absorbent pad.	Duplicating flat pad.						
Blotting-pad.	Harness-pad.						
Blowpipe-pad.	Heating-pad.						
Collar-pad.	Hoof-pad.						
Copying-pad.	Horseshoe-pad.						
Dental moistening-pad.	Moistening-pad.						
Dress-pad.	Saddle-pad.						
Pad-support and pencil-holder. Combined	Writing-pad.						
Paddle-wheel boat	G. W. Fisher	470,668	Mar. 15	1608	417	58	1427
Paddle-wheel. Feathering	J. S. Baker	482,115	Sept. 6	313	74	60	1396
Paddle-wheel. Feathering	C. H. McCready	482,455	Sept. 13	901	218	60	1523
Paddle-wheel. Feathering	F. E. and H. A. Pirrung	469,020	Feb. 16	1765	450	58	889
Paddle-wheel. Feathering	J. Polkowski	486,502	Nov. 22	2100	555	61	1046
Paddle-wheel. Feathering	G. T. Riguel	479,528	July 26	2307	576	60	491
Paddle-wheel for steamers	J. Howard	481,662	Aug. 30	3109	759	60	1233
Paddle-wheel. Recessed	J. S. Baker	480,225	Aug. 2	754	190	60	725
Padlock	V. P. Brown	482,070	Sept. 6	239	58	60	1382
Padlock	R. J. Colvin	487,608	Dec. 6	595	153	61	1440
Padlock	E. T. Fraim	478,850	July 12	1207	300	60	255
Padlock	E. T. Fraim	479,414	July 26	2107	527	60	452
Padlock	W. Hover	471,482	Mar. 22	2848	725	58	1678
Padlock	E. A. Judd	483,383	Sept. 27	2388	600	60	1839
Padlock	E. A. Judd	484,895	Oct. 25	2158	555	61	475
Padlock	C. A. Larson	473,192	Apr. 19	1854	467	59	375
Padlock	R. J. Myers	468,113	Feb. 2	308	74	58	583
Padlock	J. B. Price	473,866	Oct. 4	513	139	61	107
Padlock	F. W. Schultze	486,685	Nov. 22	2391	625	61	1103
Padlock	S. R. Slaymaker	476,495	June 7	413	98	59	1518
Padlock	W. F. Troast	467,528	Jan. 26	1991	505	58	403
Padlock	W. F. Troast	470,268	Mar. 8	953	236	59	1293
Padlock	W. F. Troast and S. R. Slaymaker	488,231	Dec. 20	1655	413	61	1685
Padlock	N. J. Zell	481,458	Aug. 23	2773	683	60	1152
Padlock. Combination	E. P. Caldwell	473,059	Apr. 19	1615	412	59	333
Padlock. Combination	H. H. Daniels	481,551	Aug. 30	2926	720	60	1199
Padlock. Combination	J. J. Deal	486,666	Nov. 22	2364	618	61	1087
Padlock. Permutation	F. M. Beard and F. P. Shepard	470,389	Mar. 8	1194	305	58	1335
Padlock. Permutation	W. H. Bolthoff	488,516	Dec. 20	2109	523	61	1776
Padlock. Permutation	J. J. Deal	486,665	Nov. 22	2362	618	61	1097
Padlock. Permutation	J. H. Hunter	467,506	Jan. 26	1947	497	58	395
Padlock. Permutation	W. B. Thomson	488,800	Nov. 22	2577	672	61	1140
Pail and strainer. Combined milk	F. and G. W. Ansley	475,375	May 24	2373	607	59	1140
Pail, bucket, scuttle, &c	G. N. Inglehart	471,121	Mar. 22	2303	591	58	1574
Pail. Dinner	H. B. Adams	468,011	Feb. 2	161	39	58	555

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Pail-holder.....	O. J. Thomas.....	468,161	Feb. 2	385	95	58	599
Pail, pan, washboiler, &c.....	T. D. Brown.....	480,555	Aug. 9	1290	323	60	840
Pail. Sanitary.....	C. Baron.....	483,036	Sept. 20	1821	463	60	1719
Pail. Scrubbing.....	J. E. Zeiser.....	475,429	May 24	2460	627	59	1155
Pail. Slop.....	K. E. Mann.....	468,571	Feb. 9	1047	266	58	737
Paint.....	S. P. Citizen.....	479,785	Aug. 2	19	.....	60	586
Paint.....	E. W. Grafton.....	471,970	Mar. 29	3563	.....	58	1823
Paint.....	W. B. Grover.....	469,634	Feb. 23	2673	.....	58	1075
Paint.....	J. Haake.....	473,391	Apr. 19	2193	.....	59	443
Paint.....	J. C. Martin.....	468,402	Feb. 9	782	.....	58	685
Paint.....	J. H. Palmer. (Reissue).....	11,255	July 26	2724	.....	60	570
Paint.....	C. H. Reaney.....	474,693	May 10	1303	.....	59	899
Paint and varnish cup.....	S. R. Wilmot.....	478,831	July 12	1187	294	60	250
Paint. Antifouling.....	A. L. Munson.....	488,479	Dec. 20	2053	.....	61	1764
Paint-can.....	C. M. Symonds.....	467,290	Jan. 19	1613	411	58	323
Paint compound.....	W. B. Frederick.....	477,110	June 14	1377	.....	59	1725
Paint. Fire and water proof.....	C. H. McAlpine.....	467,106	Jan. 12	1315	.....	58	259
Paint. Fireproof.....	W. Chureh.....	478,785	July 12	1111	.....	60	235
Paint. Fireproof.....	W. S. Hill.....	484,714	Oct. 18	1835	.....	61	395
Paint. Fireproof.....	R. W. Lamprey.....	483,307	Sept. 27	2272	.....	60	1817
Paint for tin, iron, wood-work, &c.....	C. H. Vaughn.....	466,812	Jan. 12	817	.....	58	165
Paint-mixer.....	P. Faust.....	484,851	Oct. 25	2085	536	61	460
Paint or varnish from wood. Composition for removing.....	G. L. Ball.....	488,416	Dec. 20	1959	.....	61	1744
Paint-pigment.....	F. L. Bartlett.....	477,488	June 21	2005	.....	59	1860
Paint-pigment from ores. Producing.....	N. B. Smith and C. P. Ludwig.....	485,063	Oct. 25	2425	623	61	527
Paint-pot.....	W. B. Deming and H. C. Fuller.....	482,082	Sept. 6	262	63	60	1387
Paint. Producing patterns or drawings on oil.....	F. A. Laesecke.....	469,045	Feb. 16	1797	.....	58	895
Paints, &c. Sample of.....	F. H. Rose. (Reissue).....	11,226	Feb. 23	2745	705	58	1090
Painting barbed-wire fences. Machine for.....	J. R. Smith.....	483,503	Sept. 27	2543	639	60	1871
Painting-machine.....	E. Armitage.....	478,145	Feb. 2	360	89	58	594
Painting with distemper and other colors.....	A. Pereira.....	481,282	Aug. 23	493	.....	60	1101
Palette. Artist's adjustable.....	M. R. Fowlkes.....	486,710	Nov. 22	2435	634	61	1112
Pan:							
See Ash-pan. Evaporating-pan.							
Baking-pan. Frying-pan.							
Bed-pan. Grinding-pan.							
Broiling-pan. Stew-pan.							
Cooking-pan. Vacuum-pan.							
Dust-pan.							
Pan-conveying device.....	W. T. Harper.....	474,340	May 3	734	{ 191 192 }	59	778
Pan-cover.....	H. Hollandt.....	487,443	Dec. 6	359	93	61	1392
Pan handle. Stew.....	G. Mössner.....	468,710	Feb. 9	1258	320	58	720
Pans. Catch for bake.....	J. F. Barber and J. Stevens.....	466,915	Jan. 12	993	254	58	198
Panorama.....	H. P. Motte.....	487,490	Dec. 6	426	{ 109 110 }	61	1405
Pantaloons-hanger.....	C. T. N. Engels.....	477,170	June 14	1475	361	59	1746
Pantograph.....	L. Coté.....	469,775	Mar. 1	170	46	58	1133
Pantograph-bar.....	N. T. Hartshorn.....	469,420	Feb. 23	2366	607	58	1013
Pantograph tracing and engraving machine.....	J. Bryce and A. Knox.....	481,893	Aug. 30	3487	{ 854 855 }	60	1307
Paper and composition for coating the same. Transfer.....	W. Schwartz.....	478,892	July 12	1261	.....	60	265
Paper. Apparatus for severing sheets from webs of.....	J. L. Cox.....	478,409	July 5	540	132	60	106
Paper bag.....	C. W. Fishel.....	467,088	Jan. 12	1270	322	58	250
Paper-bag-closing device.....	F. O. Paige.....	468,257	Feb. 2	534	132	58	628
Paper bag. Compartment.....	W. A. Lorenz.....	466,723	Jan. 5	667	171	58	126
Paper bag. Compartment.....	W. A. Lorenz.....	471,254	Mar. 22	2505	635	58	1612
Paper bag. Compartment.....	W. A. Lorenz.....	471,255	Mar. 22	2506	636	58	1612
Paper bag. Compartment.....	W. A. Lorenz.....	471,256	Mar. 22	2508	{ 636 637 }	58	1613
Paper bag. Compartment.....	W. A. Lorenz.....	471,257	Mar. 22	2509	637	58	1613
Paper-bag holder.....	H. F. Elton and J. W. Cadwell.....	482,056	Sept. 6	218	52	60	1378
Paper-bag machine.....	F. L. Baker.....	484,281	Oct. 11	1156	294	61	248
Paper-bag machine.....	I. T. Elst and H. P. Fiester.....	467,553	Jan. 26	2051	{ 518 519 }	58	413
Paper-bag machine.....	A. C. Getten.....	481,650	Aug. 30	3081	752	60	1228
Paper-bag machine.....	A. C. Getten.....	482,170	Sept. 6	413	98	60	1416
Paper-bag machine.....	W. Liddell.....	487,225	Nov. 29	3296	841	61	1297
Paper-bag machine.....	A. L. Stevens.....	467,776	Jan. 26	2390	607	58	477
Paper-bag machines, &c. Mechanism for delivering bags from.....	A. C. Getten.....	485,006	Oct. 25	2338	{ 602 603 }	61	510
Paper-bag machinery.....	C. B. Stilwell.....	473,977	May 3	144	33, 34	59	665
Paper bag or envelope.....	G. W. Weber.....	488,783	Dec. 27	2532	628	61	1874
Paper bags. Manufacture of.....	J. West.....	467,862	Dec. 13	1032	258	61	1543
Paper-binding machine.....	E. T. Greenfield.....	488,735	Dec. 27	2457	611	61	1859
Paper-board tubs. Manufacture of.....	W. W. McEwan.....	481,239	Aug. 23	2404	593	60	1085
Paper box.....	J. E. Baker.....	476,237	June 7	2	1	59	1439
Paper box.....	R. P. Brown.....	468,593	Feb. 9	1075	275	58	742
Paper box.....	J. E. Burke.....	488,059	Dec. 13	1370	340	61	1612
Paper box.....	O. H. Hicks.....	487,528	Dec. 6	485	127	61	1417
Paper box.....	W. B. Howe.....	482,480	Sept. 13	936	228	60	1530
Paper box.....	P. Lindemeyer.....	466,792	Jan. 12	783	203	58	158
Paper box.....	P. Lindemeyer.....	476,661	June 7	653	158	59	1566
Paper box.....	H. S. Munson.....	467,336	Jan. 19	1687	432	58	337
Paper box.....	T. F. W. Schmidt.....	483,502	Sept. 27	2542	639	60	1870
Paper box.....	J. A. Scott.....	471,400	Mar. 22	2725	695	58	1655
Paper-box blanks. Corner-cutter for.....	E. H. Taylor.....	473,859	Apr. 26	2945	{ 742 743 }	59	609
Paper box for chess, checkers, &c.....	J. C. Koch.....	476,019	May 31	3402	858	59	1352
Paper box. Knockdown.....	E. M. Scott.....	474,610	May 10	1166	296	59	872
Paper-box machine.....	C. E. Powell.....	487,771	Dec. 13	876	222	61	1512

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paper-box machine.....	J. G. Young, Jr.....	471,930	Mar. 29	3512	{ 897 898 }	58	1812
Paper-box-trimming machine.....	G. P. Salisbury.....	466,374	Jan. 5	100	29, 30	58	22
Paper boxes. Machine for making.....	J. Godfrey.....	483,957	Oct. 4	652	163	61	135
Paper boxes. Machine for making.....	G. P. Salisbury.....	470,414	Mar. 8	1329	{ 314 315 }	58	1342
Paper. Cabinet for toilet.....	J. T. Hoyt.....	476,644	June 7	629	152	59	1562
Paper cabinet. Toilet.....	J. T. Hoyt.....	478,863	July 12	1222	303	60	257
Paper-calendering machine.....	P. Dillon.....	485,534	Nov. 1	579	156	61	691
Paper can.....	A. T. Cwerdinski.....	485,158	Oct. 25	2570	659	61	557
Paper caps, capsules, &c. Machine for making plaited.....	J. Lackner.....	470,335	Mar. 8	1160	220	58	1319
Paper carpet.....	M. G. Faulkner.....	485,921	Nov. 8	1167	.....	61	827
Paper case. Toilet.....	I. M. Lowengrund.....	477,215	June 21	1564	384	59	1776
Paper coloring or moistening device.....	E. Housman.....	476,204	May 31	3707	936	59	1412
Paper-cutter.....	A. L. Karshner.....	478,935	July 12	1327	{ 329 330 }	60	278
Paper-cutter.....	A. Malm.....	474,341	May 3	735	192	59	778
Paper-cutter.....	B. J. Pavver and T. Burns.....	485,586	Nov. 1	662	176	61	709
Paper cutter. Roll.....	W. S. Mendenhall.....	488,129	Dec. 13	1474	372	61	1633
Paper cutter. Wrapping.....	H. Rosamyer, Jr.....	467,201	Jan. 19	1475	377	58	297
Paper cutting and trimming machine.....	J. J. Manning.....	480,111	Aug. 2	555	140	60	688
Paper-cutting device.....	J. C. Coram and F. D. Huntoon.....	475,722	May 24	2918	741	59	1243
Paper-cutting machine.....	C. Coates and C. E. Perry.....	467,082	Jan. 12	1261	319	58	248
Paper-cutting machine.....	R. D. Crawford.....	482,228	Sept. 6	499	119	60	1433
Paper-cutting machine.....	G. W. Evans.....	475,761	May 31	2982	756	59	1269
Paper-cutting machine.....	J. H. Horne and C. E. Barrett.....	487,739	Dec. 13	824	{ 210 211 }	61	1501
Paper-cutting machine.....	A. Malm.....	483,935	Oct. 4	614	155	61	127
Paper-cutting machine.....	B. J. Pavver and T. Burns.....	479,302	July 19	1900	475	60	397
Paper-cutting machine gage.....	W. B. Sheffield.....	466,430	Jan. 5	191	50	58	37
Paper-dampening machine.....	E. T. Fisher.....	483,738	Oct. 4	320	80, 81	61	67
Paper-delivering tip.....	L. M. Moores.....	471,221	Mar. 22	2461	625	58	1604
Paper. Device for punching webs of.....	J. Boyer.....	477,402	June 21	1868	460	59	1833
Paper drying and cutting apparatus.....	G. T. Leonhard.....	478,975	July 12	1395	{ 344 345 }	60	290
Paper-fastener.....	S. P. Denison.....	487,440	Dec. 6	352	90	61	1391
Paper-fastener.....	J. H. Lynch.....	470,383	Mar. 8	1182	303	58	1334
Paper-fastener.....	W. H. Ratcliff.....	467,471	Jan. 19	1888	481	58	376
Paper-fastenings. Apparatus for applying.....	J. B. Diver.....	486,190	Nov. 15	1611	428	61	934
Paper-feeder.....	F. Hart.....	487,526	Dec. 6	481	{ 126 127 }	61	1416
Paper-feeder. Automatic.....	R. Burnet and T. S. Crane.....	467,128	Jan. 12	1353	345	58	266
Paper feeding and cutting mechanism.....	R. T. Johnston.....	481,497	Aug. 23	2838	698	60	1166
Paper-feeding apparatus.....	J. W. Hutt and A. J. Phillips.....	478,329	July 5	5	102	60	84
Paper-feeding device.....	J. C. Coram and F. D. Huntoon.....	475,723	May 24	2920	742	59	1214
Paper-feeding machine.....	T. A. Briggs.....	469,932	Mar. 1	423	{ 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	58	1182
Paper-feeding machine.....	T. A. Briggs.....	480,447	Aug. 9	1125	{ 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000	60	806
Paper-feeding machine.....	T. A. Briggs.....	487,513	Dec. 6	460	{ 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 23		

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Paper-machine drier	T. Lindsay	480,407	Aug. 9	1058	265	60	794
Paper, &c. Machine for applying adhesive material to the surface of	J. M. Carew	475,535	May 24	2631	669	59	1188
Paper. Machine for cutting and delivering printed	W. Scott	470,308	Mar. 8	1055	267	58	1311
Paper, &c. Machine for feeding and cutting	W. G. Chapin	475,931	May 31	3369	825	59	1325
Paper. Machine for surface-coating	C. M. Gage	486,638	Nov. 22	2319	606	61	1088
Paper. Machine for the manufacture of lace	B. Karhof	484,966	Oct. 25	2271	586	61	497
Paper-machine suction mechanism	J. Reynolds	483,329	Sept. 27	2306	580	60	1824
Paper-machine suction-roll	E. B. Benham	483,340	Sept. 27	2318	583	60	1826
Paper-machines. Save-all for	G. C. F. Smidth	467,775	Jan. 26	2328	607	58	477
Paper-making machine	A. Aldrich	471,631	Mar. 29	3052	777	58	1724
Paper-making machine	L. P. Clawson	485,575	Nov. 1	648	172	61	706
Paper-making machine	E. E. Johnson	480,770	Aug. 16	1637	410	60	923
Paper-making machine	L. Lee	476,153	May 31	3620	915	59	1396
Paper. Means for coloring	W. N. Cornell	486,629	Nov. 22	2305	602	61	1085
Paper. Means for preventing spots in	R. W. Allan	480,446	Aug. 9	1123	280	60	806
Paper. Mechanism for delivering and cutting roll	D. L. Goff	478,231	July 5	263	65	60	54
Paper. Mechanism for delivering and cutting roll	D. L. Goff	486,102	Nov. 15	1484	391	61	909
Paper. Mechanism for delivering and cutting roll	D. L. Goff	486,103	Nov. 15	1486	391	61	910
Paper-mill suction apparatus	E. Sanderson and F. C. Base	478,290	July 5	362	88	60	73
Paper or analogous tubing. Making	E. T. Greenfield	477,593	June 21	2169	538	59	1893
Paper or other fabric from rolls. Apparatus for feeding	E. H. Cottrell	477,352	June 21	1785	436	59	1817
Paper or other fabrics. Apparatus for coating	G. I. Feldon	470,115	Mar. 1	706	175	58	1236
Paper or other substances into sheets. Machinery or apparatus for cutting	A. and R. J. Edwards	473,731	Apr. 26	2746	691	59	570
Paper package. Toilet	O. H. Hicks	468,534	Feb. 9	991	253	58	726
Paper pails. Hot-pressing machine for	U. Hull and W. W. McEwan	471,996	Mar. 29	3602	920	58	1829
Paper piano-cover	R. M. Webb	471,043	Mar. 15	2174	559	58	1537
Paper-polishing machine	A. W. Case	468,436	Feb. 9	822	207	58	693
Paper-polishing machine	H. E. Rogers	478,762	July 12	1067	265	60	228
Paper-pulp. Apparatus for manufacturing	J. B. Carter	479,243	July 19	1819	456	60	351
Paper-pulp. Apparatus for the manufacture of	R. N. Redmayne	483,870	Oct. 4	520	130	61	108
Paper-pulp digester	C. Curtis and N. M. Jones	484,939	Oct. 25	2328	601	61	508
Paper-pulp digester	C. Curtis and N. M. Jones	485,000	Oct. 25	2330	601	61	508
Paper-pulp digester	C. Curtis and N. M. Jones	485,808	Nov. 8	986	265	61	791
Paper-pulp digester	C. Curtis and N. M. Jones	485,809	Nov. 8	987	265	61	792
Paper-pulp digester	C. Curtis and N. M. Jones	485,810	Nov. 8	989	265	61	792
Paper-pulp. Machine for making tubes from	E. Metzger	488,149	Dec. 13	1501	377	61	1638
Paper-pulp. Making	N. H. Brokaw	474,944	May 17	1697		59	992
Paper-pulp screen	E. W. Goodrick	475,041	May 17	1853	470	59	1021
Paper-reel	W. R. Farnsworth	471,788	Mar. 29	3317	845	58	1773
Paper-roll fixture	O. H. Hicks	469,855	Mar. 1	304	79	58	1160
Paper-roll holder and cutter. Knockdown	A. S. Beach and A. Booth	481,839	Aug. 30	3404	836	60	1290
Paper-rolling machine	J. Schilling	468,728	Feb. 9	1281	326	58	785
Paper. Safety	A. Schlumberger	481,770	Aug. 30	3293	801	60	1270
Paper-separating mechanism	T. A. Briggs	467,514	Dec. 6	463	121	61	1412
Paper separating or feeding machine	A. Sedgwick	469,366	Feb. 23	2275	584	58	996
Paper sheets in quantity. Appliance for holding	T. J. Vincentz	473,099	Apr. 19	1675	425	59	343
Paper slitting and winding machine	A. P. Brown	484,173	Oct. 11	978	250	61	214
Paper-slitting machine	L. P. Clawson and J. A. Keller	479,349	July 19	1983	497	60	415
Paper slot-machine. Toilet	F. E. Housh	471,705	Mar. 29	3164	807	58	1745
Paper slot-machine. Toilet	F. E. Housh	488,500	Dec. 20	2086	518	61	1771
Paper-stock grinding-machine	M. H. Simonet	484,056	Oct. 11	800	202	61	179
Paper-stock washer	W. Moorhouse	476,066	June 28	2940	734	59	2059
Paper-supplying device. Coin-controlled	J. S. Ford, Jr., and G. H. Lockhart	467,893	Jan. 26	2580	653	58	512
Paper. Toilet	E. Jerome	478,869	July 12	1228	305	60	258
Paper. Toilet or wrapping	E. N. Cummings	487,026	Nov. 29	2985	769	61	1236
Paper-tube-making machine	J. C. Coram and F. D. Huntoon	475,721	May 24	2911	738	59	1242
Paper-tube sizing and polishing machine	A. C. Hehbs and C. R. Richards	480,017	Aug. 2	407	102	60	659
Paper tubes. Composition coating for	S. Bergmann	482,718	Sept. 20	1318	322	60	1618
Paper tubes. Machine for making	P. Carey	488,384	Dec. 20	1903	476	61	1733
Paper-weight	C. Dickenson	471,508	Mar. 22	1880	733	58	1684
Paper-weight	P. S. Townsend	470,222	Mar. 8	891	920	58	1281
Paper-weight and calendar. Combined	A. D. Palmer	485,133	Oct. 25	2523	649	61	548
Paper-weight, letter-scale, and calendar. Combined	J. B. Price	476,067	May 31	3477	877	59	1369
Paper-wrapping machine	J. F. Linthicum	478,345	July 5	442	109	60	88
Parallel bars	T. Peterson	481,509	Aug. 23	2852	701	60	1168
Parcel-carrier	C. Caplis	473,566	Apr. 26	2492	630	59	522
Parcel-carrier	S. R. Smith	473,433	Apr. 19	2248	566	59	453
Parcel-holder or advertising-valise	D. W. Long and C. Dimick	476,803	June 14	877	216	59	1625
Parchmentized fiber. Apparatus for making cylindrical rods of	R. P. Frist	469,238	Feb. 23	2081	535	58	958
Parchmentized-fiber tubes. Manufacture of	R. P. Frist	485,408	Nov. 1	402	103	61	655
Parser and corer	P. T. Gates	481,528	Aug. 23	2887	709	60	1176
Parser and corer. Apple	C. A. Benton	486,424	Nov. 22	1901	528	61	1024
Parser, corer, and cutter. Apple	E. H. Elliott	473,621	Apr. 26	2585	651	59	539
Parser, corer, and slicer. Combined apple	A. J. Greeley	468,800	Feb. 16	1395	354	58	817
Partition	A. J. Wells	477,829	June 28	2367	643	59	1987
Partition or ceiling. Fireproof	C. F. W. Doehring	478,318	July 5	405	97	60	81
Parturition-shears	W. L. and J. C. Drinkwater	487,068	Nov. 29	3045	781	61	1249
Passenger-recorder for public vehicles	J. M. O'Kelly	478,016	June 28	2862	716	59	2045

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Passenger-register. Automatic	D. L. Tower	468,845	Feb. 16	1462	{ 373 374 }	58	830
Paste-making machine	F. H. Shepherd	476,320	June 7	145	35	59	1466
Pasting-machine. Bindery	J. L. Dennis	481,258	Aug. 23	2449	603	60	1093
Pasting-machines. Automatic fountain for	C. E. Newell	470,164	Mar. 1	781	193	58	1250
Pastry-board	G. B. Pooler	469,595	Feb. 23	2634	675	58	1065
Pastry-fork	A. M. Mangin	470,005	Mar. 1	544	135	58	1204
Pastry-rack. Portable	C. F. Jesser	481,404	Aug. 23	2626	660	60	1135
Pattern:							
<i>See</i> Adjustable pattern. Trousers-pattern.							
Pattern. Adjustable	B. Musse	487,760	Dec. 13	860	218	61	1509
Pattern for drafting garments	J. H. Choquette	484,138	Oct. 11	913	234	61	201
Pattern for drafting garments. Adjustable	J. C. Cupler	487,237	Nov. 29	3315	{ 851 852 }	61	1305
Patterns on zinc-coated plates. Producing definite	W. B. Spear	484,472	Oct. 18	1459	371	61	319
Pavement	J. A. Chanler	475,234	May 17	2154	545	59	1080
Pavement	J. A. Chanler	475,235	May 17	2156	546	59	1080
Pavement	R. D. Duff	480,183	Aug. 2	678	171	60	710
Pavement	E. Hill	479,002	July 19	1442	358	60	310
Pavement-block. Artificial	D. P. Sanders	486,356	Nov. 15	1878	494	61	988
Pavement. Brick	J. R. Haldeman	481,756	Aug. 30	3267	795	60	1264
Pavement. Street	G. S. Curtis	475,724	May 24	2923	742	59	1244
Pavements. Noise-deadening cover for openings in	C. W. Fowler	469,501	Feb. 23	2493	639	58	1036
Paving apparatus. Asphalt	A. H. Perkins	476,814	June 14	898	{ 220 221 }	59	1630
Paving-block	S. Breden and J. Sheridan	475,924	May 31	3260	822	59	1323
Paving-block	H. Brunson	469,229	Feb. 23	2069	532	58	956
Paving-block	M. Levi	466,351	Jan. 5	65	17	58	15
Paving-block	L. A. Steiger	468,839	Feb. 16	1454	371	58	828
Paving-blocks. Material for the manufacture of	N. T. Barnes	467,492	Jan. 26	1924	58	58	391
Pavilion. Rotary	C. M. Hollingsworth	474,659	May 10	1245	318	59	887
Pea huller or sheller	J. H. Empson	486,441	Nov. 22	2016	535	61	1029
Peach cutter and stoner	J. H. Smith	474,927	May 17	1668	426	59	986
Peanut-cleaner	J. H. and J. L. Woolard	474,893	May 17	1619	{ 413 414 }	59	976
Peanut-heater	E. Tannay	478,721	July 12	993	246	60	214
Pearl, &c. Implement for cutting	F. Wilkie	484,075	Oct. 11	825	209	61	184
Pearl ribbons. Manufacturing	O. Fritzsche	473,309	Apr. 19	2040	512	59	413
Pegging-jack	W. M. Jones	476,650	June 7	639	155	59	1563
Pegging-jack	D. Whitlock	483,191	Sept. 27	2067	522	60	1780
Pegging-jack support	W. M. Sawyer	481,374	Aug. 23	2631	647	60	1125
Pegging-machine	J. Hyslop, Jr.	472,638	Apr. 12	971	252	59	198
Pegging-machine	E. Woodward	473,136	Apr. 19	1747	{ 441 442 }	59	356
Pegging-machine feeding mechanism	J. Hyslop, Jr.	475,868	May 31	3168	804	59	1306
Pegging machine. Wire	T. Barrett	478,732	July 12	1021	{ 250 251 }	60	218
Pelts. Machine for removing water-hairs from	J. Derbolow	483,142	Sept. 27	1979	501	60	1762
Pelts. Machine for removing water-hairs from	J. W. Sutton	468,270	Feb. 2	558	137	58	632
Pen	F. J. W. Fischer	487,143	Nov. 29	3171	812	61	1214
Pen	H. Sulzer	477,080	June 14	1336	324	59	1717
Pen and pencil clasp	S. B. Laue	473,230	Apr. 19	1919	483	59	389
Pen and pencil holder	W. W. Climensen	466,711	Jan. 5	646	166	58	123
Pen and letter rack	S. E. Moore	483,572	Oct. 4	83	21	61	19
Pen and pencil holder	A. A. Lytle	485,552	Nov. 1	608	162	61	697
Pen. Drawing	F. A. Alteneder	480,541	Aug. 9	1269	318	60	836
Pen. Drawing	O. F. Grant	479,270	July 19	7855	465	60	388
Pen. Drawing and stippling	J. Phillips	484,523	Oct. 18	1540	{ 390 391 }	61	335
Pen. Electric perforating	A. D. Lewis	485,767	Nov. 8	939	251	61	782
Pen-extractor	H. E. Grant	470,296	Mar. 8	1025	262	58	1307
Pen-extractor	W. F. Stanley	479,959	Aug. 2	290	72	60	637
Pen for swine. Farrowing	B. F. Osborn and J. R. Harcourt	488,739	Dec. 27	2465	612	61	1860
Pen. Fountain	J. Blair	468,322	Feb. 9	619	161	58	659
Pen. Fountain	C. E. Browning	477,854	June 28	2612	654	59	1995
Pen. Fountain	F. S. Cooley	471,506	Mar. 22	2878	732	58	1684
Pen. Fountain	B. K. Dorwart	469,499	Feb. 23	2490	638	58	1036
Pen. Fountain	T. W. Evans	467,261	Jan. 19	1567	399	58	315
Pen. Fountain	J. Friedmann	470,408	Mar. 8	1223	312	58	1341
Pen. Fountain	J. Holland	471,175	Mar. 22	2387	609	58	1590
Pen. Fountain	J. Holland	485,795	Nov. 8	971	260	61	788
Pen. Fountain	E. G. Peck and G. E. O'Meara	484,542	Oct. 18	1571	399	61	342
Pen. Fountain	D. T. Perkins	467,519	Jan. 26	1981	503	58	401
Pen. Fountain	D. T. Perkins	478,635	July 12	873	215	60	189
Pen. Fountain	A. H. Robinson	478,941	July 12	1338	332	60	280
Pen. Fountain	L. A. Shattuck	482,592	Sept. 13	1122	271	60	1568
Pen. Fountain	W. T. Shaw	466,950	Jan. 12	1047	266	58	208
Pen. Fountain	A. F. Sperry	470,082	Mar. 1	658	162	58	1227
Pen. Fountain	W. W. Stewart	478,653	July 12	898	{ 222 223 }	60	193
Pen. Fountain	W. W. Stewart	480,294	Aug. 9	882	224	60	762
Pen. Fountain	W. W. Stewart	480,751	Aug. 16	1604	402	60	917
Pen. Fountain	H. A. Walke	467,785	Jan. 26	2400	610	58	480
Pen. Fountain	L. B. Woolfolk	480,800	Aug. 16	1677	{ 419 420 }	60	931
Pen. Fountain	L. B. Woolfolk	481,090	Aug. 16	2142	533	60	1021
Pen fountain attachment	G. W. Price	475,285	May 17	2229	571	59	1097
Penholder	W. B. Blalock and J. A. Muir	481,158	Aug. 23	2277	561	60	1059
Penholder	F. Baumann	467,077	Jan. 12	1255	317	58	246
Penholder	H. Campbell	475,033	May 17	1842	467	59	1019
Penholder	T. O. Earle	469,684	Mar. 1	21	8	58	1103
Penholder	E. N. Gifford	478,973	June 28	2950	738	59	2061
Penholder	H. J. Kennedy	470,938	Mar. 15	2018	517	58	1507
Penholder	C. T. McClintock	474,644	May 10	1220	312	59	882

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.'t	Vol.	Page.
Penholder	G. McElwain	479,522	July 26	2300	574	60	489
Penholder	G. McElwain	482,925	Sept. 20	1641	413	60	1681
Penholder	G. B. Morrill	487,035	Nov. 29	2998	772	61	1239
Penholder	B. F. Wise	471,928	Mar. 29	3509	896	58	1812
Penholder and blotter. Combined.	F. von Eulenfeld.	469,433	Feb. 23	2320	610	58	1916
Penholder. Duplex	C. F. Green and G. A. Haley	488,119	Dec. 13	1458	367	61	1630
Penholder-guard attachment.	J. R. Grymes	474,824	May 17	1510	385	59	953
Penholder. Perforated	F. M. Libby	484,967	Oct. 25	2272	586	61	497
Penholders and lead-pencils. Hand-support for	W. G. Croom	478,787	July 12	1113	275	60	236
Penholders. Erasing attachment for	F. B. Krause	473,423	Apr. 19	2237	562	59	451
Penholders or pencils. Shield for attachment to	G. W. Woolley	467,677	Jan. 26	2228	567	58	446
Pen. Manifolding.	A. C. Carey	473,207	Apr. 19	1876	472	59	320
Penmanship-guide	J. Earle	472,751	Apr. 12	1142	293	59	228
Penmanship. System of	H. R. Fuller	477,653	June 28	2286	572	59	1932
Pen or pencil carrier	H. E. Thornhill	485,440	Nov. 1	447	120	61	663
Pen or pencil holder and making the same	H. T. Smith	481,534	Aug. 23	2901	712	60	1179
Pen-rack	I. W. Housser	488,009	Dec. 13	1271	316	61	1590
Pen. Ruling.	J. S. Söderin	485,358	Nov. 1	325	87	61	638
Pen-wiper	J. L. Du Bois	473,148	Apr. 19	1767	446	59	360
Pen. Writing.	F. C. Colburn	482,298	Sept. 6	620	148	60	1456
Pens. Ink-holder for	C. W. Vose	486,623	Nov. 22	2295	599	61	1083
Pens. Lead-pencil attachment for fountain.	J. R. Townsend	4-7,799	Dec. 13	932	235	61	1524
Pencil	C. W. Boman	481,100	Aug. 16	2162	536	60	1024
Pencil	A. Fornander	480,188	Aug. 2	686	174	60	712
Pencil	H. D. Greenwald	468,744	Feb. 9	1304	331	58	790
Pencil	J. Pusey	471,431	Mar. 22	2772	708	58	1663
Pencil	L. H. Sondheim	469,754	Mar. 1	135	36	58	1126
Pencil. Adding.	C. D. Judd	488,206	Dec. 20	1609	401	61	1677
Pencil attachment	J. H. Hamill	468,658	Feb. 9	1171	299	58	762
Pencil-case	G. W. Crowe and W. K. Massam	485,261	Nov. 1	161	47	61	606
Pencil-case	J. B. Smith	480,479	Aug. 9	1180	296	60	813
Pencil-clasp	E. W. Mildrum	482,409	Sept. 13	822	197	60	1510
Pencil-holder	O. A. Elliott	478,537	July 5	739	180	60	146
Pencil holder, sharpener, and eraser. Combined	C. B. Campbell	473,485	May 24	2550	649	59	1173
Pencil. Lead.	A. Kaiser	488,818	Dec. 27	2584	641	61	1885
Pencil. Lead.	L. H. Sondheim	470,081	Mar. 1	656	162	58	1226
Pencil or other article of fibrous material. Lead.	B. B. Goldsmith. (Reissue)	11,259	Aug. 16	2265	559	60	1043
Pencil-pointer	F. E. Flagg	481,018	Aug. 16	2016	504	60	997
Pencil-sharpener	H. A. Benedict	476,361	June 7	214	53	59	1477
Pencil-sharpener	H. Broomell	466,734	Jan. 5	681	175	58	130
Pencil-sharpener	W. K. Culver	472,161	Apr. 5	236	63	59	45
Pencil-sharpener	C. Faber	482,826	Sept. 20	1478	367	60	1650
Pencil-sharpener	T. Foy	471,216	Mar. 22	2454	623	58	1602
Pencil-sharpener	A. Lachenmeyer	471,747	Mar. 29	3243	826	58	1759
Pencil-sharpener	W. A. Phillips	479,658	July 26	2496	622	60	526
Pencil-sharpener	W. G. Price	479,303	July 19	1901	476	60	398
Pencil-sharpener	O. H. Robinson	471,435	Mar. 22	2779	709	58	1665
Pencil-sharpener	J. Siegel	474,418	May 10	866	226	59	815
Pencil-sharpener	F. M. Uhler	467,446	Jan. 19	1846	471	58	368
Pencil-sharpener	F. J. Walker	484,071	Oct. 11	821	208	61	183
Pencil-sharpener	M. E. Worn	472,420	Apr. 5	641	164	59	120
Pencil sharpener and holder. Combined	J. W. Battelle	480,547	Aug. 9	1278	321	60	838
Pencil-sharpener for school-slates	W. D. Black	481,097	Aug. 16	2158	535	60	1024
Pencil sharpener. Lead.	W. S. Gillespie	477,529	June 21	2074	516	59	1875
Pencil sharpener. Slate.	G. S. N. Humphries	486,470	Nov. 22	2055	545	61	1036
Pencil sharpener. Slate.	C. G. Keenan and W. J. Morris	474,136	May 3	386	93	59	713
Pencil sharpener. Slate.	G. H. Rutschman	472,313	Apr. 5	480	124	59	90
Pencil sharpener. Slate.	W. Shriver	478,374	July 5	492	119	60	97
Pencil-sharpening implement	L. H. Bellamy	469,036	Feb. 16	1785	455	58	893
Pencil-sharpening machine. Slate.	J. G. Wucherer	470,615	Mar. 8	1526	398	58	1402
Pencil-tip and calendar. Combined	F. McIntyre	467,379	Jan. 19	1746	446	58	348
Pencil-tip and calendar. Combined	F. McIntyre	469,527	Feb. 23	2534	632	58	1045
Pencils. Marking attachment for carpenters'	A. F. Street	486,513	Nov. 22	2115	558	61	1049
Pencils or crayons. Composition of matter for	G. Schwarzwald	471,438	Mar. 22	2785		58	1666
Pendulum. Compensation.	E. R. Malmberg	472,624	Apr. 12	956	248	59	195
Perambulating-chair. Stair-climbing	J. B. Bray	468,022	Feb. 2	177	43, 44	58	559
Percolator	J. W. Evans	486,246	Nov. 15	1701	{ 449 450 }	61	952
Percussion-tool. Pneumatic	W. E. Gibbs	486,774	Nov. 22	2539	663	61	1132
Perforating attachment	J. E. Tucker	473,463	Apr. 26	2341	593	59	494
Perforating check or other blanks. Machine for	W. F. Myers	468,358	Feb. 9	712	176	58	671
Perforating dates and amounts upon documents or checks. Machine for	A. R. Abbott	471,455	Mar. 22	2808	716	58	1670
Perforating device. Paper.	W. F. Wells	471,923	Mar. 29	3502	895	58	1811
Perforating-machine	C. O. Morgan	479,294	July 19	1869	473	60	395
Perforating-machine. Check.	G. B. Webb	473,647	Apr. 26	2620	661	59	547
Perfume-case. Pocket.	J. McCoy	477,217	June 21	1567	385	59	1776
Perfume-holder	W. Hill	476,269	June 7	61	13	59	1450
Perfumes. Extracting.	R. A. Chesebrough	475,437	May 24	2470	630	59	1127
Permutation-lock	M. Badoni	486,391	Nov. 15	1931	{ 511 512 }	61	999
Permutation-lock	W. H. Bricker	474,078	May 3	308	74	59	697
Permutation-lock	W. S. Chedister	478,567	July 12	789	191	60	170
Permutation-lock	J. I. Covington	488,648	Dec. 27	2323	575	61	1833
Permutation-lock	C. A. Dorn	470,110	Mar. 1	698	172	58	1235
Permutation-lock	E. A. Englin	471,498	Mar. 22	2868	730	58	1682
Permutation-lock	E. Féret	472,868	Apr. 12	1298	333	59	259
Permutation-lock	J. Roche	475,520	May 24	2609	663	59	1184
Permutation-lock	L. E. Schneider	473,786	Apr. 26	2827	{ 710 711 }	59	586
Permutation-lock	B. F. Singer and M. L. Davis	488,777	Dec. 27	2518	626	61	1871
Permutation-lock	D. Steiner and J. Schiele	476,904	June 14	1047	{ 253 254 }	50	1659
Perspective-gage	D. C. Hunter	486,782	Nov. 22	2548	665	61	1134

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Pessary	E. Kirwin	475,433	May 24	2499	637	59	1163
Pessary	H. H. Taylor	476,698	June 7	706	173	59	1577
Petroleum-burner	F. E. Forster	473,067	Apr. 19	1628	415	59	335
Petroleum distillation. Separation of waste products of	J. P. Engle	481,392	Aug. 23	2664	653	60	1130
Petroleum or similar engine	G. W. Weatherhogg	480,535	Aug. 9	1260	316 317	60	834
Petroleum. Purifying	H. Frasch	487,216	Nov. 29	3279	837	61	1294
Petroleum. Recovering waste products of	J. P. Engle	481,391	Aug. 23	2663	653	60	1130
Phaeton	W. N. Morrell	473,330	Apr. 19	2082	524	59	422
Phenol sulphonates of oxychinoline. Preparing	J. Ziegler	466,707	Jan. 5	623		58	120
Phonogram-blank	T. A. Edison	488,191	Dec. 20	1580	396	61	1671
Phonograms. Duplicating	T. A. Edison	484,582	Oct. 18	1625	413	61	353
Phonograph	G. Bettini	488,379	Dec. 20	1896	475	61	1732
Phonograph	G. Bettini	488,380	Dec. 20	1897	475	61	1732
Phonograph	G. Bettini	488,381	Dec. 20	1900	475	61	1732
Phonograph	L. S. Clarke	474,946	May 17	1701	433	59	992
Phonograph	F. M. and J. A. E. Criswell	470,477	Mar. 8	1333	347	58	1362
Phonograph	T. A. Edison	484,585	Oct. 18	1629	413	61	353
Phonograph	T. A. Edison	488,189	Dec. 20	1578	395	61	1670
Phonograph	V. Lahola	479,431	July 26	2136	534	60	459
Phonograph	J. L. Skillin	472,684	Apr. 12	1035	267 268	59	208
Phonograph	J. H. White	467,530	Jan. 26	1998	506	58	404
Phonograph attachment	J. F. Ott	466,922	Jan. 12	1004	257	58	200
Phonograph. Coin-controlled	H. Hoeschen	488,278	Dec. 20	1725	435	61	1699
Phonograph coin-controlled device	J. F. Ott	478,709	July 12	972	242	60	209
Phonograph cutting-tool	T. A. Edison	484,583	Oct. 18	1627	413	61	353
Phonograph-reproducer	T. A. Edison	484,584	Oct. 18	1628	413	61	353
Phonograph-reproducer	T. A. Edison	488,190	Dec. 20	1579	396	61	1670
Phosphate rock. Apparatus for treating	S. Hughes and W. B. Chisolm	483,452	Sept. 27	2475	622	60	1857
Phosphate-rock drier	W. B. Chisolm	479,872	Aug. 2	148	36	60	611
Phosphate rock, &c. Process of and apparatus for washing and drying	R. E. Rose	485,660	Nov. 8	781	207 208	61	748
Phosphate-separator and screen-washer	G. R. Boaz	480,549	Aug. 9	1280	321 322	60	838
Phosphate-washing machine	G. W. Roberts	472,820	Apr. 12	1235	317	59	246
Photograph-cards from album-leaves. Implement for withdrawing	W. R. Vansant	486,170	Nov. 15	1589	421	61	930
Photograph-display rack	J. H. Abram	486,748	Nov. 22	2491	651	61	1124
Photograph-gallery wagon	T. J. Merritt	467,423	Jan. 19	1807	461 462	58	360
Photograph-holder	V. J. Augir	476,357	June 7	203	49	59	1475
Photographs on hard surfaces. Producing	A. Müller-Jacobs	474,850	May 17	1556		59	962
Photographs, pictures, and analogous articles. Support for	A. Hunter	482,978	Sept. 20	1725	436	60	1698
Photographs. Producing colored	J. W. McDonough	471,186	Mar. 22	2404		58	1593
Photographs. Producing colored	J. W. McDonough	471,187	Mar. 22	2405		58	1593
Photographer's background-holder	W. I. Scandlin	484,165	Oct. 11	962	247	61	211
Photographic and other designs for engraving. Preparing and transferring	W. J. Charlton	466,534	Jan. 5	358		58	69
Photographic apparatus. Coin-operated	W. H. C. Bernitt	473,375	Apr. 19	2159	542 543	59	436
Photographic-background holder	A. C. Caswell	482,002	Sept. 6	126	31	60	1359
Photographic camera	R. de Barril	475,919	May 31	3252	821	59	1322
Photographic camera	H. A. Benedict	478,837	July 12	1193	296 297	60	251
Photographic camera	W. H. Bristol	478,780	July 12	1097	272	60	233
Photographic camera	B. J. Edwards	472,257	Apr. 5	393	102	59	73
Photographic camera	W. H. Fuller	466,339	Jan. 5	44	11, 12	58	11
Photographic camera	J. H. Hare	471,512	Mar. 22	2884	734	58	1685
Photographic camera	F. A. Hetherington	483,688	Oct. 4	248	62	61	52
Photographic camera	S. Hirschfelder	488,810	Dec. 27	2572	638 639	61	1882
Photographic camera	W. Sanders	488,799	Dec. 27	2558	635	61	1879
Photographic camera	W. Scorer	476,562	June 7	506	119	59	1537
Photographic camera	F. Servus	473,358	Apr. 19	2128	534	59	430
Photographic camera	J. T. Walker	467,454	Jan. 19	1858	474	58	370
Photographic camera	G. Whitney	471,584	Mar. 29	2986	761	58	1712
Photographic camera	G. Whitney	471,585	Mar. 29	2988	761	58	1713
Photographic cameras. Registering device for	J. J. Geiger, Sr	487,262	Dec. 6	36	12	61	1328
Photographic copying. Clip for use in	A. Delug	485,698	Nov. 8	925	248	61	779
Photographic dark-chamber	I. Bryner	484,759	Oct. 18	1815	461	61	392
Photographic dark-rooms. Candle-lamp for use in	H. A. Benham and W. H. Tomson	473,814	Apr. 26	2870	720	59	595
Photographic developer	M. Andresen	477,486	June 21	2003		59	1860
Photographic film-holder	T. Sault	477,337	June 21	1763	432	59	1813
Photographic-film package	G. Whitney	471,586	Mar. 29	2991	761	58	1713
Photographic films. Machine for forming flexible	G. Eastman	471,469	Mar. 22	2828	720 721	58	1674
Photographic films. Manufacture of	H. M. Reichenbach	479,305	July 19	1904		60	398
Photographic kit	J. H. Iden	474,833	May 17	1531	390	59	957
Photographic lenses. Diaphragm for	E. R. Bullard	483,135	Sept. 27	1971	499	60	1760
Photographic-negative retoucher	A. J. Bennett	488,705	Dec. 27	2415	599	61	1850
Photographic-paper holder and cutter	T. E. Wood	477,728	June 28	2400	600	59	1957
Photographic pictures. Developing	M. Andresen	475,372	May 24	2369		59	1139
Photographic-plate carrier	C. H. Lohman	478,235	July 5	274	68	60	55
Photographic-plate-changing apparatus	F. A. Fichtner	472,702	Apr. 12	1074	276	59	215
Photographic-plate holder	J. H. Ballman	474,571	May 10	1110	283	59	862
Photographic-plate holder	J. H. Hare	479,186	July 19	1733	434	60	364
Photographic-plate holder	A. E. Paige	477,696	June 28	2353	588	59	1948
Photographic-plate holder	A. M. Pierce	484,569	Oct. 18	1605	408	61	349
Photographic-printing apparatus	H. E. Tallman	486,913	Nov. 29	2814	729	61	1204
Photographic-printing apparatus and process	U. S. Rush	487,937	Dec. 13	1152	288	61	1566

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Photographic-printing frame.....	F. O. Bynoe.....	484,175	Oct. 11	980	251	61	214
Photographic-printing frame.....	F. A. Daly.....	476,041	May 31	3433	867	59	1359
Photographic-printing machine.....	J. Urie, Jr.....	478,663	July 12	910	226	60	196
Photographic prints. Apparatus for trimming.....	H. H. Newcomb.....	476,481	June 7	397	92	59	1514
Photographic purposes. Device for modifying and controlling rays of light for.....	A. P. Flaglor.....	483,606	Oct. 4	133	33	61	28
Phonographic records. Method of and means for duplicating or transferring.....	L. F. Douglass.....	475,490	May 24	2558	651	59	1174
Photographic roll-holder.....	F. A. Brownell.....	477,243	June 21	1617	{ 395 396 }	59	1785
Photographic roll-holder.....	T. S. Gillette.....	487,520	Dec. 6	472	124	61	1414
Photographic roller-holder.....	G. Jones.....	470,054	Mar. 1	615	153	58	1218
Photographic shutter.....	J. R. Albrecht and E. Ortmann.....	475,654	May 24	2809	712	59	1224
Photographic shutter.....	F. A. Anthony and W. H. Lewis.....	471,088	Mar. 22	2246	577	58	1503
Photographic shutter.....	G. F. Green.....	473,188	Apr. 19	1848	465	59	374
Photographic shutter.....	F. R. Hoyt.....	472,883	Apr. 12	1323	339	59	265
Photographic shutter.....	G. W. Low and W. Shakespeare, Jr.....	471,675	Mar. 29	3121	795	58	1737
Photographic shutter.....	F. Servus.....	473,356	Apr. 19	2123	533	59	429
Photographic shutter.....	J. E. Thornton.....	482,854	Sept. 20	1521	378	60	1659
Photography. Improving oil-paintings by.....	L. Meyer.....	473,767	Apr. 26	2795		59	580
Photography. Making relief-plates by.....	J. Husnik.....	473,753	Apr. 26	2780		59	577
Physician's operating-table.....	G. B. Nichols.....	466,621	Jan. 5	498	128	58	96
Physician's table.....	J. W. Kales.....	487,625	Dec. 6	624	{ 160 161 }	61	1445
Pianette.....	A. J. Osswald.....	468,606	Feb. 9	1092	{ 278 279 }	58	746
Piano.....	P. Anderson.....	488,915	Dec. 27	2744	677	61	1918
Piano.....	W. H. Fargo.....	488,731	Dec. 27	2452	609	61	1858
Piano.....	A. H. Hastings.....	466,346	Jan. 5	58	15	58	14
Piano.....	A. H. Hastings.....	468,135	Feb. 2	344	86	58	591
Piano.....	A. Holmstrom.....	477,938	June 28	2744	688	59	2022
Piano.....	N. Marston.....	477,669	June 28	2314	578	59	1939
Piano.....	C. Van Haagen.....	469,876	Mar. 1	339	87	58	1167
Piano.....	R. B. Watson.....	471,248	Mar. 22	2494	633	58	1610
Piano-action.....	E. C. Baughan.....	479,047	July 19	1510	376	60	323
Piano-action.....	A. D. Dimick.....	472,109	Apr. 5	157	43	59	30
Piano-action.....	F. Engelhardt.....	486,096	Nov. 15	1475	388	61	907
Piano-action.....	W. L. Hawes.....	480,014	Aug. 2	399	98	60	657
Piano-action.....	J. Herrburger.....	471,717	Mar. 29	3192	814	58	1749
Piano-action.....	S. A. Jewett.....	483,561	Oct. 4	68	17	61	16
Piano-action.....	H. and C. Keller.....	487,483	Dec. 6	414	107	61	1403
Piano-action.....	O. Lestina.....	485,873	Nov. 8	1087	289	61	811
Piano-action.....	J. R. Perry.....	485,650	Nov. 8	753	199	61	743
Piano-action.....	S. R. Perry.....	468,918	Feb. 16	1578	400	58	852
Piano-action.....	H. S. Saroni.....	470,448	Mar. 8	1290	329	58	1354
Piano-action flange.....	W. W. Shailer.....	473,241	Apr. 19	1934	486	59	392
Piano-action pilot.....	J. Herrburger.....	482,008	Sept. 6	137	33	60	1362
Piano-action rail.....	J. W. Reed.....	480,829	Aug. 16	1728	432	60	941
Piano-action. Repetition.....	J. C. Anton.....	476,115	May 31	3558	895	59	1383
Piano-action. Transposing.....	C. G. George.....	478,323	July 5	411	99	60	82
Piano action. Upright.....	G. M. Guild.....	472,478	Apr. 5	735	{ 187 188 }	59	139
Piano action. Upright.....	G. M. Guild.....	486,808	Nov. 22	2589	675	61	1142
Piano action. Upright.....	A. Hicks.....	482,740	Sept. 20	1356	336	60	1625
Piano action. Upright.....	L. Merkel.....	473,944	May 3	96	92	59	655
Piano-actions. Center-pin fastening for.....	H. and C. Keller.....	487,484	Dec. 6	416	107	61	1403
Piano attachment.....	H. A. Hauff.....	482,737	Sept. 20	1354	335	60	1625
Piano. Automatic.....	W. D. Parker.....	470,323	Mar. 8	1078	{ 275 276 277 }	58	1315
Piano-back.....	J. W. Reed.....	473,082	Apr. 19	1649	419	59	339
Piano-case.....	A. H. Hastings.....	469,341	Feb. 23	2237	574	58	988
Piano-case.....	J. Reimers.....	483,811	Oct. 4	433	107	61	90
Piano-case. Upright.....	A. Brambach.....	476,915	June 14	1066	257	59	1662
Piano-damper.....	A. Feldin.....	466,493	Jan. 5	299	77	58	57
Piano-damper.....	W. P. Hanscom.....	470,619	Mar. 8	1531	399	58	1403
Piano expression-regulator.....	J. Y. Druckenmiller.....	482,168	Sept. 6	410	98	60	1415
Piano-flange.....	W. W. Shailer.....	473,242	Apr. 19	1936	487	59	392
Pianoforte.....	J. W. Brackett.....	484,403	Oct. 18	1347	344	61	298
Pianoforte.....	F. W. Hale.....	474,827	May 17	1518	{ 387 388 }	59	955
Pianoforte.....	W. Rohlfing, Jr.....	472,588	Apr. 12	899	231	59	185
Pianoforte-action.....	J. H. Phelps.....	486,500	Nov. 22	2098	555	61	1045
Pianoforte damper-action.....	J. P. Richardson and G. F. Dyer.....	481,121	Aug. 16	2194	543	60	1030
Pianoforte pedal.....	H. A. Hambloch.....	478,007	June 28	2852	713	59	2043
Pianoforte sounding-board.....	C. Brambach.....	480,488	Aug. 9	1191	299	60	820
Pianofortes. Device for stringing.....	W. H. Ivers.....	467,554	Jan. 26	2055	519	58	414
Pianofortes. Sounding-board and resonant chamber for.....	J. U. Fischer.....	473,307	Apr. 19	2034	511	59	412
Pianofortes. Stringing.....	D. L. Bollermann.....	478,912	July 12	1293	322	60	271
Piano-key bottoms. Brace for.....	H. McClellan.....	477,566	June 21	2127	529	59	1885
Piano-key coupler.....	P. Wuest, Jr.....	486,317	Nov. 15	1817	{ 479 480 }	61	976
Piano lamp-bracket.....	C. A. Hotchkiss.....	488,608	Dec. 27	2260	561	61	1821
Piano or organ attachment.....	J. M. Stukes.....	480,296	Aug. 9	886	{ 224 225 }	60	763
Piano or organ. Upright.....	C. Keidel, Jr.....	485,414	Nov. 1	413	111	61	656
Piano pedal.....	W. H. Ivers.....	484,500	Oct. 18	1505	383	61	329
Piano pedal-foot.....	A. H. Hastings.....	480,696	Aug. 9	1519	378	60	824
Piano pin-block.....	A. H. Reed and D. Donovan.....	473,523	Apr. 26	2409	611	59	506
Piano soft-stop attachment.....	O. Lestina.....	485,872	Nov. 8	1086	288	61	811
Piano sounding-board.....	C. Hinze.....	472,878	Apr. 12	1314	337	59	263
Piano sounding-board.....	E. Stroud.....	487,060	Nov. 29	3034	779	61	1247

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Piano sounding-board.....	P. Wuest, Jr.....	486,013	Nov. 8	1323	351	61	860
Piano-string.....	T. Gill.....	478,746	July 12	1041	256	60	222
Piano tone-sustaining attachment.....	S. Hansing.....	474,990	May 17	1779	450	59	1006
Piano-tuning apparatus.....	A. Felldin.....	477,590	June 21	2166	537	59	1833
Piano tuning-pin.....	H. B. Enos.....	486,561	Nov. 22	2188	576	61	1062
Piano. Upright.....	J. U. Fischer.....	473,308	Apr. 19	2035	511 512	59	412
Pianos and organs. Mechanical attachment for.....	J. E. Harriman, Jr.....	476,197	May 31	3692	933 934	59	1409
Pianos. Device for pressing bridges in.....	C. Hinze.....	467,539	Jan. 26	2023	512	58	409
Pianos. Electrical attachment for.....	F. A. Feldkamp.....	470,294	Mar. 8	1020	260 261 262	58	1306
Pianos. Muffling attachment for.....	H. Jacobi.....	467,132	Jan. 12	1361	347	58	267
Pianos. Muffling attachment for upright.....	O. R. Trefz.....	476,842	June 14	943	230	59	1638
Pianos. Music-desk for.....	T. P. Brown.....	468,077	Feb. 2	253	62	58	573
Pianos. Music-desk for.....	E. Peterson.....	468,027	Feb. 2	185	45	58	560
Pianos or organs. Hand and arm guide for.....	A. W. Sickner.....	469,276	Feb. 23	2140	550	58	969
Pianos. Repetition-action for.....	V. Berdus.....	474,112	May 3	358	85	57	706
Pianos. Stringing.....	C. S. Weber.....	482,512	Sept. 11	991	240	60	1543
Pianos. Tongue for stringless.....	T. Miller.....	471,183	Mar. 22	2399	611	58	1592
Pianos. Touch-regulating device for.....	F. W. Kringel.....	476,766	June 7	806	198	59	1598
Pick.....	J. Mitchell and W. K. Birkinshaw.....	484,333	Oct. 11	1241	316	61	265
Pick.....	K. J. Morrison and M. McLellan.....	486,732	Nov. 22	2467	644	61	1118
Pick-handle.....	C. Rader.....	466,703	Jan. 5	617	160	58	119
Pick-point. Adjustable.....	H. Wellisch.....	470,853	Mar. 15	1695	485	58	1182
Picker:							
See Bean-picker. Cotton-picker.							
Berry-picker. Fruit-picker.							
Cherry-picker. Grape-picker.							
Picker-stem and mechanism for operating the same.....	G. N. Todd.....	483,121	Sept. 20	1945	492	60	1745
Picker-stick-operating mechanism.....	L. Bredannaz.....	469,056	Feb. 16	1813	463	58	898
Picket and shingle pointing machine.....	G. B. Rensell.....	485,431	Nov. 1	432	115	61	661
Picket-pointing machine.....	J. W. Minor.....	469,390	Feb. 23	2314	596	58	1003
Picket-wiring machine.....	J. R. Shaffer.....	479,311	July 19	1915	478	60	400
Pickle-lifter.....	J. A., Jr., and J. W. Currie.....	481,691	Aug. 30	3146	767	60	1240
Pickpocket and coat-thief detector.....	J. F. Hurd.....	477,940	June 28	2746	688 689	59	2022
Picture-cord take-up.....	H. E. Billings.....	468,637	Feb. 9	1137	290	58	755
Picture-exhibitor.....	F. E. Merkel.....	477,259	June 21	1644	401	59	1799
Picture-exhibitor.....	D. J. Rogers.....	488,134	Dec. 13	1480	373	61	1634
Picture-exhibitor.....	A. Svensson.....	488,042	Dec. 13	1338	331	61	1605
Picture. Folding.....	A. Operti.....	486,216	Nov. 15	1654	437	61	942
Picture-frame.....	O. C. R. Ellis.....	477,188	June 14	1502	368	59	1751
Picture-frame.....	J. Mauerhofer.....	480,953	Aug. 16	1919	480	60	978
Picture-frame.....	P. Wiener.....	481,217	Aug. 23	2370	583	60	1079
Picture-frame fastener.....	C. F. Naegelo.....	481,117	Aug. 16	2186	541	60	1029
Picture-frames. Clasp for holding covers on.....	H. Levy.....	467,702	Jan. 26	2275	577	58	455
Picture-frames. Device for attaching covers to.....	H. Levy.....	467,700	Jan. 26	2272	576	58	454
Picture-frames. Device for holding covers on.....	H. Levy.....	467,701	Jan. 26	2274	577	58	455
Picture-hanger.....	E. A. Snow.....	480,632	Aug. 9	1418	353	60	865
Picture-holder.....	A. D. Stewart.....	478,478	July 5	638	156	60	127
Picture. Magic.....	F. Tschofen.....	471,305	Mar. 22	2581	58	58	1627
Picture, mirror, and the like and forming the same. Framed.....	J. Jacobson.....	479,004	July 19	1444	358	60	310
Picture or surface exhibitor. Coin-controlled.....	M. O. Griswold.....	472,704	Apr. 12	1077	276	59	216
Picture-stretcher. Folding.....	E. R. Butler.....	483,280	Sept. 27	2233	561	60	1810
Picture-support.....	B. L. Turner.....	468,847	Feb. 16	1468	374	58	831
Pictures. Stretcher for the paper or canvas of.....	J. N. Anderson.....	472,021	Apr. 5	2	1	59	3
Pie-box.....	A. A. Whiting.....	469,987	Mar. 1	522	130	58	1199
Pie-raising and lidding machine.....	W. R. Gandie.....	453,549	Oct. 4	50	12, 13	61	12
Pier.....	O. Haerem.....	474,734	May 10	1361	345	59	910
Pigments. Making white.....	J. Blair.....	477,735	June 28	2411	602	59	1959
Pigments. Manufacture of.....	G. W. Scollay.....	471,147	Mar. 22	2348	601	58	1582
Pile armor or casing.....	G. W. Bedbury and E. F. Badgley.....	468,291	Feb. 2	592	147	58	638
Pile-driver. Reciprocating electric.....	C. J. Van Depoele.....	479,965	Aug. 2	303	74, 75	60	640
Pile fabric. Double.....	F. Pearson.....	484,607	Oct. 18	1663	422	61	361
Pile fabric. Double-faced woven.....	J. Coley.....	483,977	Oct. 4	685	171	61	142
Pile fabric. Woven.....	F. Pearson.....	484,541	Oct. 18	1569	399	61	341
Pile fabric. Woven.....	F. Pearson.....	484,605	Oct. 18	1659	421	61	360
Pile fabric. Woven.....	F. Pearson.....	484,606	Oct. 18	1661	421	61	361
Pile fabrics. Apparatus for cutting.....	J. J. Mann.....	478,515	July 5	696	169	60	138
Pile fabrics. Apparatus for cutting.....	J. H. Smith, A. Goddard, L. Higginbottom, and T. Mannoek.....	475,620	May 24	2761	700	59	1214
Pile fabrics. Knife for cutting.....	J. H. Smith, A. Goddard, L. Higginbottom, and T. Mannoek.....	475,709	May 24	2891	731	59	1239
Pile fabrics. Pegging-machine for.....	H. Heywood and J. Holland.....	479,274	July 19	1860	466	60	390
Pile of velvets, &c. Knife for cutting.....	J. H. Smith.....	487,974	Dec. 13	1202	300	61	1576
Pile of woven fabrics. Machine for raising the.....	W. D. Watson.....	485,400	Nov. 1	391	105 106	61	652
Pile or fence-post driver.....	W. L. George.....	487,920	Dec. 13	1127	281 282	61	1561
Pile-protector.....	J. W. Lowman.....	488,896	Dec. 27	2702	669	61	1909
Pill-machine.....	C. A. Weller.....	467,071	Jan. 12	1238	314 315	58	243
Pill-machine.....	J. R. Witzel.....	470,028	Mar. 1	574	143	58	1210
Pill or tablet machine.....	W. T. Sears.....	473,432	Apr. 19	2247	565 566	59	453
Pillow.....	G. H. Davis.....	470,819	Mar. 15	1845	474	58	1473
Pillow.....	A. J. Lytle.....	484,441	Oct. 18	1413	361	61	310
Pillow-block.....	H. W. Hill.....	477,543	June 21	2092	520	59	1878
Pillow-sham holder.....	G. H. Davis.....	472,036	Apr. 5	38	8	59	9
Pillow-sham holder.....	F. Karr.....	476,882	June 14	1011	245	59	1652
Pillow-sham holder.....	A. J. Robberson.....	481,424	Aug. 23	2721	669	60	1142

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Pin:							
See Clothes-pin.	Safety-pin.						
Drapery-pin.	Scarf-pin.						
Hair-pin.	Tent-pin.						
Insulator-pin.	Veil-pin.						
Pin-fastening.		T. Fahrner	485,005	Oct. 25	2337	602	509
Pin. Spiral hair or other.		J. T. Larkin	482,257	Sept. 6	549	130	1441
Pin-sticking machine.		E. A. Burgess	481,746	Aug. 30	3250	791	1261
Pins, studs, &c. Safety-guard for scarf.		W. E. Trott	479,578	July 26	2378	593	60
Pinch-bar.		A. M. Collett	480,398	Aug. 9	1047	263	792
Pinchers.		J. Gérard	483,550	Oct. 4	51	13	13
Pinchers. Hog-ring.		H. W. Hill	475,767	May 31	2992	759	59
Pinchers. Lasting.		G. W. Morrill	480,433	Aug. 9	1104	276	802
Pineapples. Machine for treating.		G. W. Zastrow	482,493	Sept. 13	965	234	1537
Pinking device.		J. E. Welmer	483,884	Oct. 4	537	136	112
Pipe:							
See Blowpipe.	Soap-bubble pipe.						
Clay pipe.	Stovepipe.						
Concrete pipe.	Strake-weld pipe.						
Hose-pipe.	Submerged pipe.						
Lead-lined pipe.	Tobacco-pipe.						
Sheet-metal pipe.	Wooden pipe.						
Pipe.		C. Schlei	471,775	Mar. 29	3287	838	58
Pipe and manufacturing the same. Coated metal.		W. Lacy, Jr.	475,454	May 24	2500	637	59
Pipe and nut wrench.		M. J. Wilson	483,336	Sept. 27	2314	582	60
Pipe and nut wrench. Ratchet.		I. C. Gray	484,634	Oct. 18	1713	435	370
Pipe and rod wrench.		J. J. Tomey	472,153	Apr. 5	222	59	42
Pipe clamp and holder.		J. B. Davis	484,410	Oct. 18	1357	346	300
Pipe-closer. Adjustable.		W. P. O'Brien	475,793	May 31	3031	768	59
Pipe-connecting apparatus.		A. Clancy	484,408	Oct. 18	1354	346	61
Pipe connection.		W. Vanderman	471,247	Mar. 22	2493	633	58
Pipe connection for hydraulic mechanisms.		C. Mercader	486,383	Nov. 15	1915	507	61
Pipe connection or coupling.		R. Parish	471,735	Mar. 29	3225	821	58
Pipe-corrugating machine.		G. C. Keene	471,301	Mar. 22	2574	633	58
Pipe-coupling.		W. D. P. Aims, Jr.	470,531	Mar. 8	1407	368	58
Pipe-coupling.		D. A. Barnes	481,250	Aug. 23	2438	601	60
Pipe-coupling.		J. Connor	476,188	May 31	3680	930	59
Pipe-coupling.		R. M. Dixon	467,880	Jan. 26	2561	649	58
Pipe-coupling.		W. R. England	487,829	Dec. 13	972	245	61
Pipe-coupling.		W. L. Fitts	466,521	Jan. 5	341	85	58
Pipe-coupling.		E. B. Gold and W. H. H. Sisum	466,340	Jan. 5	50	13	58
Pipe-coupling.		F. H. Hambleton	467,718	Jan. 26	2304	585	58
Pipe-coupling.		R. Hernan	482,922	Sept. 20	1638	412	60
Pipe-coupling.		J. Lister	486,936	Nov. 29	2845	736	61
Pipe-coupling.		G. W. Seebach	480,374	Aug. 9	1007	253	60
Pipe-coupling.		E. T. Steen	487,434	Dec. 6	344	88	61
Pipe-coupling.		A. Wilbur	483,593	Oct. 4	117	28	61
Pipe-coupling. Flexible.		J. Suydam	479,856	Aug. 2	122	30	60
Pipe coupling. Flexible-steam.		J. E. Marble	480,875	Aug. 16	1792	448	60
Pipe-coupling. Valved.		E. Bartholomew	481,130	Aug. 16	2208	546	60
Pipe-cutter and threader.		G. W. Bowman and J. C. Godfrey	472,426	Apr. 5	653	166	59
Pipe-cutter attachment.		H. Comstock. (Reissue).	11,243	June 7	809	199	59
Pipe-elbow.		O. H. Lawrence.	485,124	Oct. 25	2510	644	61
Pipe elbow. Sheet-metal.		W. H. Noble	471,620	Mar. 29	3037	773	58
Pipe-flanging machine.		R. K. Welch	478,670	July 12	921	229	60
Pipe-flasks. Core-seat for.		R. Morgan	469,747	Mar. 1	124	33	58
Pipe for the conveyance of liquids or gases.		E. Walker and J. Shaw	483,274	Sept. 27	2225	550	60
Pipe-hanger.		G. C. Blackmore	475,066	May 17	1805	457	59
Pipe-hanger.		J. Collis	471,348	Mar. 22	2641	671	58
Pipe-hanger.		J. D. Dunning	476,227	May 31	3755	948	59
Pipe-hanger.		M. J. Hanna	485,033	Oct. 25	2385	613	61
Pipe-hanger.		A. Newbury	472,068	Apr. 5	88	24	59
Pipe-holder.		C. H. Alapaw	479,384	July 19	2051	512	60
Pipe-holder.		T. E. Brink	471,940	Mar. 29	3527	901	58
Pipe-holder and pipe-vise. Combined.		A. S. Rager	486,124	Nov. 15	1522	402	61
Pipe laying device. Sewer, water, and drain.		E. H. Rose	478,024	June 28	2875	719	59
Pipe-making machine.		W. A. Tipson	485,242	Nov. 1	132	40	60
Pipe or flue header and expander.		C. A. Frayer	474,956	May 17	1717	437	59
Pipe or flue header and expander.		C. A. Frayer	478,000	June 28	2843	711	59
Pipe-plug.		D. A. Streeter	474,196	May 3	481	116	59
Pipe-rod coupling.		P. Mueller	486,290	Nov. 15	1779	468	61
Pipe-thimble.		A. B. Carl	470,845	Mar. 15	1886	483	58
Pipe-threading machine.		A. W. Cash	482,296	Sept. 6	617	147	60
Pipe-threading machine.		R. P. Curtis	477,297	June 21	1703	417	59
Pipe-threading machine.		R. P. and L. B. Curtis	477,296	June 21	1702	417	59
Pipe-threading machine.		J. B. Z. Dumais	477,406	June 21	1875	461	59
Pipe-threading machine.		D. O. James	480,871	Aug. 16	1785	447	60
Pipe-turning tool.		J. J. Hogan	473,877	Apr. 26	2977	750	59
Pipe under water. Apparatus for laying iron.		J. G. Falcon	467,927	Feb. 2	38	9	58
Pipe-wrench.		A. Bareis	478,948	July 12	1344	333	60
Pipe-wrench.		W. H. Dechant	481,257	Aug. 23	2448	603	60
Pipe-wrench.		A. L. Engelbach	471,471	Mar. 22	2836	722	58
Pipe-wrench.		F. L. George	470,042	Mar. 1	598	148	58
Pipe-wrench.		G. S. Hiltz	483,785	Oct. 4	399	90	61
Pipe-wrench.		J. Landwehr	471,078	Mar. 15	2232	573	58
Pipe-wrench.		G. McKercher	474,300	May 3	644	163	59
Pipe-wrench.		A. N. Parnall	486,235	Nov. 15	1686	446	61
Pipe-wrench.		D. R. Porter	482,527	Sept. 13	1025	247	60
Pipe-wrench.		W. J. Walker	482,109	Sept. 6	305	72	60
Pipe-wrench.		M. J. Wilson	473,542	Apr. 26	2437	617	59
Pipe-wrench and cutter.		G. W. Gorsuch	468,601	Feb. 9	1887	277	58
Pipe-wrench. Chain.		J. F. Sauerma	480,140	Aug. 2	609	155	60

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Pipes and pipe-fittings. Joint or coupling for	C. R. Schmidt	485,116	Oct. 25	2497	642	61	543
Pipes. Apparatus for the manufacture of	W. H. Stewart	467,648	Jan. 26	2184	555	52	438
Pipes. Automatic alcohol-injector for service-	J. W. Bragger	466,998	Jan. 12	1120	254	58	921
Pipes. Bell-and-spigot joint for cement-lined	E. H. Phipps	474,779	May 10	1433	363	59	925
Pipes. Corrugating	W. J. Plecker	473,020	Apr. 19	1554	396	59	322
Pipes. Device for supporting flexible	A. E. Brown	467,746	Jan. 26	2343	595	58	469
Pipes. Forming beads on the ends of lead-lined iron	G. W. Harrington	485,693	Nov. 8	826	221	61	758
Pipes. Plumber's fastening-strap for lead	J. G. Murdock	470,698	Mar. 15	1650	428	58	1435
Pipes. Protecting-thimble for steam or heating	S. Vanstone	481,126	Aug. 16	2199	544	60	1031
Pipes, rods, &c. Collar for	G. W. Aldrich	474,511	May 10	1006	259	59	842
Pipes. Service-box for water or gas	J. M. Hurley	479,909	Aug. 2	198	49	60	621
Pipes. Swage for forming beads on the ends of lead-lined	G. W. Harrington	485,692	Nov. 8	825	220	61	758
Pipes. Tapering-tool for lead	M. Fritsche	481,169	Aug. 23	2291	565	60	1062
Pipes. Tool for cutting off	J. F. Mason	479,892	Aug. 2	179	44	60	617
Pipes with flared ends. Coupling for	J. J. Hogan	473,462	Apr. 26	2312	585	59	488
Pipes with lead. Method of and apparatus for lining	G. W. Harrington	485,691	Nov. 8	822	219	61	758
Piperazin. Making	W. Majert	471,520	Mar. 22	2893	58	1687	
Piperazin. Making	P. Volkman	482,108	Sept. 6	304	60	1395	
Pistol. Magazine	F. N. Thayer and E. W. Francis	477,280	June 21	1672	409	59	1795
Pistol. Mock	C. Golden	476,878	June 14	1001	243	59	1650
Pistol-pocket	J. A. E. Anderson	468,556	Feb. 9	1027	262	58	734
Piston. Balanced	W. J. Thomas	473,032	Apr. 19	1574	401	59	326
Piston. Lubricating	W. Berenberg	474,075	May 3	305	74	59	696
Piston-lubricator	C. M. Dreyer	471,068	Mar. 15	2214	569	58	1545
Piston-lubricator	E. Glover	470,189	Mar. 8	840	58	1271	
Piston meter	T. Blein and E. Beraud	483,278	Sept. 27	2231	560	60	1810
Piston meter	J. A. Myers	480,606	Aug. 9	1370	340	60	855
Pitcher. Ice	R. Arnold	481,544	Aug. 30	2918	718	60	1197
Pitman	P. Y. Barber	480,545	Aug. 9	1276	320	60	837
Placer-machine	W. M. Jewell	479,744	July 26	2658	659	60	555
Placer-machine	G. M. Reed	488,452	Dec. 20	2008	502	61	1755
Plaiter-blade	C. C. Emmons	473,303	Apr. 19	2029	510	59	411
Plaiting-machine	A. Olson	469,170	Feb. 16	1959	501	58	928
Plane attachment	A. J. Ferris	469,688	Mar. 1	27	9	58	1103
Plane. Carpenter's	O. Longval	471,391	Mar. 22	2712	691	58	1653
Plane. Carpenter's	F. Phelps	468,362	Feb. 9	716	177	58	672
Plane-iron	E. A. Schade	473,087	Apr. 19	1658	422	59	340
Plane truing device. Bench	J. P. Gage	485,923	Nov. 8	1168	308	61	827
Planes. Beveling attachment for	F. E. Hart	466,494	Jan. 5	300	77	58	57
Planer. Metal	T. E. Cherry	477,510	June 21	2035	505	59	1866
Planers and shapers. Tool-head for iron	F. W. and E. P. Parsons	471,189	Mar. 22	2407	612	58	1593
Planing and sawing machine	C. Ranger	470,444	Mar. 8	1285	328	58	1353
Planing-cutter	C. Kussmaul and C. F. Reichert	469,845	Mar. 1	289	75	58	1157
Planing-machine	G. W. Bugbee and F. Danner	470,359	Mar. 8	1143	292	58	1327
Planing-machine	W. H. Doane	477,928	June 28	2726	683	59	2016
Planing-machine	A. B. Hutchinson	482,481	Sept. 13	938	228	60	1531
Planing-machine	L. T. Pyott	481,371	Aug. 23	2625	646	60	1124
Planing-machine	M. S. Rawson	477,610	June 21	2198	545	59	1899
Planing-machine	J. R. Thomas	483,970	Oct. 4	674	169	61	139
Planing-machine	I. H. Venn	470,404	Mar. 8	1217	311	58	1340
Planing-machine	E. A. Walker	475,004	May 17	1801	457	59	1010
Planing-machine feed mechanism	A. B. Hutchinson	468,045	Feb. 2	210	51	52	58
Planing-machine table	G. W. Bugbee and F. Danner	470,358	Mar. 8	1142	292	58	1326
Plank. Walk and bridge	A. Zagelmeyer	482,536	Sept. 13	1039	251	60	1552
Planograph. Self-recording	J. Soler	481,432	Aug. 23	2734	672	60	1145
Plant-fender	R. Jones	478,074	June 28	2952	738	59	2061
Plant-frame	E. K. Jones	473,756	Apr. 26	2783	699	59	577
Plant-holder for windows	F. A. Curtis and H. J. Sautter	477,355	June 21	1797	440	59	1819
Plant or tree supporter	R. T. Hoffman	469,246	Feb. 23	2090	537	58	960
Plant protecting and irrigating apparatus	A. D. Pickens	468,536	Feb. 9	994	254	58	727
Plant-setting tool	A. A. Hawes	486,713	Nov. 22	2438	635	61	1112
Plant-stand. Folding	F. Hamblin	485,627	Nov. 8	725	189	61	737
Plants and press adapted therefor. Pressing and dry-	R. H. Day	484,301	Oct. 11	1188	302	61	254
Planter	J. C. Cayton	488,239	Dec. 20	1665	415	61	1687
Planter	T. J. Fincher and W. Byers	468,335	Feb. 9	678	168	58	664
Planter	W. T. Goodson	485,188	Nov. 1	52	16	61	583
Planter	W. M. Holladay	486,971	Nov. 29	2900	749	61	1221
Planter	J. Kelly	470,686	Mar. 15	1628	422	58	1431
Planter	E. J. Updike	474,425	May 10	876	228	59	818
Planter	L. E. Waterman	480,304	Aug. 9	897	227	60	765
Planter and cultivator. Combined	H. M. Horne and J. W. Asbell	471,863	Mar. 29	3422	874	58	1794
Planter and fertilizer-distributor	A. Bush	482,738	Sept. 20	1426	353	60	1639
Planter and fertilizer-distributor	R. Hasson	478,356	Dec. 20	1857	465	61	1724
Planter and fertilizer-distributor. Combined hand corn-	A. Knapp, Jr	473,760	Apr. 26	2787	701	59	579
Planter and fertilizer-distributor. Potato-	J. S. Robbins	475,519	May 24	2608	663	59	1184
Planter and fertilizer-distributor. Seed-	J. Laude	474,256	May 3	567	140	59	748
Planter and fertilizer-distributor. Seed-	J. Laude	474,748	May 10	1382	349	59	915
Planter and fertilizer-distributor. Seed-	T. E. Schumpert	469,096	Feb. 16	1865	477	58	909
Planter attachment. Corn-	G. J. Clime	476,036	May 31	3425	865	59	1357
Planter attachment. Corn-	J. B. Pedrick	485,710	Nov. 8	858	230	61	765

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Planter attachment. Corn or cotton	S. J. Adkins	487,941	Dec. 13	1157	289	61	1567
Planter. Bean	L. P. Thomas	468,977	Feb. 16	1694	432	58	875
Planter. Check-row	G. Ames	487,506	Dec. 6	449	116	61	1410
Planter. Check-row	S. B. Sare	482,437	Sept. 13	870	208	60	1518
Planter. Check-row	L. Scofield	466,431	Jan. 5	193	50	58	37
Planter check-row attachment	C. M. Furgason	469,205	Feb. 16	2031	518	58	939
Planter check-row attachment	L. Harpin	472,996	Apr. 19	1518	387	59	315
Planter. Check-row corn	J. R. Ayers	472,246	Apr. 5	376	99	59	70
Planter. Check-row corn	C. E. Kessler	476,149	May 31	3611	{ 912 913 }	59	1394
Planter check-row mechanism	J. W. Barlow	472,976	Apr. 19	1479	378	59	368
Planter. Combined corn and cotton	T. W. Knight	486,478	Nov. 22	2067	548	61	1039
Planter. Corn	J. P. Alinder	468,231	Feb. 2	484	119	58	619
Planter. Corn	F. Bayless	478,498	July 5	665	163	60	132
Planter. Corn	J. E. Bering	473,413	Apr. 19	2222	{ 558 559 }	59	448
Planter. Corn	O. Bell	484,991	Oct. 24	2317	597	61	505
Planter. Corn	G. W. Brown	474,363	May 10	781	{ 203 204 }	59	798
Planter. Corn	W. Cattell	470,661	Mar. 15	1590	414	58	1424
Planter. Corn	J. R. Cox	483,736	Oct. 4	317	79, 80	61	66
Planter. Corn	O. P. Cranmer	483,376	Sept. 27	2371	594	60	1836
Planter. Corn	B. Deardorff	475,266	May 17	2199	561	59	1090
Planter. Corn	H. H. Dougherty	481,852	Aug. 30	3424	840	60	1294
Planter. Corn	E. C. Fisher	476,624	June 7	600	144	59	1556
Planter. Corn	J. G. Goodwin	477,531	June 21	2078	517	59	1875
Planter. Corn	L. P. Graham	474,448	May 10	915	236	59	824
Planter. Corn	L. P. Graham	479,067	July 19	1538	{ 384 385 }	60	328
Planter. Corn	A. J. Hall	473,663	Apr. 26	2645	667	59	552
Planter. Corn	C. B. Harman	467,594	Jan. 26	2582	654	58	513
Planter. Corn	P. P. Hayes	483,217	Sept. 27	2106	534	60	1787
Planter. Corn	O. Hegglund	467,099	Jan. 12	1289	327	58	253
Planter. Corn	G. E. Johnson and S. H. Kirkpatrick	468,603	Feb. 9	1089	278	58	745
Planter. Corn	J. Keys	470,762	Mar. 15	1744	449	58	1454
Planter. Corn	S. C. Minear	470,500	Mar. 8	1364	{ 355 356 }	58	1368
Planter. Corn	T. W. Overlin	485,560	Nov. 1	619	165	61	699
Planter. Corn	W. O. Rundle	483,872	Oct. 4	532	131	61	108
Planter. Corn	L. Scofield	469,795	Mar. 1	207	54	58	1141
Planter. Corn	J. C. Tunncliffe	472,281	Apr. 5	425	{ 109 110 }	59	79
Planter. Corn and seed	A. Griesemer	481,170	Aug. 23	2292	565	60	1062
Planter. Cotton	T. C. Cadogan	466,487	Jan. 5	281	71, 72	58	54
Planter. Cotton	P. P. Simpson	482,277	Sept. 6	581	138	60	1448
Planter. Cotton	J. M. Terry	466,839	Jan. 12	861	220	58	174
Planter. Cotton and corn	J. W. Lehr	478,441	July 5	584	142	60	115
Planter. Cotton-seed	A. Lang	483,655	Oct. 4	203	50	61	42
Planter. Cotton-seed	W. S. West	485,518	Nov. 1	553	148	61	686
Planter guide-marker. Corn	H. A. Behrens	477,983	June 28	2801	702	59	2034
Planter. Hand	H. Seppmann	466,627	Jan. 5	505	130	58	97
Planter. Hand corn	J. W. Champion	474,721	May 10	1342	341	59	907
Planter. Hand corn	I. Mackey	487,849	Dec. 13	1007	254	61	1539
Planter marking attachment	C. W. Chafee	482,075	Sept. 6	250	60, 61	60	1385
Planter or dibbler. Hand	T. Priesheff	467,433	Jan. 19	1829	467	58	364
Planter. Potato	S. Essex	467,683	Jan. 26	2238	570	58	448
Planter. Potato	C. F. Gillett	466,849	Jan. 12	877	224	58	176
Planter. Potato	F. Robinson	475,610	May 24	2746	696	59	1211
Planter. Potato	S. C. Schofield	481,642	Aug. 30	3067	749	60	1225
Planter. Potato	E. Skerpil	478,137	July 5	88	23	60	20
Planter. Potato	C. Wright	481,456	Aug. 23	2771	{ 682 683 }	60	1152
Planter. Seed	J. A. Dodd	488,650	Dec. 27	2328	576	61	1833
Planter. Seed	H. Fiene and J. E. Kreenccke	486,669	Nov. 22	2369	619	61	1098
Planter. Seed	J. C. Haas	480,091	Aug. 2	528	134	60	683
Planter. Seed	J. F. Hulett	477,369	June 21	1819	445	59	1823
Planter. Seed	A. J. Johnson	468,178	Feb. 2	411	102	58	604
Planter. Seed	E. R. Knight	483,066	Sept. 20	1861	472	60	1728
Planter. Seed	A. Matson	476,056	May 31	3460	873	59	1364
Planter. Seed	A. Neely	473,124	Apr. 19	1728	437	59	352
Planter. Seed	S. G. Raddall	485,226	Nov. 1	110	33, 34	61	586
Planter. Seed	J. A. Stone	469,755	Mar. 1	139	36	58	1127
Planter. Seed	O. F. Yarbrough	471,728	Mar. 29	3214	818	58	1753
Planter. Tobacco	E. A. Kellman	478,289	July 5	361	87	60	73
Planter. Tobacco	A. F. Shuler	471,624	Mar. 29	3043	775	58	1722
Planter wheel. Corn	P. E. Wistrand	476,348	June 7	189	45	59	1473
Planters. Fertilizer-distributor attachment for check-row corn	J. A. Stuf	483,877	Oct. 4	528	133	61	109
Planters. Wheel for seed	W. H. Holsclaw	468,136	Feb. 2	346	86	58	592
Planting attachment. Corn	W. P. Goins	479,269	July 19	1854	465	60	388
Planting machine. Seed	R. B. Snell and B. Smith	488,846	Dec. 27	2634	{ 652 653 }	61	1895
Planting purposes. Guide-line for	H. Nichols	477,776	June 28	2478	620	59	1971
Plaster	C. Cassteel	478,951	July 12	1348	.....	60	289
Plaster compound	H. R. English	486,329	Nov. 15	1836	.....	61	980
Plaster. Wall	C. L. Denison	485,177	Nov. 1	37	.....	61	580
Plaster. Wall	W. Robinson	472,511	Apr. 5	792	.....	59	151
Plastering composition	A. L. Grant	466,782	Jan. 12	768	.....	58	156
Plastering composition	W. Robinson	471,081	Mar. 15	2235	.....	58	1549
Plastering. Composition of matter for	E. W. Dickie	479,060	July 19	1529	.....	60	327
Plastic composition	R. G. de Vassen	479,967	Aug. 2	309	.....	60	641
Plastic composition. Making	J. H. Amies	469,111	Feb. 16	1882	.....	58	912
Plastic compounds. Machine for molding articles from	H. C. Warren	483,663	Oct. 4	213	53	61	44
Plastic material. Die for forming articles from	H. E. Miller	488,570	Dec. 27	2202	544	61	1809

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. gr.	Vol.	Page.
Plastic material. Molding.....	H. B. Garrigues.....	468,222	Feb. 2	469	116	58	617
Plastic material. Toilet and other articles of.....	J. R. France.....	478,851	July 12	1209	300	60	255
Plastic materials. Coating surfaces with.....	M. B. Church.....	487,606	Dec. 6	593	152	61	1440
Plastic materials. Machine for shaping and molding.....	O. R. Chase.....	484,777	Oct. 25	1959	500	61	434
Plate-holder.....	W. H. Lewis.....	468,456	Feb. 9	853	216	58	699
Plate-holder.....	F. Servus.....	473,359	Apr. 19	2131	534	59	430
Plate-lifter.....	J. H. Traylor.....	475,363	May 24	2352	603	59	1136
Plate or pan lifter.....	C. L. Waldron.....	481,986	Sept. 6	98	25	60	1354
Plate-securing device.....	J. A. Anderson.....	475,745	May 31	2960	751	59	1265
Plate-straightening machine.....	H. C. Jones.....	479,745	July 26	2660	660	60	556
Plated articles. Manufacture of.....	W. E. Pleadwell.....	477,265	June 21	1652	404	59	1791
Platform: See Furnace-platform. Window-platform. Hoisting-platform.							
Platform.....	J. Matthews.....	483,233	Sept. 27	2132	539	60	1792
Pliers.....	J. Monto.....	486,616	Nov. 22	2286	596	61	1081
Pliers.....	S. O. Root.....	477,066	June 14	1304	317	59	1711
Pliers and calipers. Balance-wheel.....	J. E. Eckert.....	481,936	Sept. 6	26	6	60	1339
Pliers and cutter. Combined.....	W. A. Bernard.....	479,113	July 19	1618	404	60	343
Pliers. Belt.....	W. A. Bernard.....	488,785	Dec. 27	2534	629	61	1874
Pliers. Compound.....	F. Newitt.....	468,005	Feb. 2	151	36	58	553
Plotter.....	B. E. Sawyer.....	467,664	Jan. 26	2207	561	58	442
Plotter.....	L. P. Watson.....	479,198	July 19	1748	438	60	367
Plow.....	C. Atkinson.....	466,591	Jan. 5	448	115	58	86
Plow.....	C. L. Baggett.....	485,732	Nov. 8	895	240	61	773
Plow.....	M. L. Battle.....	486,021	Nov. 8	1333	354	61	863
Plow.....	O. D. Bunt.....	467,853	Jan. 26	2513	636	58	501
Plow.....	B. F. Cadenhead and M. E. Butt.....	478,273	July 5	340	82	60	68
Plow.....	U. A. Cleveland.....	484,178	Oct. 11	984	252	61	215
Plow.....	J. A. Cole.....	474,651	May 10	1229	314	59	884
Plow.....	J. P. Couch.....	485,457	Nov. 1	472	125	61	668
Plow.....	W. W. Davis.....	483,994	Oct. 11	711	179	61	160
Plow.....	G. N. Dexter, Jr.....	479,706	July 26	2586	644	60	542
Plow.....	J. Du Shane.....	475,681	May 24	2847	720	55	1231
Plow.....	W. S. Duggan.....	466,668	Jan. 5	567	147	58	110
Plow.....	D. Edwards.....	471,420	Mar. 22	2757	704	58	1661
Plow.....	W. A. Estes.....	487,142	Nov. 29	3167	{ 811 812 }	{ 61 61 }	{ 1273 1273 }
Plow.....	T. J. Fariss.....	472,015	Mar. 29	3629	928	58	1835
Plow.....	C. C. Fields.....	471,111	Mar. 22	2288	587	58	1571
Plow.....	L. S. Flatau.....	470,913	Mar. 15	1979	506	58	1499
Plow.....	J. I. Hatfield.....	472,348	Apr. 5	538	139	59	100
Plow.....	D. J. Hill.....	469,435	Feb. 23	2382	611	58	1016
Plow.....	D. J. Hill.....	471,336	Mar. 22	2621	665	58	1635
Plow.....	F. Huenerjaeger.....	471,290	Mar. 22	2557	649	58	1622
Plow.....	R. S. Hyer.....	467,780	Jan. 26	2395	608	58	479
Plow.....	L. C. Jackson and J. F. Reiger.....	475,731	May 24	2934	745	59	1246
Plow.....	S. R. Jackson.....	485,941	Nov. 8	1200	317	61	835
Plow.....	O. T. Jensen.....	481,630	Aug. 30	3051	745	60	1222
Plow.....	H. F. Jones.....	469,147	Feb. 16	1928	494	58	922
Plow.....	Z. R. Kea.....	487,749	Dec. 13	840	214	61	1505
Plow.....	W. A. Keahey.....	468,179	Feb. 2	412	102	58	605
Plow.....	F. F. Landis.....	482,847	Sept. 20	1509	375	60	1657
Plow.....	W. R. Lee.....	476,802	June 14	876	216	59	1625
Plow.....	J. H. Linebarger.....	472,302	Apr. 5	465	119	59	87
Plow.....	J. F. B. Lorentzen.....	481,633	Aug. 30	3057	746	60	1223
Plow.....	M. J. McBurnett.....	486,492	Nov. 22	2085	552	61	1043
Plow.....	J. E. and E. M. Mitchell.....	467,946	Feb. 2	64	15	58	537
Plow.....	J. E. and E. M. Mitchell.....	473,517	Apr. 26	2399	{ 607 608 }	{ 59 59 }	{ 504 504 }
Plow.....	J. E. and E. M. Mitchell.....	485,394	Nov. 1	383	103	61	651
Plow.....	P. S. Moore.....	487,578	Dec. 6	554	142	61	1431
Plow.....	W. H. Myers.....	469,584	Feb. 23	2620	672	58	1062
Plow.....	J. M. Nicholson.....	469,168	Feb. 16	1957	540	58	927
Plow.....	J. Oliver.....	468,026	Feb. 2	184	45	58	560
Plow.....	P. C. Pagett.....	475,604	May 24	2734	693	59	1208
Plow.....	E. Paulsen.....	487,539	Dec. 6	502	131	61	1420
Plow.....	H. E. Payne.....	466,701	Jan. 5	611	159	58	118
Plow.....	C. A. Pfeiffer.....	482,751	Sept. 20	1372	340	60	1628
Plow.....	S. Remaly.....	483,311	Sept. 27	2279	573	60	1818
Plow.....	S. P. Richmond.....	487,643	Dec. 6	655	169	61	1451
Plow.....	R. G. Roach.....	488,287	Dec. 20	1741	439	61	1702
Plow.....	N. C. Sample.....	477,230	June 21	1591	390	59	1780
Plow.....	K. N. Sharp.....	479,992	Aug. 2	362	89, 90	60	650
Plow.....	W. Strait.....	469,756	Mar. 1	141	36, 37	58	1127
Plow.....	G. W. Swinson.....	480,637	Aug. 9	1425	355	60	866
Plow.....	T. Tinkler.....	479,036	July 19	1495	372	60	320
Plow.....	D. C. Turner.....	471,915	Mar. 29	3492	893	58	1809
Plow.....	C. H. Vanderburg.....	482,884	Sept. 20	1583	398	60	1670
Plow.....	C. Wagner.....	486,515	Nov. 22	2118	559	61	1050
Plow.....	E. L. Ward.....	481,708	Aug. 30	3172	775	60	1246
Plow.....	H. G. Webb.....	471,922	Mar. 29	3501	894	58	1810
Plow.....	F. W. Wellhausen.....	466,477	Jan. 5	269	68	58	51
Plow.....	E. C. Westervelt.....	469,075	Feb. 16	1837	470	58	903
Plow.....	G. C. Westervelt.....	484,129	Oct. 11	896	229	61	198
Plow.....	F. Wiard.....	479,927	Aug. 2	235	59	60	628
Plow.....	H. Wiard.....	479,927	Aug. 2	162	38, 39	59	669
Plow and harrow. Combined sulky.....	M. A. McClellan.....	478,627	July 12	864	213	60	187
Plow and seeder. Combined.....	H. Sommerfeld.....	487,871	Dec. 13	1046	262	61	1546
Plow and seeder. Combined.....	H. F. Wisteman.....	469,352	Feb. 23	2254	{ 578 579 }	{ 58 58 }	{ 992 992 }
Plow attachment.....	T. B. Fagan.....	470,886	Mar. 15	1942	497	58	1482
Plow attachment.....	S. F. Savits.....	472,179	Apr. 5	267	70	59	50
Plow attachment.....	C. B. Thornton.....	484,943	Oct. 25	2240	577	61	491

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Plow attachment.....	C. H. Warrington.....	482,602	Sept. 13	1135	274	60	1571
Plow attachment.....	G. Watson.....	481,215	Aug. 23	2362	582	60	1076
Plow-beam.....	H. H. Sater.....	474,485	May 10	969	249	59	834
Plow-beam attachment.....	F. J. Blauke.....	476,779	June 14	837	207	59	1617
Plow. Break.....	F. W. Gillespie.....	469,693	Mar. 1	31	11	58	1104
Plow. Combination.....	H. M. McCafferty.....	478,884	July 12	1250	309	60	262
Plow. Combined riding and walking gang.....	A. M. Fitch.....	484,000	Oct. 11	723	182	61	163
Plow. Cultivating.....	E. H. Franklin.....	468,743	Feb. 9	1303	331	58	789
Plow-cultivator attachment. Listing.....	H. L. Markham.....	485,959	Nov. 8	1236	326	61	842
Plow-cutter.....	C. A. Wren.....	488,863	Dec. 27	2660	658	61	1900
Plow. Ditching.....	I. Jones.....	470,491	Mar. 8	1356	353	58	1366
Plow. Ditching.....	P. T. Montgomery.....	487,869	Dec. 13	1043	261	61	1545
Plow. Ditching.....	B. H. Rinehart.....	483,476	Sept. 27	2501	630	60	1862
Plow. Double.....	J. S. Stockton.....	475,825	May 31	3100	785	59	1292
Plow. Double-mold-board.....	C. E. Parks.....	482,380	Sept. 13	782	188	60	1502
Plow-fender.....	G. N. Spencer.....	482,595	Sept. 13	1128	272	60	1569
Plow. Gang.....	C. Anderson.....	468,021	Feb. 2	174	42, 43	58	558
Plow. Gang.....	R. L. Penn.....	478,634	July 12	872	215	60	188
Plow. Grub.....	J. P. Weatherman.....	485,308	Nov. 1	230	64	61	619
Plow. Hand.....	J. I. Mettler.....	488,397	Dec. 20	1919	480	61	1736
Plow-handle clamp.....	J. L. O. King.....	472,657	Apr. 12	996	257	59	202
Plow harrow attachment.....	W. O. Silvey.....	474,269	May 3	589	146	59	752
Plow harrow attachment. Sulky.....	S. P. Yoder.....	485,830	Nov. 8	1018	{ 273 } { 274 }	61	797
Plow heel attachment.....	A. O. Woodbury.....	486,416	Nov. 15	1973	524	61	1007
Plow. Hillside.....	D. B. English.....	472,112	Apr. 5	162	44	59	30
Plow. Hillside.....	C. P. McWane.....	484,043	Oct. 11	785	198	61	175
Plow-jointer.....	C. A. Stringer.....	476,090	May 31	3513	885	59	1375
Plow. Listing.....	B. Blankenship.....	479,779	Aug. 2	10	3	60	584
Plow. Listing.....	C. N. Leatherwood.....	479,987	Aug. 2	356	88	60	649
Plow planter attachment.....	J. P. Nugent.....	481,242	Aug. 23	2408	{ 594 } { 595 }	60	1086
Plow-point.....	G. Sears.....	484,758	Oct. 18	1914	488	61	413
Plow-point.....	G. C. Westervelt.....	477,723	June 28	2394	598	59	1956
Plow-point. Reversible.....	C. J. Abbott.....	478,730	July 12	1020	249	60	218
Plow-point. Reversible.....	T. M. Bissell and J. B. Huber.....	479,696	July 26	2564	638	60	538
Plow. Reversible.....	M. R. Hubbell.....	486,530	Nov. 22	2139	564	61	1053
Plow. Reversible.....	A. Pirsch.....	477,912	June 28	2702	677	59	2013
Plow. Reversible.....	W. F. Sweet.....	470,019	Mar. 1	562	139	58	1208
Plow. Reversible double-shovel.....	J. W. Thrush.....	476,578	June 7	526	124	59	1541
Plow riding attachment.....	W. E. Stafford.....	488,848	Dec. 27	2637	{ 653 } { 654 }	61	1896
Plow. Rotary.....	G. P. Cleveland.....	486,325	Nov. 15	1826	482	61	978
Plow. Rotary.....	M. T. Hancock. (Reissue).....	11,257	Aug. 9	1530	{ 360 } { 381 }	60	886
Plow. Rotary.....	O. Marth.....	469,046	Feb. 16	1797	459	58	895
Plowshare.....	W. R. Russell.....	472,400	Apr. 5	618	157	59	116
Plow-shovel.....	E. Paulsen.....	470,503	Mar. 8	1369	357	58	1369
Plow. Shovel.....	B. Ratcliff and S. T. Lawrence.....	472,817	Apr. 12	1231	316	59	246
Plow. Side-hill.....	D. B. Vance and H. J. Laurence.....	473,487	Apr. 26	2349	596	59	495
Plow. Side-hill.....	G. C. Westervelt.....	484,128	Oct. 11	894	229	61	198
Plow. Spade.....	W. Pichno.....	476,684	June 7	684	166	59	1573
Plow standard and attachment.....	W. T. Stapler.....	482,510	Sept. 13	989	239	60	1542
Plow-stock.....	T. Brooks.....	485,254	Nov. 1	152	44	61	604
Plow-stock.....	H. J. Davis.....	468,909	Feb. 16	1559	396	58	848
Plow-stock.....	E. Koenig.....	484,520	Oct. 18	1537	390	61	334
Plow. Sulky.....	C. Anderson.....	476,355	June 7	199	48	59	1474
Plow. Sulky.....	W. L. Casaday.....	466,945	Jan. 12	1035	{ 263 } { 264 }	58	205
Plow. Sulky.....	L. S. Flatau.....	482,943	Sept. 20	1667	419	60	1687
Plow. Sulky.....	M. Glynn.....	482,734	Sept. 20	1342	332	60	1623
Plow. Sulky.....	L. and G. Ronse and W. H. Hanley.....	486,266	Nov. 15	1742	459	61	961
Plow. Sulky.....	S. H. Tinsman.....	476,579	June 7	527	124	59	1541
Plow. Sulky.....	C. E. Tower.....	475,638	May 24	2787	{ 706 } { 707 }	59	1220
Plow. Sulky.....	J. R. Warren.....	472,240	Apr. 5	364	94	59	68
Plow. Sulky.....	J. Wolpert.....	483,480	Sept. 27	2506	631	60	1863
Plow. Sweep.....	A. M. Miller.....	475,461	May 24	2513	640	59	1166
Plow. Truck or rice farm.....	J. A. Taylor, Jr.....	477,971	June 28	2784	697	59	2030
Plow. Turning.....	P. J. Ebersohl.....	488,880	Dec. 27	2680	{ 663 } { 664 }	61	1905
Plow. Walking and riding.....	A. M. Fitch.....	468,966	Feb. 16	1662	425	58	868
Plow. Wheel.....	J. Clayton.....	484,652	Oct. 18	1750	{ 445 } { 446 }	61	378
Plow. Wheel.....	J. E. Lamborn and R. Rickards.....	470,495	Mar. 8	1359	353	58	1367
Plow. Wheel.....	P. W. Stanhope, Jr.....	485,994	Nov. 8	1293	343	61	854
Plow. Wheel.....	E. Stock.....	482,816	Sept. 20	1464	364	60	1647
Plow. Wheel.....	E. C. Westervelt and C. W. Clapp.....	473,803	Apr. 26	2252	{ 716 } { 717 }	59	591
Plows. Adjustable standard for.....	J. K. Teague.....	470,219	Mar. 8	884	219	58	1280
Plows. Foot-latch for reversible.....	O. H. Eddy.....	480,077	Aug. 2	509	139	60	679
Plows. Harrow attachment for.....	J. P. Rhoads.....	467,020	Jan. 12	1154	293	58	227
Plows. Harrows, &c. Riding attachment for.....	C. D. Fox.....	485,184	Nov. 1	47	15	61	582
Plows. Heel-sweep set for.....	D. S. Bradberry.....	470,469	Mar. 8	1324	344	58	1360
Plows. Subsoiling attachment for.....	W. F. Highfill.....	469,434	Feb. 23	2381	611	58	1016
Plows. Weed-cutter for cultivator.....	J. Rosencrans.....	471,687	Mar. 29	3140	800	58	1740
Plowing machine. Land.....	G. M. Clark.....	466,772	Jan. 12	746	{ 194 } { 195 }	58	152
Plowing machine. Land.....	G. M. Clark.....	478,311	July 5	392	94, 95	60	79
Plowing machine. Land.....	G. M. Clark.....	478,500	July 5	669	{ 163 } { 164 }	60	133
Plug-cutter.....	E. C. Heydenreich.....	475,559	May 24	2673	679	59	1196
Plug-cutter.....	E. C. Heydenreich.....	475,560	May 24	2674	679	59	1196
Plug-cutter.....	U. H. Leffel.....	472,231	Apr. 19	1919	483	59	389

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Plug-cutting tool	F. E. Resche	476,312	June 7	126	30	59	1462
Plug spring-jack	C. A. Shea	481,204	Aug. 23	2342	577	60	1072
Plumb and level	N. H. Spencer	466,380	Jan. 5	113	32	58	24
Plumb-bob	H. M. Fuller	485,376	Nov. 1	352	94	61	645
Plumber's clamp	J. H. Ash	474,713	May 10	1325	338	59	904
Plumber's safe connection	J. J. Hogan	473,460	Apr. 26	2310	584	59	487
Plumber's tack	W. H. Evory	469,553	Feb. 23	2577	660	58	1053
Plumber's trap	B. C. Anderson	473,993	May 3	169	40	59	671
Plunge-battery	J. H. Howard	473,463	Apr. 26	2314	585	59	488
Pneumatic boat. Collapsible	W. H. Gamble and D. H. Allen	486,597	Nov. 22	2251	5-9	61	1074
Pneumatic chair	A. P. Watson	484,072	Oct. 11	822	208	61	183
Pneumatic dispatch-tube	D. Hunter	468,419	Feb. 9	802	200	58	690
Pneumatic or other dispatch systems. Automatic receiver for	A. Bryson, Jr	480,805	Aug 16	1690	422	60	933
Pneumatic-tired wheel	G. A. Burwell	486,556	Nov. 22	2171	573	61	1060
Pneumatic tool	F. A. Bagnasco	474,154	May 3	413	100	59	718
Pneumatic tool	J. G. Carlinet	487,086	Nov. 29	3080	791	61	1256
Pneumatic tool	D. Drawbaugh	482,942	Sept. 20	1664	419	60	1687
Pocket	H. Logan and C. R. Lewis	467,818	Jan. 26	2458	621	58	490
Pocket attachment	S. Salinger	476,687	June 7	690	170	59	1574
Pocketbook	L. Hummel	472,174	Apr. 5	254	67	59	48
Pocketbook, &c.	F. Müller	476,159	May 31	3630	918	59	1398
Pocketbook-fastening	A. Goertz	477,798	June 28	2513	631	59	1977
Pocketbook-frame	S. Schener	486,128	Nov. 15	1528	404	61	917
Pocketbook or purse	E. Schnopp	480,143	Aug. 2	613	156	60	699
Pocketbook, purse, or satchel frame	S. Schener	485,230	Nov. 1	116	35	61	597
Pocketbook-support	J. G. Gareis	471,854	Mar. 29	3410	879	58	1792
Pocketbooks, &c. Frame for	E. Oldenbusch	484,111	Oct. 11	872	232	61	193
Pocketbooks, &c. Frame for	A. W. Scheuber	471,144	Mar. 22	2345	600	58	1581
Pocket-flask	A. D. Schlesinger	468,829	Feb. 16	1439	366	58	825
Pocket-gage	P. Broadbooks	481,507	Oct. 18	1603	407	61	348
Pocket-knife	C. E. Billings	470,777	Mar. 15	1771	456	58	1458
Pocket-knife	B. von Bültzingslöwen	472,104	Apr. 5	147	40	59	28
Pocket-knife	B. von Bültzingslöwen	476,245	June 7	19	4	59	1442
Pocket-knife	R. H. Franklin	475,306	May 24	2257	582	59	1118
Pocket-knife	W. O'Hara	478,812	July 12	1152	285	60	244
Pocket-knife	A. Pauls	472,390	Apr. 5	604	153	59	113
Pocket-knife	G. Schrade	470,605	Mar. 8	1505	393	58	1399
Pocket-knife	G. Skoglund	468,340	Dec. 20	1829	457	61	1718
Pocket-protector	J. W. Parmley	486,352	Nov. 15	1872	493	61	986
Pocket-register	J. B. Reed	478,863	July 5	474	115	60	94
Pocket. Safety	I. Kleinberger	484,435	Oct. 18	1406	358	61	309
Pocket. Safety watch	H. A. Liedel	475,017	May 17	1822	462	59	1014
Poison-cabinet	E. G. Knabler	469,349	Feb. 23	2250	577 578 577 578	58	991
Poison-distributor	S. M. Conlson	471,633	Mar. 29	3054	777 778	58	1724
Poison-distributer	J. T. McGee and R. W. Carr	467,619	Jan. 26	2143	544	58	430
Poison-distributor	H. J. Hill	477,119	June 14	1389	338	59	1728
Poison-distributor	J. M. Krueger and F. Wunderlich	477,127	June 14	1400	340	59	1730
Poison-distributor	C. H. Pickering	471,892	Mar. 29	3461	884	58	1892
Poison-distributor	F. L. Richter	472,819	Apr. 12	1233	316	59	246
Poison-dust distributor	E. B. Norton	468,685	Feb. 9	1216	309	58	771
Poison-receptacle	A. L. De Shen	478,691	July 12	951	236	60	205
Poke. Animal	A. Bolding	483,508	Sept. 27	2552	640	60	1872
Poke. Animal	W. T. Elliot	477,651	June 28	2284	572	59	1931
Poke. Animal	C. J. Le Count	486,483	Nov. 22	2074	549	61	1041
Poke. Animal	T. H. Sparks	471,149	Mar. 22	2353	601	58	1533
Poke. Animal	U. W. Stracener	475,091	May 17	1940	491	59	1037
Poke. Animal	C. V. Whallon	483,190	Sept. 27	2066	522	60	1779
Pole. Adjustable wagon	F. L. Wood	488,410	Dec. 20	1947	487	61	1742
Pole. Coupling	A. Drew	482,678	Sept. 13	1244	303	60	1591
Pole. Metallic	S. H. Terry	467,526	Jan. 26	1988	504	58	402
Pole or shaft prop	A. Scarlett	488,406	Dec. 20	1933	4-5	61	1739
Pole or shaft. Vehicle	L. M. Robbins	477,269	June 21	1657	405	59	1792
Pole socket. Vehicle	C. F. Kimball	485,947	Nov. 8	1213	320	61	837
Pole-tip	W. I. Schryver	486,942	Nov. 29	2863	739	61	1213
Pole tip. Carriage	E. W. Rider	488,133	Dec. 13	1479	373	61	1634
Pole tip. Vehicle	T. J. Houghton	481,791	Aug. 30	3327	812	60	1276
Pole. Tubular metallic	D. Dorward	470,153	Mar. 1	757	188	58	1246
Pole. Tubular metallic	D. Dorward	484,144	Oct. 11	928	239	61	204
Pole. Vehicle	L. L. Buffham	483,531	Oct. 4	22	5	61	7
Pole. Vehicle	T. B. Cultra	486,857	Nov. 29	2683	702	61	1178
Pole. Vehicle	J. W. Jeffery	474,743	May 10	1376	348	59	914
Pole. Vehicle	J. P. Johnson	481,619	Aug. 30	3036	742	60	1219
Pole. Vehicle	W. L. Pike	480,510	Aug. 9	1222	306	60	827
Pole. Vehicle	W. L. Pike	480,511	Aug. 9	1223	306	60	827
Pole. Vehicle	E. M. Van Valkenburg	470,271	Mar. 8	964	239	58	1295
Poles. Detachable step for	V. A. Thomas	480,977	Aug. 16	1962	491	60	967
Poles. Machine for removing knots from	J. C. Ballew	476,859	June 14	972	236	59	1644
Police-nippers	S. A. French	469,557	Feb. 23	2581	661	58	1054
Police-nippers	S. A. French	469,117	Mar. 1	709	175	58	1237
Police signal system	J. C. Wilson	486,306	Nov. 15	1635	433	61	939
Polishing-machine	C. Seymour	487,785	Dec. 13	902	228	61	1518
Polishing-machines. Abrading-cylinder for	A. P. Boardman	469,226	Feb. 23	2064	531	58	954
Polishing-wheel	J. McClellan	481,415	Aug. 23	2706	665	60	1139
Pool-ball frame	W. A. Sweet	484,562	Oct. 18	1598	406	61	347
Pool-game register	C. A. Hathaway and J. W. Golden	470,048	Mar. 1	655	150	58	1217
Pool-rack	G. F. Hall and H. Gottschalk	484,533	Oct. 18	1595	305 306	61	338
Pool rack and spotter	C. H. Fuchs	479,213	July 19	1770	444	60	371
Pool-table	F. E. and W. F. Angustin	472,423	Apr. 5	645	164 165	59	121

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Pop-corn. Machine for coating.....	J. T. Woods.....	475,840	May 31	3127	792	59	1297
Portable bath.....	A. H. Cox and I. N. Haley.....	477,515	June 21	2045	509	59	1868
Portable heater.....	W. F. Falls.....	469,417	Feb. 23	2362	606	58	1012
Portable house.....	O. P. Howe.....	477,757	June 28	2454	613	59	1967
Portable safety-heater.....	J. House.....	485,008	Oct. 25	2342	603	61	511
Portable tubular boiler.....	G. Seldon.....	479,991	Aug. 2	360	89	60	649
Portfolio.....	H. M. Hoelscher.....	472,264	Apr. 5	406	104	59	76
Portfolio.....	C. N. Leonard.....	471,390	Mar. 22	2710	691	58	1653
Portfolio or pocket-case.....	C. Galle.....	480,087	Aug. 2	523	133	60	682
Portraits or other pictures. Making.....	F. Piera y de Mata.....	472,812	Apr. 12	1224		59	244
Position of distant objects. Method of and appa- ratus for finding the.....	B. A. Fiske.....	472,617	Apr. 12	944	{ 243 244 }	{ 59 193 }	
Post:							
See Coal-auger post. Lamp-post.							
Concrete post. Metallic post.							
Fence-post. Tool-post.							
Hitching-post.							
Post-driver.....	J. McLandsborough.....	485,051	Oct. 25	2408	620	61	524
Post-hole digger.....	W. Z. Brown.....	481,688	Aug. 30	3140	766	60	1239
Post-hole digger.....	J. W. Clark.....	488,918	Dec. 27	2748	678	61	1918
Post-hole digger.....	T. A. Cross.....	471,767	Mar. 29	3269	834	58	1704
Post-hole digger.....	H. Hall and J. W. Cook.....	467,751	Jan. 26	2355	596	58	470
Post or pile driver.....	C. E. McAuley.....	470,252	Mar. 8	930	231	58	1288
Post-top.....	M. E. Loughlin.....	479,123	July 19	1632	408	60	345
Postmarking and stamp-canceling machine.....	W. Groth.....	472,497	Apr. 5	764	{ 194 195 196 }	{ 59 145 }	
Postmarking-machines. Delivery apparatus for.....	M. J. Dolphin.....	467,682	Jan. 26	2236	569	58	448
Post-office lock-drawer.....	J. W. Harriott.....	486,777	Nov. 22	2542	{ 663 664 }	{ 61 1132 }	
Pot:							
See Coffee-pot. Flower-pot.							
Coffee or tea pot. Melting-pot.							
Dash-pot. Paint-pot.							
Fire-pot. Tea-pot.							
Floating pot. Tea or coffee pot.							
Potassium carbonate. Making.....	P. Römer.....	484,921	Oct. 25	2207	568	61	464
Potassium chlorate. Electrolytically producing.....	E. B. Cutten.....	480,492	Aug. 9	1196	300	60	821
Potassium chlorate. Electrolytically producing.....	E. B. Cutten.....	480,493	Aug. 9	1197		60	821
Potato-bug gatherer.....	G. Carlson.....	472,428	Apr. 5	656	167	59	123
Potato-coverer.....	I. F. Dodge.....	486,861	Nov. 29	2695	703	61	1180
Potato-coverer.....	J. Lundy.....	486,534	Nov. 22	2143	566	61	1054
Potato-cutter.....	L. A. Aspinwall.....	485,160	Nov. 1	2	1	61	573
Potato-cutter.....	F. Jackson.....	481,629	Aug. 30	3050	745	60	1222
Potato-digger.....	G. E. and M. J. Anderson.....	475,772	May 24	2370	{ 606 607 }	{ 59 1140 }	
Potato-digger.....	W. Grasham and J. W. Moore.....	469,136	Feb. 16	1914	490	58	919
Potato-digger.....	J. Guzowski.....	466,752	Jan. 5	705	{ 181 182 183 }	{ 58 134 }	
Potato-digger.....	J. E. Kelly and F. R. Howell.....	480,590	Aug. 9	1344	335	60	851
Potato-digger.....	D. Livingston.....	478,442	July 5	586	143	60	115
Potato-digger.....	G. M. Marshall.....	469,160	Feb. 16	1946	494	58	925
Potato-digger.....	J. E. McCreedy.....	466,699	Jan. 5	608	158	58	118
Potato-digger.....	W. Morrow.....	469,973	Mar. 1	500	124	58	1195
Potato-digger.....	G. M. D. Pomeroy and G. H. Web- ber.....	477,266	June 21	1633	404	59	1791
Potato-digger.....	A. A. Pratt.....	484,817	Oct. 25	2024	519	61	448
Potato-digger.....	W. and J. Reuther.....	473,083	Apr. 19	1650	420	59	339
Potato-digger.....	W. and J. Reuther.....	473,084	Apr. 19	1652	420	59	339
Potato-digger.....	J. H. Sauer.....	472,552	Apr. 12	850	{ 217 218 }	{ 59 175 }	
Potato-digger.....	W. H. Van Voorhis.....	476,763	June 7	600	197	59	1597
Potato-digger.....	S. N. Washburn.....	485,118	Oct. 25	2500	642	61	544
Potato-digger.....	P. J. Wiborg.....	481,645	Aug. 30	3072	750	60	1226
Potato-grinder.....	J. R. Hartman.....	483,251	Sept. 27	2157	546	60	1797
Potato-masher.....	A. M. Amos.....	488,668	Dec. 27	2359	584	61	1839
Potato-masher.....	C. S. Apple.....	472,515	Apr. 12	799	205	59	165
Potato-separator.....	J. Joubert.....	467,177	Jan. 19	1439	{ 366 367 }	{ 58 290 }	
Potter's tool.....	H. Mishler.....	467,609	Jan. 26	2130	541	58	428
Pottery-kilo.....	W. H. Zimmer and O. G. Hess.....	488,413	Dec. 20	1952	488	61	1743
Pottery-machine.....	C. Breitschwerth.....	471,807	Mar. 29	3344	852	58	1778
Pottery-machine.....	W. J. Woolley.....	468,391	Feb. 9	760	189	58	680
Poultry-killing apparatus.....	W. S. Farnas.....	487,180	Nov. 29	3225	826	61	1285
Poultry-killing apparatus.....	W. S. Farnas and T. Kenderdine.....	487,560	Dec. 6	531	137	61	1426
Poultry-trough.....	S. J. Day.....	466,397	Jan. 5	135	37	58	28
Powder:							
See Blasting-powder. Flavoring-powder.							
Explosive powder. Washing-powder.							
Powder-box.....	W. P. Farrington.....	472,532	Apr. 12	827	211	59	170
Powder-box. Toilet.....	W. Hill.....	472,217	Apr. 5	332	85	59	62
Powder-distributor.....	J. Fries.....	466,337	Jan. 5	43	11	58	11
Powder-duster.....	J. P. Wright.....	478,901	July 12	1275	316	60	267
Powder-motor.....	G. V. Sheffield.....	489,989	Nov. 8	1279	340	61	851
Powder-papers. Machine for creasing.....	A. G. Beale and T. Nesbitt.....	474,716	May 10	1334	{ 339 340 }	{ 59 905 }	
Powder-puff.....	E. A. Bailey.....	471,680	Mar. 29	3131	798	58	1738
Powder-puff and inhaler device. Pocket.....	W. H. Payne.....	478,353	July 5	469	114	60	93

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Power:							
See Animal-power.	Mechanical moving-power.						
Baling-press power.	er.						
Chain-power.	Motor or treadle-power.						
Churn-power.	Propelling power.						
Horse-power.	Water-power.						
Power. Application of differential	F. Burger	477,736	June 28	2412	603	59	1959
Power. Device for the transmission of	L. Tighe	487,303	Dec. 6	102	30	61	1342
Power-dividing apparatus	W. J. Hull	469,364	Feb. 23	2272	583	58	995
Power. Electric transmission of	E. W. Rice, Jr.	485,658	Nov. 8	777	206	61	747
Power. Electric transmission of	E. W. Rice, Jr.	485,659	Nov. 8	779	207	61	747
Power. Electrical transmission of	C. J. Van Depoele	479,966	Aug. 2	306	75	60	640
Power machine. Manual	W. K. Crofford	480,452	Aug. 9	1141	285	60	810
Power, &c. Machine for utilizing ocean-	R. L. Johansen	475,451	May 24	2493	636	59	1162
Power. Means for transmitting	C. T. Tarpenning and L. B. Sherwood.	477,469	June 21	1974	490	59	1854
Power. Means for transmitting	W. E. Walsh	487,805	Dec. 13	939	237	61	1525
Power. Mechanism for controlling the application of	J. F. McLaughlin	467,297	Jan. 19	1621	413 414	58	324
Power. Method of and apparatus for generating motive	F. C. Romkey	467,834	Jan. 26	2478	629	58	494
Power-press clutch mechanism	C. E. Pollard	477,604	June 21	2184	541 542	59	1896
Power-presses. Clntch mechanism for	A. H. Merriman	468,506	Feb. 9	940	239	58	716
Power. System of electrical transmission of	N. Tesla	487,796	Dec. 13	925	233 234	61	1522
Power-transmission	J. F. Devold	471,812	Mar. 29	3354	854	58	1780
Power-transmitter	J. M. Bergold	485,167	Nov. 1	13	4	61	575
Power-transmitter	W. Larson and O. Gunderson	485,952	Nov. 8	1224	322	61	839
Power-transmitter	A. Lewis	466,352	Jan. 5	66	17	58	15
Power-transmitter	D. McCarthy	479,297	July 19	1895	474	60	396
Power-transmitter	F. C. Osborn	472,222	Apr. 5	339	88	59	63
Power-transmitter	F. C. Osborn	472,223	Apr. 5	340	88	59	64
Power-transmitter	A. S. Tragethon	484,066	Oct. 11	813	206	61	181
Power-transmitting apparatus	T. Krieg	470,201	Mar. 8	858	212	58	1275
Power-transmitting device	J. Walker	469,491	Feb. 23	2477	635	58	1033
Power-transmitting device	E. D. Weyburn	481,988	Sept. 6	101	25	60	1354
Power-transmitting mechanism	D. C. Frazee	487,615	Dec. 6	604	155	61	1442
Power-transmitting mechanism	B. W. Grist	486,287	Nov. 15	1774	466 467	61	967
Precious metals and copper. Treating mixtures containing sulphides of	C. Whitehead	483,972	Oct. 4	677	.....	61	140
Precious metals by amalgamation from ores or materials containing them. Apparatus for separating	R. E. Shill	470,921	Mar. 15	1990	509	58	1501
Precious stones. Machine for cutting and polishing.	E. Passmore	479,452	July 26	2175	544	60	467
Preserved meat. Receptacle for	D. Rylands	473,349	Apr. 19	2113	530	59	428
Preserving animal food	J. W. Cameron	473,893	Apr. 26	3008	758	59	621
Preserving-can	L. K. Royer	488,839	Dec. 27	2623	650	61	1892
Preserving fruit.	M. Marshfield	467,641	Jan. 26	2173	553	58	436
Preserving-jar	J. E. Faber	481,939	Sept. 6	31	7	60	1340
Press:							
See Bag-bundling press.	Hand-press.						
Baling-press.	Hay-press.						
Barrel-press.	Heel-press.						
Bending-press.	Honey-section press.						
Brick-press.	Hop-press.						
Brick or fuel press.	Household press.						
Car-seal press.	Hydraulic press.						
Cigar-press.	Letter-press.						
Cloth-press.	Matrix-press.						
Copy-press.	Oil-press.						
Copying-press.	Printing-press.						
Cotton-press.	Proof-press.						
Die-press.	Seal-press.						
Domestic press.	Signature-press.						
Drop-press.	Soap-press.						
Fruit-press.	Stamping-press.						
Fuel-press.	Telescopic press.						
Glass-press.	Tile-press.						
Press	V. D. Anderson	474,802	May 17	1473	375	59	947
Press	D. W. Bromley	486,662	Nov. 22	2355	616 617	61	1095
Press	C. M. Terrell and G. T. Bartlett	488,296	Dec. 20	1755	442 839	61	1704
Press	S. D. Tucker	471,778	Mar. 29	3292	840 841	58	1768
Press-stripper	H. Schaafe	473,889	Apr. 26	3002	757	59	620
Presses. Clutch and stop mechanism for	F. Wheeler	470,797	Mar. 15	1804	463 464	58	1465
Pressing and molding machine	J. L. Shute	470,513	Mar. 8	1383	361	58	1372
Pressing-frame	C. Leland	486,347	Nov. 15	1866	491	61	985
Pressure apparatus. Fluid	I. T. Dyer	474,059	May 3	285	69	59	692
Pressure brake. Fluid	G. A. Boyden	481,135	Aug. 16	2218	548	60	1035
Pressure-gage	C. B. Bosworth	485,404	Nov. 1	397	107	61	654
Pressure-gage	C. A. G. Winther	466,547	Jan. 5	378	96	58	73
Pressure gage and register. Combined	W. J. O. Bryon, Jr.	487,515	Dec. 6	465	122	61	1413
Pressure-gage. Duplex	F. H. Haskell	471,383	Mar. 22	2701	669	58	1651
Pressure-gage. Duplex	F. H. Haskell	483,613	Oct. 4	144	36	61	30
Pressure gage. Steam	M. McNeil	486,839	Nov. 22	2647	691	61	1155
Pressure-gages. Device for testing	C. B. Bosworth	476,512	June 7	436	102 103	59	1523
Pressure-indicator. Electrical	J. W. Howell	480,947	Aug. 16	1903	476	60	976

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Pressure-plate	E. F. Lewis	472,301	Apr. 5	462	119	59	87
Pressure-recorder for air-brakes, &c	W. F. De Forest	484,411	Oct. 18	1357	347	61	300
Pressure-regulating device	C. F. A. Convert	481,272	Aug. 23	2468	608	60	1097
Pressure-regulator	C. H. Burton	469,231	Feb. 23	2072	533	58	956
Pressure-regulator	H. Giessenbier	473,069	Apr. 19	1632	416	59	336
Pressure-regulator	G. Harris	4-2,842	Sept. 20	1504	374	60	1656
Pressure-regulator	V. H. Higgins and W. D. Smith	483,516	Sept. 27	2575	646	60	1-76
Pressure-regulator	J. B. Knickerbocker	468,007	Feb. 2	153	37	58	553
Pressure-regulator	J. Lehr and J. Bodani	486,485	Nov. 22	2076	550	61	1041
Pressure-regulator	G. H. Purdy	469,505	Feb. 23	2498	604	58	1037
Pressure-regulator	J. D. P. Schenck	488,370	Dec. 20	1-82	471	61	1729
Pressure-regulator	W. Werle	472,241	Apr. 5	365	94	59	68
Pressure-regulator. Fluid	I. Cumberbatch	468,129	Feb. 2	337	53, 84	58	589
Pressure-regulator. Fluid	T. Hanson	474,244	May 3	552	136	59	745
Pressure-regulator. Fluid	W. B. Mason	481,579	Aug. 30	2972	730	60	1208
Pressure-regulator. Fluid	C. J. Riuderknecht	484,458	Oct. 18	1435	366	61	315
Pressure-regulator. Fluid	E. Webb	479,234	July 19	1801	451	60	377
Pressure-regulator for compressed-air machines	E. C. Fasoldt	4-5,578	Nov. 1	653	174	61	707
Pressure-regulator. Steam	J. J. Lowden	469,373	Feb. 23	2292	5-9	58	999
Pressures. Mercury column for ascertaining	A. B. Calkins	469,960	Mar. 1	473	118	58	1190
Price-dieu	J. McShea	477,440	June 21	1925	475	59	1844
Printer and cutter. Roll-paper	F. Kirsch	485,701	Nov. 8	835	224	61	761
Printer's chase	J. S. Brown	487,710	Dec. 13	708	197	61	1490
Printer's combination-tool	N. Bunch	464,595	Feb. 9	1078	276	58	743
Printers' forms. Lock-up mechanism for	J. E. Horning and E. D. Clapp	473,750	Apr. 26	2777	698	59	576
Printer's galley	N. G. Duffy	483,481	Sept. 27	2507	631	60	1-63
Printer's miter-tool	W. H. F. Bloebaum	473,689	Apr. 26	26-1	675	59	558
Printer's press-guide	J. A. Boehringer and F. X. Müller	478,679	July 12	937	233	60	201
Printer's quoin	W. J. Busse	470,650	Mar. 8	1573	408	58	1412
Printer's quoin	A. Cameron	484,907	Oct. 25	2177	560	61	479
Printer's quoin	E. A. and A. G. Schmid	483,792	Oct. 4	407	101	61	85
Printer's quoin	W. J. Tinsley	483,185	Sept. 27	2059	520	60	1778
Printer's roller-mold	O. J. Maigne	466,568	Jan. 5	416	107	58	80
Printers' rollers. Inclosure for packing and carrying	H. M. Bingham and G. Runge	481,465	Aug. 23	2791	686	60	1156
Printer's rule-bender	E. Buck	478,085	July 5	17	6	60	6
Printers' rules and leads. Machine for cutting	F. Wesel	484,984	Oct. 25	2299	{ 593 } { 594 }	61	502
Printer's slug	F. T. Gunderson and C. G. Wilson	470,154	Mar. 1	758	189	58	1246
Printers' use. Block for	E. B. Sheldon	483,814	Oct. 4	437	108	61	91
Printing	W. F. Heald	479,508	July 26	2284	571	60	486
Printing and adding machine. Check	C. W. Weiss	481,709	Aug. 30	3173	{ 775 } { 776 }	60	1246
Printing and folding machine. Combined	C. Chambers, Jr.	477,886	June 28	2665	{ 666 } { 667 }	59	2005
Printing and lithographic presses. Side guide for	F. C. Davis	475,677	May 24	2840	719	59	1229
Printing apparatus	J. W. Nutt and A. J. Phillips	480,467	Aug. 9	1161	{ 291 } { 292 }	60	814
Printing apparatus. Blue	P. Heinze	469,214	Feb. 23	2087	537	58	959
Printing-block	S. H. Horgan	478,750	July 12	1045	257	60	223
Printing-block	J. N. Wiggin	467,269	Jan. 19	1583	404	58	317
Printing block or roller	P. Groeber	466,677	Jan. 5	581	150	58	113
Printing-cylinder plate-holder	J. J. Clause	467,992	Dec. 13	1244	310	61	1584
Printing device. Column	W. W. Rosenfield	478,524	July 5	710	172	60	141
Printing fabrics. Machine for	T. J. Martin	488,897	Dec. 27	2702	669	61	1910
Printing, folding, and cutting sheets. Machine for	W. Scott	467,265	Jan. 19	1575	{ 401 } { 402 }	58	316
Printing. Lithographic or other	F. A. Schimpf and W. C. Hunter	468,695	Feb. 9	1232	314	58	774
Printing-machine	T. A. Briggs	469,931	Mar. 1	420	{ 105 } { 106 }	58	1182
Printing-machine	C. B. Cottrell	472,206	Apr. 5	314	81	59	59
Printing-machine	T. Gibson	482,733	Sept. 20	1337	{ 329 } { 330 } { 331 } { 332 }	60	1622
Printing-machine	W. Scott	472,554	Apr. 12	852	219	59	176
Printing-machine	W. Scott	480,042	Aug. 2	455	116	60	669
Printing-machine	W. Scott	480,970	Aug. 16	1949	{ 487 } { 488 }	60	984
Printing-machine	W. Scott	486,129	Nov. 15	1529	404	61	917
Printing-machine	W. Scott	488,637	Dec. 27	2106	571	61	1828
Printing-machine	G. Vining	474,108	May 3	353	84	59	705
Printing-machine beds. Mechanism for operating	S. Whitlock	479,382	July 19	2043	510	60	426
Printing machine. Check	C. Paine	475,605	May 24	2735	{ 693 } { 694 }	59	1209
Printing machine. Chromatic	H. F. Wyatt	469,767	Mar. 1	156	41, 42	58	1130
Printing-machine. Cylinder	C. B. Cottrell	474,056	Mar. 3	282	68	59	691
Printing-machine. Cylinder	M. Vierengel. (Reissue)	11,227	Mar. 1	789	195	58	1252
Printing-machine. Cylinder	M. Vierengel. (Reissue)	11,228	Mar. 1	791	{ 195 } { 196 } { 197 }	58	1253
Printing-machine delivery apparatus	C. B. Cottrell	487,386	Dec. 6	239	64, 65	61	1368
Printing-machine. Double-cylinder flat-bed	S. D. Tucker	473,484	Apr. 26	2342	{ 593 } { 594 }	59	494
Printing-machine feeding apparatus	C. B. Cottrell	487,914	Dec. 13	1115	{ 278 } { 279 }	61	1559
Printing-machine feeding mechanism. Cylinder	C. B. Cottrell	487,254	Dec. 6	23	7	61	1326
Printing-machine inking apparatus	C. B. Cottrell	472,666	Apr. 12	1007	{ 261 } { 262 }	59	204
Printing-machine inking apparatus	C. B. Cottrell	473,142	Apr. 19	1757	443	59	358
Printing machine. Music	L. Durdilly	482,728	Sept. 20	1329	325	60	1621
Printing machine. Oil-cloth	G. F. Eisenhardt	487,365	Dec. 6	210	57, 58	61	1362
Printing machine. Plate	H. Lee	479,516	July 26	2293	573	60	488

Alphabetical list of inventions—Continued.

Invention.	Name	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Printing-machine. Rotary	H. B. Thompson.....	476,906	June 14	1052	{ 254 255	59	1659
Printing-machine sheet-delivery apparatus	F. Meisel	478,347	July 5	452	{ 111 112	60	90
Printing-machine sheet-delivery apparatus	W. Scott	470,307	Mar. 8	1050	{ 266 267 307	58	1310
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	477,045	June 14	1266	{ 308 309 373	59	1704
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	477,200	June 21	1531	{ 374 375	59	1770
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	477,738	June 23	2418	{ 604 605	59	1901
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	478,091	July 5	25	{ 8, 9 194	60	8
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	478,573	July 12	789	{ 195 234	60	172
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	480,321	Aug. 9	925	{ 235 236	60	770
Printing-machines. Bed-motion for cylinder	L. C. Crowell.....	480,454	Aug. 9	1143	{ 287 648	60	810
Printing-machines. Bed-motion for cylinder	L. C. Crowell. (Reissue).....	11,272	Sept. 27	2581	{ 649 646	60	1877
Printing-machines. Bed-motion for cylinder	L. C. Crowell. (Reissue).....	11,273	Sept. 27	2585	{ 647 550	60	1878
Printing-machines. Offset mechanism for	C. B. Cottrell.....	467,637	Jan. 26	2164	{ 551 551	58	435
Printing-machines. Offset mechanism for	C. B. Cottrell.....	484,531	Oct. 18	1552	{ 394 31	61	338
Printing-machines. Registering mechanism for double-cylinder flat-bed	S. D. Tucker	479,860	Aug. 2	125	{ 31 609	60	607
Printing. Means for surface	E. S. Boynton	475,534	May 24	2630	{ 609 906	59	1188
Printing oil-cloth. Apparatus for	G. F. Eisenhardt.....	476,135	May 31	3589	{ 907 908	59	1389
Printing oil-cloth. Machine for	G. F. Eisenhardt.....	478,927	July 12	1317	{ 327 377	60	276
Printing or embossing fabrics. Machine for	J. Farmer.....	477,205	June 21	1540	{ 378 256	59	1772
Printing plate and block	S. H. Horgan.....	478,749	July 12	1044	{ 256 2305	60	223
Printing-plate and making the same	W. H. Steele	486,572	Nov. 22	2305	{ 61 414	61	1065
Printing-plate holder	F. Hainsworth.....	484,588	Oct. 18	1632	{ 414 796	61	354
Printing-plate. Surface	J. Mullaly and L. L. Bullock	476,759	June 7	796	{ 195 637	59	1596
Printing-plate. Surface	J. Mullaly and L. L. Bullock	483,498	Sept. 27	2532	{ 637 552	60	1869
Printing-plates. Producing photo-mechanical	L. Schaefer	470,012	Mar. 1	552	{ 137 381	58	1206
Printing. Preparing celluloid and similar materials for	A. A. C. de Coëtlogon.....	474,814	May 17	1493	{ 381 499	59	950
Printing-press	K. Almén	486,365	Nov. 15	1890	{ 500 102	61	990
Printing-press	E. A. Blake	487,468	Dec. 6	394	{ 165 166	61	1398
Printing-press	J. L. Cox	478,503	July 5	676	{ 166 594	60	134
Printing-press	D. I. Eckerson.....	483,377	Sept. 27	2372	{ 95 596	60	1836
Printing-press	S. G. Goss	483,687	Oct. 4	246	{ 61, 62 174	61	51
Printing-press	J. Hackett.....	480,191	Aug. 2	6-9	{ 174 589	60	712
Printing-press	W. B. Lawrence.....	475,327	May 24	2289	{ 589 609	59	1125
Printing-press	J. C. Padgett and W. E. Bolton	473,520	Apr. 26	2405	{ 610 262	59	505
Printing-press	E. Prouty	478,760	July 12	1061	{ 263 264	60	226
Printing-press	W. Scott	482,204	Sept. 6	461	{ 111 696	60	1425
Printing-press	L. W. Southgate.....	471,403	Mar. 22	2729	{ 697 56	58	1656
Printing-press	L. W. Southgate.....	474,032	May 3	234	{ 56 126	59	683
Printing-press	J. H. Stonemetz	472,318	Apr. 5	486	{ 127 598	59	91
Printing-press	A. W. Vaughn.....	479,579	July 26	2379	{ 598 680	60	504
Printing-press	W. B. Yates	471,368	Mar. 22	2673	{ 680 53	58	1645
Printing-press addressing attachment	I. W. Newman.....	479,917	Aug. 2	208	{ 53 584	60	623
Printing-press and folding-machine. Combined	L. C. Crowell.....	471,102	Mar. 22	2272	{ 584 574	58	1569
Printing-press and folding mechanism. Combined	L. C. Crowell.....	486,558	Nov. 22	2175	{ 575 575	61	1060
Printing-press and folding mechanism. Combined	L. C. Crowell.....	486,559	Nov. 22	2182	{ 576 228	61	1061
Printing-press attachment	E. Meier	485,704	Nov. 8	851	{ 228 125	61	764
Printing-press bed-motion	J. W. Cribbins.....	485,458	Nov. 1	473	{ 126 351	61	669
Printing press. Color	H. E. Grandy	484,421	Oct. 18	1375	{ 352 127	61	303
Printing-press. Cylinder	J. H. Stonemetz	472,319	Apr. 5	490	{ 127 419	59	92
Printing-press feed-gage. Platen	F. S. Horner.....	470,675	Mar. 15	1615	{ 419 283	58	1428
Printing-press feed-machine attachment	T. A. Briggs.....	480,448	Aug. 9	1135	{ 283 410	60	808
Printing press feeding mechanism	F. H. Van Loozen	474,884	May 17	1605	{ 411 576	59	973
Printing-press folding attachment	R. C. Seymour.....	481,203	Aug. 23	2340	{ 577 218	60	1072
Printing-press ink-roller	R. W. Murphy	487,750	Dec. 13	859	{ 218 629	61	1569
Printing-press inking attachment	T. G. Spence.....	479,674	July 26	2527	{ 630 477	60	532
Printing press. Job	F. G. Willard	486,312	Nov. 15	1811	{ 478 111	61	975
Printing-press. Oscillating-cylinder.....	W. Scott	487,495	Dec. 6	432	{ 112	61	1406

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Printing-press paper-straightener.....	A. Binkard.....	478,079	July 5	7	2	60	4
Printing-press. Perfecting.....	J. C. Fowler.....	477,999	June 28	2833	{ 709 710 711 }	59	2040
Printing-press perforator.....	W. P. Kastenhuber, P. H. Wuag- neux, and R. I. States.	485,547	Nov. 1	602	160	61	696
Printing press. Plate.....	S. Steen, Jr.....	471,723	Mar. 29	3205	817	58	1751
Printing-press. Platen.....	W. H. Price, Jr.....	469,215	Feb. 16	2048	524	58	943
Printing-press platens. Safety-guard for.....	A. Bell.....	484,751	Oct. 18	1902	485	61	411
Printing-press reciprocating mechanism.....	W. B. Yates.....	471,369	Mar. 22	2675	680	58	1646
Printing-press. Sheet-delivery.....	G. P. Fenner.....	469,555	Feb. 23	2579	661	58	1053
Printing-press stopping and reversing mechanism.....	W. S. Huson.....	482,359	Sept. 13	744	179	60	1495
Printing presses. Attachment to roll-carrying spin- dles for web.....	A. A. Houghtlin.....	480,499	Aug. 9	1207	302	60	823
Printing-presses. Combined paper-folding and sheet- delivering mechanism for.....	J. H. Stonemetz.....	479,768	July 26	2700	672	60	564
Printing-presses. Electro-magnetic mechanism for operating.....	E. H. Korsmeyer.....	483,564	Oct. 4	71	17, 18	61	16
Printing-presses. Gripper for.....	A. De Vos.....	470,637	Mar. 8	1556	405	58	1408
Printing rolls. Machine for shading the surfaces of calico.....	G. Hancock.....	478,540	July 5	744	181	60	148
Printing stencil characters consecutively. Machine for.....	E. G. Bates.....	486,964	Nov. 29	2890	747	61	1219
Printing wall-paper. Apparatus for.....	G. K. Birge.....	479,346	July 19	1983	{ 496 497 }	60	414
Privy.....	P. Mueller.....	484,040	Oct. 11	781	{ 196 197 }	61	175
Privy-seat cover.....	G. E. Waldo.....	466,388	Jan. 5	122	34	58	26
Projectile.....	F. M. Ashley.....	486,657	Nov. 22	2349	614	61	1074
Projectile.....	L. V. Benét.....	477,492	June 21	2012	499	59	1861
Projectile.....	H. H. Grenfell and J. G. Accles.....	486,598	Nov. 22	2253	589	61	1074
Projectile.....	J. R. Haskell.....	484,008	Oct. 11	736	184	61	165
Projectile.....	P. H. Holmes.....	468,621	Feb. 9	1119	285	58	751
Projectile.....	P. H. Holmes.....	468,622	Feb. 9	1120	285	58	751
Projectile.....	J. J. McIntyre.....	484,862	Oct. 25	2098	540	61	463
Projectile.....	J. E. Schlörff.....	480,142	Aug. 2	612	155	60	699
Projectile for small-arms. Compound.....	M. Tweedie.....	481,081	Aug. 16	2128	530	60	1019
Projectiles. Band-seat for.....	W. H. Driggs.....	469,631	Feb. 23	2676	688	58	1074
Proof-press.....	N. G. Duffy.....	483,433	Sept. 27	2451	617	60	1852
Propeller.....	J. Q. Adams.....	484,511	Oct. 18	1524	387	61	332
Propeller.....	J. T. Baldwin.....	473,374	Apr. 19	2158	542	59	436
Propeller.....	W. A. Baldwin.....	470,097	Mar. 1	680	167	58	1231
Propeller.....	S. W. Barnaby.....	486,366	Nov. 15	1894	{ 500 501 }	61	991
Propeller.....	W. R. Bonham.....	482,225	Sept. 6	496	118	60	1432
Propeller.....	G. K. Eacrett.....	471,604	Mar. 29	3015	767	58	1717
Propeller.....	L. Gayon.....	480,945	Aug. 16	1899	475	60	975
Propeller.....	H. Petersen.....	473,017	Apr. 19	1548	394	59	321
Propeller-blade.....	D. H. Welch.....	469,618	Feb. 23	2661	684	58	1071
Propeller. Boat.....	E. G. Deloe.....	472,526	Apr. 12	822	209	59	169
Propeller. Boat.....	F. Giles.....	467,012	Nov. 29	2965	764	61	1232
Propeller. Buoyant.....	D. W. Lord.....	484,503	Oct. 18	1509	383	61	329
Propeller. Chain.....	C. W. and C. H. Threlkeld.....	485,241	Nov. 1	131	39, 40	61	600
Propeller. Chain.....	J. G. Wright.....	484,485	Oct. 18	1483	378	61	323
Propeller-dam for twin-screw vessels.....	J. Haug.....	473,745	Apr. 26	2771	{ 696 697 }	59	575
Propeller for steam-vessels. Side.....	A. Cooper.....	468,039	Feb. 2	201	49	58	563
Propeller. Hydraulic.....	J. T. Carstairs.....	484,651	Oct. 18	1748	444	61	377
Propeller. Screw.....	J. MacHaffie.....	483,158	Sept. 27	2013	{ 508 509 }	60	1769
Propeller. Screw.....	C. Myers.....	467,322	Jan. 19	1658	{ 422 423 }	58	332
Propeller. Screw.....	C. Myers.....	467,323	Jan. 19	1659	423	58	332
Propeller. Screw.....	C. and E. Myers and J. Davies.....	467,824	Jan. 26	2167	626	58	492
Propeller. Screw.....	P. Stauch, Jr.....	471,907	Mar. 29	3477	889	58	1806
Propeller. Screw.....	J. C. Street and H. P. Norton.....	475,826	May 31	3101	785	59	1292
Propeller. Screw.....	C. B. Wattles.....	484,382	Oct. 11	1310	335	61	279
Propeller-shaft lubricator.....	F. R. Cedervall.....	475,436	May 24	2468	629	59	1157
Propeller. Vessel.....	D. Ureh.....	482,122	Sept. 20	1946	{ 492 493 }	60	1745
Propeller-wheel.....	E. D. Bangs.....	486,062	Nov. 8	1398	370	61	874
Propeller-wheel.....	C. J. Lowe.....	479,008	July 19	1450	360	60	312
Propellers of vessels. Regulating.....	A. Hellinger.....	474,169	May 3	436	{ 105 106 }	59	722
Propellers. Transmitting power to.....	D. S. Regan.....	474,926	May 17	1667	426	59	986
Propelling apparatus. Boat.....	W. S. Salisbury.....	486,684	Nov. 22	2389	624	61	1102
Propelling apparatus. Vessel.....	H. Barcroft.....	475,122	May 31	3569	897	59	1385
Propelling boats. Means for.....	A. M. Haswell.....	481,113	Aug. 16	2182	510	60	1028
Propelling machine. Vessel.....	I. C. de Albornoz.....	474,939	May 17	1689	431	59	990
Propelling mechanism. Boat.....	W. H. Dick.....	470,108	Mar. 1	695	171	58	1234
Propelling mechanism for row-boats.....	G. Vogel.....	479,924	Aug. 2	231	58	60	627
Propelling power.....	J. B. Hall.....	478,962	July 12	1367	337	60	285
Propelling vessels.....	J. M. Robinson.....	468,694	Feb. 9	1231	313	58	774
Propelling vessels. Apparatus for.....	F. G. Curtis.....	472,207	Apr. 5	316	81	59	59
Propelling vessels. Means for.....	C. J. Lowe.....	468,668	Feb. 9	1191	303	58	766
Propelling vessels. Means for.....	S. Seabury.....	472,199	Apr. 5	295	77, 78	59	56
Proportional meter.....	W. D. Hawley and S. J. Hogan.....	479,759	July 26	2680	665	60	560
Proportional meter.....	F. E. Youngs.....	473,544	Apr. 26	2439	{ 617 618 }	59	511
Proportional meter.....	F. E. Youngs.....	473,545	Apr. 26	2441	618	59	511
Proportional meter. Multiple.....	J. Thomson.....	485,439	Nov. 1	446	119	61	663
Proportional meter. Positive.....	J. Thomson.....	476,103	May 31	3537	{ 890 891 }	59	1379

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Propulsion. Apparatus for piston	E. J. Meister	472,380	Apr. 5	587	150	59	110
Propulsion of vessels by hydraulic reaction	A. Vogelsang	469,328	Feb. 23	2222	570	58	985
Propulsion of vessels. Hydraulic	J. C. Walker	480,533	Aug. 9	1358	316	60	834
Propulsion of vessels. Screw	E. J. Pahtz	471,274	Mar. 22	2534	644	58	1618
Prospecting-drill	A. Ball	478,077	July 5	3	1, 2	60	3
Protector:							
See Basket-protector. Gutter-protector.							
Bed-protector. Horse-protector.							
Book-cover protector. Ingot-protector.							
Car-platform protector. Lamp-chimney protector.							
Carpet or oil-cloth protector. Mail-bag protector.							
Chest-protector. Pile-protector.							
Closet-seat protector. Pocket-protector.							
Coffin-protector. Shirt and chest protector.							
Counter-protector. Trace-protector.							
Edge-protector. Tree-protector.							
Electric-contact protector. Trolley-protector.							
Electrical-apparatus protector. Trousers-protector.							
Flue-protector. Trunk-protector.							
	Trunk or shipping-case protector.						
	Valve-protector.						
	Waistcoat-protector.						
	Wall-protector.						
Protractor	H. R. Eshelman	472,531	Apr. 12	826	210	59	170
Protractor and bevel	E. M. Long	474,393	May 10	820	214	59	806
Protractor. Bevel	L. S. Starrett	474,699	May 10	1309	334	59	901
Pruning implement	J. Bingham	470,656	Mar. 8	1556	405	58	1408
Pruning implement	E. H. Dixon	466,879	Jan. 12	939	240	58	188
Pruning implement	L. J. Gitman	474,085	May 3	322	77	59	699
Pruning implement	W. P. Hatch	485,793	Nov. 8	969	260	61	788
Pruning implement	F. P. Kern	483,928	Oct. 4	605	153	61	125
Pruning implement	W. Levin	476,279	June 7	73	16	59	1452
Pruning implement	C. L. Mann	472,304	Apr. 5	467	120	59	88
Pruning implement	J. M. Morgan	470,586	Mar. 8	1479	385	58	1392
Pruning implement	S. A. O'Neil	474,505	May 10	995	256	59	839
Pruning implement	W. D. Sunderlin	483,588	Oct. 4	110	27	61	23
Puddling-furnace	H. B. Hall	472,759	Apr. 12	1153	295	59	230
Pug-mill	J. Crossley	473,497	Apr. 26	2363	{ 599 600 }	59	497
Puller:							
See Cork-puller. Stump-puller.							
Flax-puller. Tack-puller.							
Nail-puller. Weed-puller.							
Sprout-puller. Weed and root puller.							
Pulley	W. F. Buswell	469,512	Feb. 23	2508	643	58	1039
Pulley	E. Crossley, Jr	486,631	Nov. 22	2307	602	61	1086
Pulley	H. H. Kendrick	473,119	Apr. 19	1718	435	59	350
Pulley	O. C. Little	483,227	Sept. 27	2122	537	60	1790
Pulley	E. A. Long	479,221	July 19	1782	447	60	373
Pulley	G. W. Nock	487,491	Dec. 6	428	110	61	1406
Pulley	J. W. Parkin	472,769	Apr. 12	1165	298	59	233
Pulley	C. A. Paul	466,948	Jan. 12	1045	265	58	207
Pulley	C. A. Paul	466,949	Jan. 12	1046	266	58	207
Pulley	J. L. Potter	476,303	June 7	114	27	59	1460
Pulley	E. T. Shepard	487,454	Dec. 6	375	98	61	1395
Pulley	C. F. Winkler	466,390	Jan. 5	125	35	58	26
Pulley and the manufacture thereof. Sheet-metal ..	T. Corscaden	474,547	May 10	1070	274	59	853
Pulley. Antifriction	W. H. St. John	468,843	Feb. 16	1460	373	58	829
Pulley-block	F. H. Addis	468,499	Feb. 9	930	236	58	714
Pulley-block	P. Freund	471,519	Mar. 22	2892	736	58	1687
Pulley-block	H. Lund	475,692	May 24	2868	725	59	1234
Pulley-block. Automatic-brake	H. W. Seaman	468,901	Feb. 16	1546	393	58	846
Pulley-block. Differential	E. Y. Moore	467,513	Jan. 26	1970	501	58	399
Pulley clamp. Split	J. J. Hogan	473,459	Apr. 26	2309	584	59	487
Pulley. Driving	E. F. Gordon	488,390	Dec. 20	1911	478	61	1735
Pulley. Electro-magnetic	W. E. Harrington	487,070	Nov. 29	3049	782	61	1249
Pulley. Expandable	T. A. Edison	476,984	June 14	1179	285	59	1685
Pulley-fastening	F. H. Ball	486,154	Nov. 15	1569	416	61	926
Pulley for transmitting power	J. Meier	486,585	Nov. 22	2223	586	61	1071
Pulley. Friction	M. B. Koerper	469,640	Feb. 23	2667	691	58	1076
Pulley. Grip	J. M. Dodge	473,254	Apr. 19	1953	490	59	396
Pulley. Grip	A. S. Hallidie	483,442	Sept. 27	2462	{ 619 620 }	60	1854
Pulley. Hay-elevator	W. Londen	481,263	Aug. 23	2456	605	60	1094
Pulley-lines. Rider for	D. S. Hayward	468,098	Feb. 2	282	69	58	579
Pulley. Loose	A. Streit	472,083	Apr. 5	105	29	59	22
Pulley. Loose or idle	T. W. Simcox	478,292	July 5	365	89	60	73
Pulley lubricator. Loose	E. Dawson	487,257	Dec. 6	28	9	61	1327
Pulley or wheel. Split	J. J. Scholfield	470,952	Mar. 15	2039	521	58	1511
Pulley. Power-transmitting friction clutch	C. W. Thomas	485,513	Nov. 1	548	146	61	685
Pulley rigging. Dead	J. Q. Marsh	473,765	Apr. 26	2792	{ 702 703 }	59	580
Pulley. Sash	F. V. Phillips	472,074	Apr. 5	95	26	59	20
Pulley. Sash	F. V. Phillips	481,510	Aug. 23	2853	701	60	1168
Pulley. Self-locking	B. R. Sockman	473,093	Apr. 19	1666	423	59	342
Pulley. Sheet-metal	T. Corscaden	474,546	May 10	1069	274	59	853
Pulley. Split	H. Comstock	475,204	May 17	2105	532	59	1071
Pulley. Split	J. C. Fiester	483,647	Oct. 4	193	48	61	40
Pulley. Split	C. C. Lockstaedt	484,935	Oct. 25	2229	575	61	488
Pulley. Split	J. F. Parkes	488,947	Dec. 27	2794	689	61	1928

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Pulley. Split.....	D. G. Reitz.....	481,871	Aug. 30	3451	{ 846 847 }	60	1300
Pulley. Split.....	H. and C. R. Rudd.....	488,253	Dec. 20	1688	421	61	1691
Pulley-wheels. Manufacture of.....	J. Ritchie.....	476,489	June 7	406	95	59	1516
Pulley. Wood split.....	D. A. Sprinkle.....	484,167	Oct. 11	965	248	61	211
Pulley. Wooden.....	F. J. Forster.....	469,517	Feb. 23	2517	646	58	1041
Pulleys or gears. Means for fastening.....	J. Shermau.....	469,350	Feb. 23	2252	578	58	991
Pulleys to shafts. Securing.....	M. O. Reeves.....	473,524	Apr. 26	2410	611	59	506
Pulp beating and refining engine.....	E. R. Marshall.....	475,063	May 17	1849	479	59	1027
Pulp-digester.....	G. F. Russell. (Reissne).....	11,282	Nov. 15	1978	525	61	1008
Pulp-drainer.....	G. L. Jaeger.....	483,847	Oct. 4	469	121	61	101
Pulp-engine.....	G. Miller.....	482,184	Sept. 6	434	{ 103 104 }	60	1420
Pulp-grinding machines. Feed for.....	A. W. Lefebvre.....	483,458	Sept. 27	2480	624	60	1858
Pulp. Machine for making vessels from fibrous.....	E. Hubbard.....	474,637	May 10	1209	{ 309 310 }	59	880
Pulp machines. Hydraulic feed for wood.....	J. T. Horton.....	481,174	Aug. 23	2298	566	60	1064
Pulp. Molded pail from fibrous.....	E. Hubbard.....	487,031	Nov. 29	2992	770	61	1238
Pulp-molding apparatus.....	S. L. Chapman.....	488,517	Dec. 20	2110	{ 524 525 }	61	1776
Pulp. Press for forming hollow articles from.....	E. Hubbard.....	480,466	Aug. 9	1160	291	60	813
Pulp-producing apparatus.....	J. B. Carter.....	485,090	Oct. 25	2467	634	61	537
Pulp-reducing machines. Rubbing-surface for.....	J. B. Carter.....	482,619	Sept. 13	1162	281	60	1575
Pulp-screen.....	J. J. Flanders.....	488,166	Dec. 13	1540	386	61	1646
Pulp-screening machine.....	C. J. Foster.....	488,067	Dec. 13	1384	344	61	1615
Pulp. Strainer for chemical wood.....	C. Wandel.....	478,179	July 5	171	44, 45	60	36
Pulp-strainer. Rotary.....	T. Volstorf.....	483,030	Sept. 20	1814	{ 460 461 }	60	1717
Pulverizer.....	G. H. Smith.....	481,532	Aug. 23	2899	712	60	1178
Pulverizer or mixer.....	R. W. Lyle.....	486,937	Nov. 29	2847	737	61	1210
Pulverizing-machine.....	U. Cummings.....	478,253	July 5	309	75	60	62
Pulverizing-machine.....	A. Sahlin.....	475,471	May 24	2528	{ 643 644 }	59	1168
Pulverizing-mill.....	E. I. Nichols.....	466,864	Jan. 12	905	{ 231 232 }	58	182
Pulverizing-mill.....	V. L. Rice.....	469,334	Feb. 23	2230	572	58	986
Pulverizing sods, manure, &c. Machine for.....	B. F. Knapp.....	473,421	Apr. 19	2236	562	59	451
Pump.....	A. F. A. Abrahamson.....	472,156	Apr. 5	228	61	59	43
Pump.....	D. E. Annkst.....	486,016	Nov. 8	1327	352	61	860
Pump.....	J. F. and J. S. Bradley.....	467,697	Jan. 26	2268	575	58	454
Pump.....	C. R. Brown and W. B. Collins.....	468,324	Feb. 9	654	102	58	659
Pump.....	J. Burkholder.....	475,847	May 31	3141	{ 796 797 }	59	1300
Pump.....	O. Brünler.....	480,707	Aug. 16	1546	385	60	903
Pump.....	D. B. Cahow.....	480,169	Aug. 2	656	167	60	707
Pump.....	A. Carlson.....	475,536	May 24	2634	670	59	1189
Pump.....	C. Chamberlin.....	475,296	May 24	2245	579	59	1113
Pump.....	A. D. Cook.....	484,139	Oct. 11	915	235	61	202
Pump.....	H. H. Cummings.....	483,666	Oct. 4	218	54	61	45
Pump.....	H. Gaskins.....	484,496	Oct. 18	1499	381	61	327
Pump.....	M. M. Grove.....	481,022	Aug. 16	2022	505	60	998
Pump.....	M. W. Hall.....	482,921	Sept. 20	1636	{ 411 412 }	60	1680
Pump.....	J. P. Labm.....	484,898	Oct. 25	2162	556	61	476
Pump.....	G. W. Long.....	470,063	Mar. 1	627	156	58	1221
Pump.....	J. Mason.....	473,940	May 3	91	20	59	654
Pump.....	E. D. Middlekauff.....	481,043	Aug. 16	2058	513	60	1006
Pump.....	F. A. Morand.....	470,695	Mar. 15	1644	427	58	1434
Pump.....	P. A. Myers.....	486,350	Nov. 15	1869	492	61	981
Pump.....	J. North.....	477,569	June 21	2130	{ 529 530 }	59	1886
Pump.....	W. Peterson.....	482,588	Sept. 13	1115	269	60	1567
Pump.....	R. H. Rapraeger.....	478,464	July 5	619	150	60	122
Pump.....	P. B. Riggins.....	473,345	Apr. 19	2108	529	59	426
Pump.....	E. J. Schiller.....	475,895	May 31	3219	814	59	1315
Pump.....	W. S. Shahan.....	466,375	Jan. 5	105	30	58	23
Pump.....	A. Siebert.....	482,416	Sept. 13	834	200	60	1512
Pump.....	M. M. Smith.....	483,637	Oct. 4	178	45	61	37
Pump.....	J. F. Stone and F. Miller.....	487,397	Dec. 6	256	70	61	1372
Pump.....	W. H. Sunderland.....	486,136	Nov. 15	1543	407	61	926
Pump.....	J. C. Tou.....	483,406	Sept. 27	2416	607	60	1845
Pump.....	E. H. Weatherhead.....	484,383	Oct. 11	1313	336	61	279
Pump.....	A. N. Woodard.....	483,034	Sept. 20	1819	462	60	1718
Pump.....	B. Wright.....	485,250	Nov. 1	147	43	61	603
Pump. Air or gas compression.....	E. G. Shortt.....	466,432	Jan. 5	196	50, 51	58	38
Pump and dripper for barrels. Combined.....	C. B. Allgood.....	483,757	Oct. 4	351	88	61	73
Pump and mixer. Combined.....	A. M. Phillips.....	479,378	July 19	2017	508	60	424
Pump and motor. Combined.....	T. Henderson.....	474,248	May 3	556	137	59	746
Pump and water-elevator. Force.....	M. L. G. Wheeler.....	484,169	Oct. 11	972	249	61	213
Pump attachment.....	A. B. Clancy.....	498,183	Dec. 20	1570	394	61	1669
Pump attachment.....	C. A. Harrison and A. W. Baumgartner.....	468,514	Feb. 9	957	244	58	720
Pump. Centrifugal.....	B. F. Bee.....	478,307	July 5	387	93	60	78
Pump. Chain.....	D. K. Keller.....	478,112	July 5	51	14	60	12
Pump. Displacement.....	G. W. Bartholomew.....	487,595	Dec. 6	576	147	61	1436
Pump. Double-acting.....	G. J. Neth.....	482,692	Sept. 13	1270	311	60	1596
Pump. Dredging.....	J. D. McRae.....	479,765	July 26	2695	{ 670 671 }	60	563
Pump. Duplex.....	A. Bornholdt.....	467,587	Jan. 26	2097	532	58	422
Pump. Exhaust and pressure.....	D. L. Holden and J. J. Hayes.....	467,578	Jan. 26	2085	524	58	420
Pump. Filter.....	H. Nordtmeyer.....	472,547	Apr. 12	843	{ 215 216 }	59	174
Pump for condensers. Air.....	B. V. Nordberg.....	482,315	Sept. 6	656	157	60	1464

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Pump for refrigerating apparatus	M. Grimm	479,877	Aug. 2	157	39	60	612
Pump. Force	M. W. Hall	482,944	Sept. 20	1669	{ 419 420 421	60	1688
Pump-handle	C. A. Sellon	476,082	May 31	3501	882	59	1373
Pump. Hydraulic force	M. Long	476,398	June 7	273	64	59	1491
Pump. Hydraulic mining	W. A. Rockliff and J. P. Foley	482,810	Sept. 20	1456	361	60	1646
Pump. Measuring	S. F. and A. Bowser	480,550	Aug. 9	1281	332	60	838
Pump. Measuring	S. F. and A. Bowser	480,551	Aug. 9	1283	332	60	839
Pump. Measuring	S. F. and A. Bowser	480,552	Aug. 9	1285	332	60	839
Pump. Measuring	W. Crighton	486,596	Nov. 22	2249	{ 588 589	61	1073
Pump. Mercurial air	G. A. Frei	487,478	Dec. 6	408	105	61	1401
Pump-motor	J. H. Miller and J. H. Oswalt	482,800	Sept. 20	1447	359	60	1644
Pump. Oil-well	G. Allen	480,701	Aug. 16	1537	383	60	901
Pump-operating mechanism	C. W. McMullin and W. C. De Graf- ferried	468,821	Feb. 16	1425	363	58	832
Pump-operating mechanism	F. H. Ober	477,629	June 21	2244	562	59	1907
Pump or compressor. Air	R. F. Avery	482,776	Sept. 20	1416	350	60	1637
Pump or compressor. Fluid	J. J. Duffy	480,811	Aug. 16	1699	{ 423 424	60	935
Pump-piston	H. J. Seymour	475,812	May 31	3076	778	59	1287
Pump-piston and valve	J. R. Collins	478,029	July 5	22	7	60	7
Pump. Plumber's force	J. H. Lawless	477,808	June 28	2526	634	59	1980
Pump-plunger	W. P. Carlin	474,365	May 10	785	204	59	799
Pump. Pneumatic	R. P. Garsed	487,090	Nov. 29	3085	792	61	1258
Pump. Pneumatic	T. O. Perry	485,880	Nov. 8	1095	{ 291 292	61	813
Pump. Portable garden or spraying	G. D. Hamblin	482,681	Sept. 13	1251	305	60	1593
Pump. Purifying	G. W. and J. L. Horn	480,096	Aug. 2	533	135	60	684
Pump. Reciprocating	A. F. Abrahamson	471,411	Mar. 22	2745	700	58	1659
Pump-rod. Elastic	W. C. Westaway	480,756	Aug. 16	1611	404	60	918
Pump. Rotary	J. Menge	471,486	Mar. 22	2553	726	58	1679
Pump. Rotary	J. Menge	480,473	Aug. 9	1169	294	60	815
Pump. Rotary	B. F. Taber	471,279	Mar. 22	2541	645	58	1619
Pump. Rotary	B. F. Taber	471,280	Mar. 22	2543	{ 645 646	58	1619
Pump. Sand	T. F. Mahan	474,843	May 17	1747	395	59	960
Pump. Self-measuring	J. J. Becker	473,891	Apr. 26	3004	758	59	620
Pump. Steam	C. H. Booth	482,840	Sept. 20	1500	373	60	1655
Pump. Steam	D. F. Lepley	471,870	Mar. 29	3431	8	58	1795
Pump. Steam	J. Maslin	477,949	June 25	2759	691	59	2025
Pump. Steam	G. J. Roberts	484,241	Oct. 11	1087	276	61	235
Pump. Steam-actuated air	E. Smedley	482,814	Sept. 20	1461	{ 362 363	60	1647
Pump. Steam-jet	J. A. Bills	475,716	May 24	2904	736	59	1241
Pump. Steam vacuum	D. P. Bardon	482,072	Sept. 6	244	59, 60	60	1383
Pump. Vacuum	J. P. Boettiger	472,802	Apr. 12	1210	310	59	242
Pump. Vacuum	A. H. Dodd	470,847	Mar. 15	1888	484	58	1481
Pump. Vacuum	W. L. Judson	473,500	Apr. 26	2386	604	59	501
Pump-valve	A. J. Hopkins	474,579	May 10	1122	287	59	864
Pump valve and case	J. Neumann	479,299	July 19	1897	475	60	397
Pump. Well	T. J. Sayre	471,829	Mar. 29	3376	860	58	1785
Pump. Wheel	T. Powell	468,430	Feb. 9	815	205	58	692
Pumps. Automatic electric controller for air	A. Bergmann	467,551	Jan. 26	2049	517	58	413
Pumps. Automatic governing device for electric	F. A. Pocock	485,221	Nov. 1	101	30	61	594
Pumps by means of treadles. Device for operating	R. F. Avery	482,777	Sept. 20	1417	250	60	1637
Pumps, &c. Locking device for chain	E. G. Crawford	470,551	Mar. 8	1434	373	58	1383
Pumps. Locomotive attachment for supplying steam to	R. Zinsmayer	479,870	Aug. 2	146	35	60	610
Pumps. Means for operating	M. F. Brown and L. A. Berger	471,942	Mar. 29	3529	{ 901 902	58	1815
Pumps. Means for varying the strokes of	A. Müller	467,823	Jan. 26	2465	626	58	491
Pumps. Valve for suction-pipes of	W. Bishop	468,926	Feb. 16	1592	403	58	855
Pumps. Valve-operating mechanism for pneumatic	T. O. Perry	485,884	Nov. 8	1114	{ 294 295	61	816
Pumping and measuring apparatus	J. C. Meyers	470,205	Mar. 8	864	214	58	1276
Pumping-engine	W. E. Good	469,661	Feb. 23	2724	{ 700 701	58	1085
Pumping-engine. Electro-magnetic reciprocating	C. J. Van Depoele	467,450	Jan. 19	1853	473	58	369
Pumping-engine. Hydraulic	G. W. Dawson	478,314	July 5	397	96	60	80
Pumping-engine. Pneumatic	T. O. Perry	485,882	Nov. 8	1105	{ 293 294	61	815
Pumping mechanism. Oil-well	O. A. Knox	482,011	Sept. 6	142	34	60	1363
Punch	A. A. Baumener and J. B. Harting	485,164	Nov. 1	10	3	61	575
Punch	J. M. Fairfield	484,891	Oct. 25	2149	551	61	473
Punch	J. W. Graves	469,783	Mar. 1	187	48	58	1137
Punch	F. N. Simmonds	473,791	Apr. 26	2537	712	59	588
Punch and laying-out machine. Multiple	C. E. Brown	480,557	Aug. 9	1292	{ 323 324	60	840
Punch. Bank-check	S. S. Williamson	474,932	May 17	1676	{ 428 429	59	988
Punch. Canceling	J. B. and G. M. Morris	470,435	Mar. 8	1270	335	58	1350
Punch. Check	E. W. Bassett	485,733	Nov. 8	897	210	61	773
Punch. Check	E. G. Bates	488,052	Dec. 13	1354	336	61	1608
Punch. Check	S. W. Peek	472,391	Apr. 5	604	153	59	113
Punch for cutting out shapes from sheets of plastic material	G. A. Firnstein	475,549	May 24	2654	675	59	1193
Punch. Keyboard	H. Hollerith	487,737	Dec. 13	820	{ 208 209	61	1501
Punch. Perforating	H. H. Norrington	481,583	Aug. 30	2979	731	60	1209
Punch. Ticket	A. W. Coffin	480,560	Aug. 9	1295	324	60	841
Punch. Ticket	J. Dossmann and P. G. Ober	466,847	Jan. 12	872	223	58	175
Punch. Ticket	W. C. Downing	477,107	June 14	1372	335	59	1725

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Punch. Ticket.....	H. M. Grantham.....	476,378	June 7	239	58	59	1483
Punch. Ticket.....	C. W. Kuen.....	472,793	Apr. 12	1199	308	59	239
Punching and cutting machine. Metal.....	G. E. Hopkin.....	471,084	Mar. 15	2237	{ 574 575 }	58	1550
Punching and marking machine. Check.....	G. Wright.....	485,444	Nov. 1	452	121	61	665
Punching and riveting machine. Portable.....	A. C. A. Holzapfel.....	472,356	Apr. 5	546	141	59	102
Punching and riveting machine. Portable.....	A. C. A. Holzapfel.....	472,357	Apr. 5	547	142	59	102
Punching and shearing machine.....	F. N. Helfrich.....	482,356	Sept. 13	739	178	60	1495
Punching and shearing machine.....	G. W. Rockenfield.....	474,971	May 17	1748	443	59	1001
Punching and shearing machine. Combined metal.....	E. T. Horner.....	484,369	Oct. 11	1289	329	61	275
Punching flange-plates. Machine for.....	H. C. Jones.....	477,899	June 28	2685	{ 671 672 }	59	2009
Punching-machine.....	T. Barrow.....	483,095	Sept. 20	1908	482	60	1736
Punching-machine.....	R. H. Ireland.....	468,200	Feb. 2	443	110	58	611
Punching-machine.....	J. Long.....	481,574	Aug. 30	2968	720	60	1207
Punching-machine feed mechanism.....	F. H. Hardman.....	474,321	May 3	692	180	59	770
Punching presses. Feeding device for card.....	J. P. Odgers.....	482,981	Sept. 20	1731	{ 437 438 }	60	1700
Punching, shearing, &c., machine.....	T. Snaith.....	466,387	Nov. 15	1922	510	61	998
Purifier and separator.....	J. Mills.....	476,231	May 31	3760	949	59	1422
Purse.....	S. C. Langfeld.....	484,101	Oct. 11	862	219	61	191
Purse.....	G. Topham.....	467,760	Jan. 26	2367	600	58	473
Purse and pocketbook frame and catch.....	A. Goertz.....	477,799	June 28	2515	631	59	1978
Purse, card-case, and bill-holder.....	D. A. Lanferty.....	476,278	June 7	72	15	59	1452
Purse-frame.....	M. Koenig.....	468,248	Feb. 2	510	126	58	625
Purse. Hand.....	E. J. Green.....	471,000	Mar. 15	2116	544	58	1526
Purse or pocketbook.....	M. Scheuer.....	488,742	Dec. 27	2469	613	61	1861
Purse safety attachment.....	H. W. Hock.....	475,503	May 24	2583	657	59	1179
Push-button.....	C. H. Delano.....	470,372	Mar. 8	1162	298	58	1330
Push-button.....	A. Luengen.....	467,875	Jan. 26	2548	646	58	507
Push-button and thermostat.....	E. L. Ashley and W. H. Camp.....	488,645	Dec. 27	2320	574	61	1832
Puttying seams. Implement for.....	J. Hawksley.....	471,115	Mar. 22	2295	589	58	1573
Puzzle.....	P. W. Anderson.....	473,276	Sept. 27	2228	560	60	1809
Puzzle.....	A. Assorati and A. Cnyas.....	478,497	July 5	664	162	60	132
Puzzle.....	G. W. Bailey.....	487,063	Nov. 29	3038	780	61	1247
Puzzle.....	A. W. Bartholomew.....	474,941	May 17	1692	432	59	991
Puzzle.....	D. V. Brown.....	471,941	Mar. 29	3528	901	58	1815
Puzzle.....	W. H. Burnett.....	474,627	May 10	1193	393	59	877
Puzzle.....	C. E. Clarke.....	487,318	Dec. 6	135	39	61	1348
Puzzle.....	W. H. Cook.....	476,980	June 14	1172	283	59	1683
Puzzle.....	H. L. Davis.....	488,974	Dec. 27	2837	699	61	1939
Puzzle.....	M. Flannery.....	475,210	May 17	2114	535	59	1073
Puzzle.....	C. S. Ford.....	483,912	Oct. 4	585	147	61	121
Puzzle.....	G. A. Goodson.....	472,292	Apr. 5	445	115	59	84
Puzzle.....	H. C. Guertin.....	479,418	July 26	2115	539	60	454
Puzzle.....	C. E. O. Hager.....	478,998	July 19	1438	356	60	309
Puzzle.....	J. W. Hale.....	481,561	Aug. 30	2947	724	60	1203
Puzzle.....	J. J. Jenkins.....	485,798	Nov. 8	973	261	61	789
Puzzle.....	H. F. Keil.....	488,819	Dec. 27	2584	{ 642 643 }	61	1885
Puzzle.....	M. W. Marsden.....	478,799	July 12	1135	279	60	240
Puzzle.....	J. A. McDougall.....	471,706	Mar. 29	3166	807	58	1745
Puzzle.....	A. C. Proctor.....	481,589	Aug. 30	2987	733	60	1210
Puzzle.....	C. H. Rickert.....	484,882	Oct. 25	2128	547	61	468
Puzzle.....	W. Rose.....	471,228	Mar. 22	2469	627	58	1605
Puzzle.....	J. A. Sloan.....	483,772	Oct. 4	377	94	61	79
Puzzle.....	S. Sterne.....	470,717	Mar. 15	1678	433	58	1441
Puzzle.....	L. F. Stutz.....	479,475	July 26	2228	559	60	476
Puzzle.....	J. W. Thorne.....	483,820	Oct. 4	449	112	61	93
Puzzle.....	E. L. Thurston.....	487,797	Dec. 13	928	224	61	1522
Puzzle.....	E. L. Thurston.....	487,798	Dec. 13	930	235	61	1523
Puzzle.....	W. T. Walker.....	478,668	July 12	918	238	60	197
Puzzle.....	C. S. Watson.....	466,589	Jan. 5	443	114	58	85
Puzzle.....	R. Watt.....	486,308	Nov. 15	1805	476	61	974
Puzzle.....	O. A. Wheeler.....	466,925	Jan. 12	1009	258	58	201
Puzzle.....	C. Wolf.....	480,983	Aug. 16	1970	493	60	988
Puzzle.....	A. E. Woolf.....	485,314	Nov. 1	238	66	61	620
Puzzle-box.....	A. D. Kimball.....	467,816	Jan. 26	2454	623	58	490
Puzzle. Wire.....	C. B. Whitworth.....	479,145	July 19	1666	416	60	352
Pyromagnetic generator.....	T. A. Edison.....	476,983	June 11	1176	285	59	1684
Pyrotechnic.....	C. del Grande.....	471,703	Mar. 29	3162	806	58	1745
Pyrotechnic device.....	G. J. M. Ashby.....	487,898	Dec. 13	1087	272	61	1554
Pyrotechnic device.....	G. J. M. Ashby.....	487,899	Dec. 13	1089	272	61	1554
Pyrotechnic suit.....	H. J. Pain.....	479,899	Aug. 2	188	46	60	619
Pyroxyline. Apparatus for the manufacture of transparent sheets of.....	E. N. Todd.....	483,701	Oct. 4	269	66	61	56
Pyroxyline. Manufacture of compounds of.....	A. Seber.....	470,451	Mar. 8	1294	.....	58	1355
Pyroxyline. Manufacture of compounds of.....	J. H. Stevens.....	478,543	July 5	748	.....	60	149
Pyroxyline varnish.....	R. Hale.....	471,422	Mar. 22	2759	.....	58	1662
Quarry-frame bar.....	H. C. Sergeant.....	484,117	Oct. 11	878	223	61	194
Quartz-crusher.....	A. P. Anderson.....	480,647	Aug. 9	1443	359	60	870
Quilling-frames. Friction-collar for spindles on long-chain.....	W. F. West.....	478,269	July 5	332	80	60	67
Quilling-machines. Doubling attachment for.....	H. G. Pounds.....	471,020	Mar. 15	2146	551	58	1531
Quilling-frame.....	W. C. Backof.....	487,240	Dec. 6	2	61	1322	
Quilling-machine.....	C. E. Hadley.....	467,138	Jan. 12	1375	352	58	270
Quilling-machine.....	W. Koch.....	467,134	Jan. 12	1364	{ 348 349 }	58	268
Quoin.....	C. W. Waldron.....	481,605	Aug. 30	3018	738	60	1216
Quoit-peg.....	F. A. O. Beddingfeld.....	479,614	July 26	2432	606	60	514
Race-course for horses.....	H. S. Butler.....	483,600	Oct. 4	125	31	61	26
Race-horses. Device for starting.....	J. J. Sullivan.....	481,835	Aug. 30	3399	{ 834 835 }	60	1288
Race-track.....	R. A. Howard.....	475,769	May 31	2995	760	59	1272

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Racers. Apparatus for starting	E. Forbes	481,260	Aug. 23	2453	604	60	1094
Rack:							
See Advertising-card	Horseshoeing-rack.						
rack.	Hose-rack.						
Barrel-rack.	Locking-rack.						
Book-rack.	Meat-rack.						
Cable-rack.	Music-rack.						
Car bundle-rack.	Musical-instrument rack.						
Cloak-rack.	Pastry-rack.						
Collar, cuff, and garment rack.	Pen and letter rack.						
Display-rack.	Photograph-display rack.						
Door-rack.	Pool-rack.						
Feed-rack.	Sheep-rack.						
Feeding-rack.	Suspended rack.						
Hat-rack.	Towel-rack.						
Hay-rack.	Trowsers-supporting rack.						
Hay and stock rack.	Wagon-rack.						
Hook-rack.	Wall-paper-display rack.						
Rack	H. U. Ackerman	487,594	Dec. 6	576	147	61	1436
Rack	J. H. Crawford	473,825	Apr. 26	2885	723	59	597
Rack	H. F. Hutton	468,461	Feb. 9	861	217	58	701
Rack	F. E. Nutting	471,885	Mar. 29	3452	881	58	1800
Racket	C. Beecroft	484,578	Oct. 18	1620	411	61	352
Radiator	A. M. Dimmick and J. T. Morgan	479,849	May 31	3143	797	59	1300
Radiator	J. F. Donahoe	488,756	Dec. 27	2486	618 619	61	1865
Radiator	C. F. Gessert	486,400	Nov. 15	1946	515 516	61	1002
Radiator	W. J. Jackson	488,764	Dec. 27	2499	621	61	1867
Radiator	W. E. Landon	486,480	Nov. 22	2071	548	61	1040
Radiator	G. E. Longard	480,597	Aug. 9	1357	337 338	60	852
Radiator	C. C. Mulford	487,880	Dec. 13	1060	266	61	1548
Radiator	O. Pederson	476,894	June 14	1029	249	59	1655
Radiator	W. Scott	485,018	Oct. 25	2365	608	61	515
Radiator attachment. Steam-	H. E. Stager	484,619	Oct. 18	1686	428	61	365
Radiator-deflector	E. Kirk, Jr.	484,638	Oct. 18	1718	435	61	371
Radiator. Gas-	W. J. Frazier	479,977	Aug. 2	319	78	60	642
Radiator. Gas-	W. J. Mullen	480,117	Aug. 2	569	144	60	691
Radiator. Graduating steam-	J. T. Hawkins	481,789	Aug. 30	3321	811	60	1276
Radiator-loop	G. H. Burley	468,640	Feb. 9	1142	241	58	755
Radiator-shield	A. H. Fowler	479,413	July 26	2104	527	60	451
Radiators. Construction of cast-iron	G. E. Dixon	481,900	Aug. 30	3502	858	60	1309
Radiators. Fitting or connection for supply-pipes and branch pipes of	G. L. Allen	485,757	Nov. 8	924	248	61	779
Radiators or other articles. Leg for	J. E. Russell	483,392	Sept. 27	2397	602 603	60	1841
Rags. Machine for cutting	W. N. Stevens	474,270	May 3	591	146	59	752
Rail-aligning device. Track-	E. S. Hidden	487,621	Dec. 6	617	158	61	1444
Rail and chair. Channel-	W. E. Loughrey and A. H. McGrew	479,435	July 26	2144	359	60	460
Rail and cross-tie. Combined	A. J. Moxham	482,803	Sept. 20	1449	359	60	1644
Rail and manufacturing the same. Girder-	A. J. Moxham	477,679	June 28	2326	581	59	1941
Rail-bond. Electric	R. M. Hunter	486,211	Nov. 15	1643	435	61	940
Rail-brace	T. J. McTighe	478,629	July 12	867	213	60	187
Rail-brace and tie-plate. Combined	G. H. Mason	474,560	May 10	1086	279	59	859
Rail-brake	D. F. Holman	485,384	Nov. 1	364	98	61	647
Rail-chair	C. W. Howlett	481,029	Aug. 16	2031	507	60	1060
Rail-chair and coupling for permanent ways	C. E. Mark	481,575	Aug. 30	2969	729	60	1307
Rail-chair, tie-plate, truss-joint, and joint-fastening	R. Cardwell and S. Watson	478,399	July 5	525	128	60	104
Rail-chairs. Method of and die for making	F. H. Heave	474,127	May 3	374	90	59	710
Rail-clamp	P. J. Lavelle	482,092	Sept. 6	277	67	60	1390
Rail Contact-	H. R. Wolpert	479,867	Aug. 2	143	34	60	610
Rail-crossing	F. E. Kinsman	487,752	Dec. 13	845	215	61	1506
Rail-fastening	S. S. Leach	467,817	Jan. 26	2455	624	58	490
Rail-fastening	H. Alexy	483,518	Oct. 4	1	1	61	3
Rail-fastening	T. W. Fay	485,097	Oct. 25	2475	636	61	539
Rail-fastening	W. H. Mattson	470,943	Mar. 15	2026	518	58	1508
Rail-fastening	G. A. Weber	472,090	Apr. 5	116	32	59	23
Rail-fastening device.	W. S. Phelps	469,947	Mar. 1	455	114	58	1187
Rail-fastening for longitudinal stringers	R. Morrell	467,548	Jan. 26	2046	516	58	412
Rail-frog. Spring	H. Elliot	474,726	May 10	1350	342	59	908
Rail. Guard-	S. H. Stupakoff	482,766	Sept. 20	1404	347	60	1634
Rail-holding splice	F. G. Johnson	472,168	Apr. 5	244	65	59	46
Rail-joint	W. Curtis	483,993	Oct. 11	710	179	61	160
Rail-joint	J. Delaney and A. D. Reaume	485,862	Nov. 8	1068	284	61	807
Rail-joint	J. C. Gentry	474,499	May 10	988	255	59	838
Rail-joint	F. H. Heath	474,129	May 3	378	91	59	711
Rail-joint	C. H. Jenne	467,935	Feb. 2	51	12	58	535
Rail-joint	T. J. Kennedy	482,796	Sept. 20	1442	357	60	1642
Rail-joint	J. N. Lewis	476,753	June 7	789	194	59	1594
Rail-joint	A. J. Moxham	477,677	June 28	2325	581	59	1941
Rail-joint	J. Nelson	473,162	Apr. 19	1788	451	59	364
Rail-joint	M. C. Niles	473,638	Apr. 26	2608	657	59	544
Rail-joint	M. C. Niles	477,694	June 28	2351	587	59	1947
Rail-joint	M. C. Niles	480,506	Aug. 9	1217	304	60	826
Rail-joint	M. C. Niles	484,226	Oct. 11	1059	269	61	230
Rail-joint	M. C. Niles	484,227	Oct. 11	1062	270	61	230
Rail-joint	M. C. Niles	484,228	Oct. 11	1064	270	61	231
Rail-joint	M. C. Niles	484,229	Oct. 11	1067	271	61	231
Rail-joint	C. Roberts	472,928	Apr. 5	346	90	59	65
Rail-joint	J. H. Rouse	484,341	Oct. 11	1250	319	61	267
Rail-joint	R. Roxby	477,156	June 14	1443	354	59	1739
Rail-joint	J. E. Sarvis	486,605	Nov. 22	2267	592	61	1077
Rail-joint	G. G. Stacy	469,178	Feb. 16	1973	504	58	930

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Rail-joint	G. G. Stacy	481,433	Aug. 23	2537	673	60	1145
Rail-joint	G. Weeks	487,340	Dec. 6	165	46, 47	61	1353
Rail-joint and chair	J. H. Campbell	483,898	Oct. 4	556	140	61	115
Rail-joint fastening	R. Morrell	483,854	Oct. 4	498	124	61	103
Rail-joint fastening. Truss	F. H. Heath	474,126	May 3	373	90	59	709
Rail-joints. Combined rail-brace and truss-fastening for	F. H. Heath	474,128	May 3	376	90	59	710
Rail-joints. Roll for forming connecting-plates for	D. H. Lentz and A. W. Thompson	481,697	Aug. 30	3154	770	60	1242
Rail-sanding apparatus	G. Lentz	481,797	Aug. 30	3336	815	60	1278
Rail-securing device	A. Beaudry and P. F. King	488,749	Dec. 27	2479	616	61	1863
Rail support. Metallic	A. J. Hartford	467,166	Jan. 19	1422	363	58	287
Rail-tie	G. H. Sellers	486,959	Nov. 29	2883	745	61	1217
Rail. Track	J. T. Hill and B. Meiring	484,315	Oct. 11	1211	308	61	258
Rails. Box-brace for girder	A. J. Moxam	472,767	Apr. 12	1164	298	59	233
Rails. &c. Method of and apparatus for the manufacture of iron	T. Bichereux	470,466	Mar. 8	1319	340 341 342 343	58	1359
Rails to main-line rails. Means for securing guard	H. H. Sporenburg	471,906	Mar. 29	3476	888	58	1805
Railing. Iron	T. H. Flynn	485,268	Nov. 1	170	50	61	607
Railings. Bracket and supporting device for	A. E. Briggs	473,376	Apr. 19	2162	543	59	437
Railway	A. C. Hopkins	473,227	Apr. 19	1912	482	59	387
Railway	C. W. Hunt	468,110	Feb. 2	303	73	58	583
Railway	W. Latimer	484,027	Oct. 11	763	193	61	171
Railway	A. G. E. Westmacott and J. P. Hutchinson	468,608	Feb. 9	1097	279	58	747
Railway and car therefor. Pleasure	L. A. Thompson	470,220	Mar. 8	885	219	58	1220
Railway and draw-bridge signal	T. E. Hill	470,875	Mar. 15	1929	493	58	1499
Railway and grip therefor. Cable	C. Bollinger	470,280	Mar. 8	984	243	58	1299
Railway and truck	J. G. Johnson	478,332	July 5	423	103	60	85
Railway-beds. Device for indicating washouts in	J. Ortega y Espinosa	479,834	Aug. 2	91	23	60	600
Railway-blocks. Electric indicator for	R. W. Jaggard	472,359	Apr. 5	549	142	59	103
Railway-brace-chair	G. Murray	482,807	Sept. 20	1452	360 361	60	1645
Railway-brake. Electric	E. Verstraete	467,259	Jan. 19	1565	398	58	314
Railway-brake. Pneumatic	L. Soulerin	467,060	Jan. 12	1222	309 310	58	241
Railway-brakes. Pressure-regulator for	H. Hinckley	468,618	Feb. 9	1112	283	58	750
Railway-brakes. Pressure-regulator for	H. Hinckley	468,619	Feb. 9	1115	284	58	756
Railway. Cable	J. B. Mahaffey	483,965	Oct. 4	663	166	61	138
Railway. Cable	R. McIntock, J. F. Langhammer, and J. W. Lowell	486,262	Nov. 15	1738	458	61	960
Railway. Cable	W. C. Metzner and G. E. Buschick	468,813	Feb. 16	1412	358 359	58	820
Railway. Cable	J. H. Pendleton	479,919	Aug. 2	210	53, 54	60	624
Railway. Cable	J. H. Pendleton	479,920	Aug. 2	215	54, 55	60	624
Railway. Cable	J. H. Pendleton and A. Bryson	479,921	Aug. 2	224	55 56 57	60	626
Railway. Cable	S. D. Root and G. C. Vineyard	480,519	Aug. 9	1231	308 309	60	828
Railway-carriage	C. C. Burton	470,617	Mar. 8	1528	399	58	1403
Railway-carriage lights. Dioptric lens for	A. Nieuwenhuys	478,015	June 28	2861	716	59	2045
Railway cattle-guard	G. A. Christ	470,663	Mar. 15	1593	415	58	1425
Railway cattle-guard	J. H. Garaghty and G. J. Worthington	470,801	Mar. 15	1812	465	58	1467
Railway-chair	S. Harris	478,426	July 5	566	137	60	111
Railway-chair	S. Harris	478,427	July 5	566	137	60	111
Railway-chair	S. Harris	478,428	July 5	567	137	60	111
Railway-chair	B. N. Payne	485,298	Nov. 1	215	61	61	616
Railway-chair	S. H. Stupakoff	482,765	Sept. 20	1403	346	60	1634
Railway-chair	W. Wharton, Jr.	483,592	Oct. 4	116	28	61	24
Railway circuit-closer	F. E. Kinsman	470,806	Mar. 15	1818	467	58	1468
Railway-coach	M. Goetze	482,634	Sept. 13	1171	285	60	1578
Railway-coach	W. W. Munsell	467,514	Jan. 26	1972	501	58	399
Railway. Coasting	W. E. Smith	474,351	May 3	760	198	59	783
Railway collisions. Device for preventing	J. Stierle	482,143	Sept. 6	358	85	60	1406
Railway conductor. Electric	T. A. Edison	476,989	June 14	1184	26 27	59	1636
Railway conductor. Electric	R. M. Hunter	483,494	Sept. 27	2524	635	60	1867
Railway conduit. Cable	M. H. Bronsden	477,284	June 28	2662	666	59	2005
Railway conduit. Electric	F. O. Blackwell	471,375	Mar. 22	2683	64 65	58	1648
Railway conduit. Electric	F. O. Blackwell	482,719	Sept. 20	1319	322	60	1618
Railway conduit. Electric	W. F. Carr and C. F. Ferrin	476,128	May 31	3579	901	59	1387
Railway conduit. Electric	J. W. Hayden	487,735	Dec. 13	816	208	61	1500
Railway conduit. Electric	R. M. Hunter	482,964	Sept. 20	1704	430	60	1694
Railway conduit. Electric	W. F. Jenkins	481,403	Aug. 23	2685	659	60	1134
Railway conduit. Electric	C. T. H. Schwieger	478,026	June 28	2280	720	59	2048
Railway conduit. Electric	M. Shoemaker	478,175	July 5	164	42	60	35
Railway conduit. Electric	A. W. Wright	486,315	Nov. 15	1816	479	61	976
Railway conduit system. Electric	J. E. Waller and E. Manville	469,828	Mar. 1	261	67, 68	58	1152
Railway conduits. Trolley for electric	W. F. Jenkins	481,402	Aug. 23	2683	658 659	60	1134
Railway construction	R. W. King	470,641	Mar. 8	1561	406	58	1409
Railway construction	W. J. Morden	481,368	Aug. 23	2621	645	60	1123
Railway contact device. Electric	J. C. Love	469,861	Mar. 1	314	80, 81	58	1162
Railway cross-tie	F. A. Byram	475,99	May 31	3374	850	59	1316
Railway cross-tie	W. M. Hewitt	484,855	Oct. 25	2089	537	61	461
Railway cross-tie. Metallic	W. McManes and G. E. Lum	476,404	June 7	280	66	59	1493
Railway-crossing	E. B. Gibson	482,352	Sept. 13	732	176	60	1493
Railway-crossing	M. G. Knight	484,100	Oct. 11	860	218 219	61	190
Railway-crossing	J. McCarthy	479,829	Aug. 2	86	22	60	598

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Railway-crossing	A. J. Moxham	477,676	June 28	2323	580	59	1940
Railway-crossing	A. J. Moxham	477,681	June 28	2328	582	59	1942
Railway-crossing	A. J. Moxham	477,682	June 28	2331	582	59	1942
Railway-crossing	A. J. Moxham	477,685	June 28	2336	584	59	1944
Railway-crossing	A. J. Moxham	477,687	June 28	2340	584	59	1945
Railway-crossing	A. J. Moxham	477,688	June 28	2342	588	59	1945
Railway-crossing	T. Smith	479,627	July 19	1481	368	60	317
Railway-crossing. Adjustable	D. McNamara	480,608	Aug. 9	1374	341	60	856
Railway-crossing. Electric	W. Osner	466,362	Jan. 5	81	21, 22	58	18
Railway-crossing protector	R. J. M. Danley	482,432	Sept. 13	847	203	60	1514
Railway-crossing protector	R. J. M. Danley	482,423	Sept. 13	848	203	60	1514
Railway-crossing signal mechanisms. Circuit-closer for	I. W. Loy and E. O'Toole	483,231	Sept. 27	2128	538	60	1791
Railway-crossings. Frog or cross for	A. J. Moxham	477,684	June 28	2334	583	59	1943
Railway curve. Cable	G. Muller	481,412	Aug. 23	2699	663 664	60	1138
Railway. Double-track elevated	E. M. Turner	488,157	Dec. 13	1524	382 383	61	1643
Railway. Electric	F. B. Badt	480,543	Aug. 9	1272	319 320	60	837
Railway. Electric	C. H. Baker	474,355	May 10	766	199	59	795
Railway. Electric	C. H. Baker	480,004	Aug. 2	377	94	60	652
Railway. Electric	R. W. Barkley	476,776	June 14	826	203 204 205	59	1615
Railway. Electric	J. W. Bates	477,734	June 28	2409	602	59	1959
Railway. Electric	E. M. Bentley	470,654	Mar. 15	1581	412	58	1421
Railway. Electric	M. W. Dewey	479,493	July 26	2258	566	60	482
Railway. Electric	T. A. Edison	475,494	May 24	2565	653	59	1176
Railway. Electric	W. C. Goss	471,543	Mar. 29	2928	745	58	1702
Railway. Electric	J. W. Grantland	475,107	May 17	1961	497	59	1041
Railway. Electric	R. M. Hunter	480,850	Aug. 16	1757	440	60	947
Railway. Electric	R. M. Hunter	481,905	Aug. 30	3510	859	60	1311
Railway. Electric	W. B. Hutchinson	467,699	Jan. 26	2271	576	58	454
Railway. Electric	F. Mansfield	478,346	July 5	445	110	60	89
Railway. Electric	W. G. Murphy, Jr.	483,856	Oct. 4	500	124	61	104
Railway. Electric	W. S. Smith	469,250	Feb. 23	2150	552	58	970
Railway. Electric	F. J. Sprague and P. F. O'Shaughnessy.	468,959	Feb. 16	1650	421 422	58	865
Railway. Electric	C. P. Tatro	476,935	June 14	1101	266	59	1670
Railway. Electric	C. W. Thomas	468,708	Feb. 9	1255	319	58	779
Railway. Electric	E. Thomson	470,221	Mar. 8	889	220	58	1280
Railway. Electric	C. J. Van Depoelo	467,448	Jan. 19	1848	472	58	368
Railway. Electric	M. Wheelless	468,163	Feb. 2	387	96	58	599
Railway. Electric	M. Wheelless	468,164	Feb. 2	387	96	58	599
Railway. Electric	M. Wheelless	468,165	Feb. 2	388	96	58	600
Railway electric motor	C. F. Winkler	466,914	Jan. 12	991	253 254	58	198
Railway. Elevated	A. Anderson	470,534	Mar. 8	1411	368	58	1377
Railway. Elevated	E. L. Arnold	476,730	June 7	734	181 182	59	1583
Railway. Elevated	A. Davis	476,982	June 14	1174	284	59	1684
Railway. Elevated	S. V. Day	472,862	Apr. 12	1289	331	59	258
Railway. Elevated	A. E. Hotchkiss	488,200	Dec. 20	1593	399	61	1673
Railway. Elevated	H. W. Kirchner	485,700	Nov. 8	834	224	61	760
Railway. Elevated	E. M. Turner	488,151	Dec. 13	1519	381	61	1642
Railway. Elevated	E. M. Turner	488,155	Dec. 13	1521	381	61	1642
Railway. Elevated	E. M. Turner	488,156	Dec. 13	1523	382	61	1643
Railway. Elevated	E. D. Wilson	471,452	Mar. 22	2803	715	58	1669
Railway expansion-rail	A. J. Moxham	477,672	June 28	2319	579	59	1939
Railway expansion-rail	A. J. Moxham	477,675	June 28	2322	580	59	1940
Railway fish-plate, set-screw, and nut-lock therefor	J. P. McGuire	484,809	Oct. 25	2012	517	61	446
Railway-frog	J. S. McAdams	487,957	Dec. 13	1179	294	61	1571
Railway-frog	N. Ratcliff	470,009	Mar. 1	547	136	58	1205
Railway-frog	J. E. Shaw	469,098	Feb. 16	1867	477	58	909
Railway-frog	D. F. Vaughan	474,200	May 3	486	117	59	732
Railway-frog	J. Wall and J. J. Mack	474,705	May 10	1316	335	59	902
Railway frog and switch. Combined	D. Horrie	471,004	Mar. 15	2121	545	58	1527
Railway-frog. Automatic	H. A. Hancox	470,486	Mar. 8	1347	350	58	1364
Railway frog, crossing, &c.	H. Elliot	474,727	May 10	1352	343	59	909
Railway-frog foot-guard	W. Driscoll	478,504	July 5	682	166	60	135
Railway-gate	L. S. Barnett	478,978	July 19	1400	347	60	303
Railway-gate	J. S. Chambers, Jr.	473,823	Apr. 26	2882	723	59	597
Railway-gate	D. M. Dewitt	476,738	June 7	767	189	59	1590
Railway-gate	W. R. McGuire	487,538	Dec. 6	500	131	61	1419
Railway-gate	F. W. Mills	488,322	Dec. 20	1796	451	61	1711
Railway-gate	M. B. Mills	460,955	Aug. 16	1921	481	60	979
Railway-gate	W. Smith	485,894	Nov. 8	1126	298	61	819
Railway-gate	C. A. Snider	484,256	Oct. 11	1111	281	61	240
Railway-gate	N. Van Winkle	471,040	Mar. 15	2170	558	58	1536
Railway-gate and danger-signal	W. J. Webb	476,846	June 14	949	231	59	1640
Railway gate. Automatic	E. A. Morrow and J. Wilson	479,295	July 19	1890	473 474	60	396
Railway. Gravity	J. B. Maxwell	477,059	June 14	1294	314	59	1709
Railway grip. Cable	G. and L. Schorpp	481,512	Aug. 23	2857	702	60	1169
Railway grip. Cable	J. C. H. Stut	474,875	May 17	1592	405 406	59	976
Railway grip. Cable	P. T. Taylor	485,257	Nov. 1	123	37	61	599
Railway grip. Cable	C. Vogel	478,773	July 12	1081	269	60	230
Railway grip. Cable	C. Vogel	483,775	Oct. 4	382	95	61	80
Railway grip. Cable	C. Vogel and C. McIntosh	483,774	Oct. 4	379	94	61	79
Railway grip mechanism. Cable	J. H. Robertson	484,920	Oct. 25	2206	568	61	484

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di'g.	Vol.	Page.
Railway guard-rail.....	A. J. and F. D. Gosnell.....	467,228	Jan. 19	1512	387	58	304
Railway guard-rail.....	E. A. Trapp.....	477,713	June 28	2381	595	59	1953
Railway-head.....	C. S. Hadfield.....	466,410	Jan. 5	156	42	58	31
Railway head-plate.....	J. M. Katzmaier.....	471,240	Mar. 22	2485	631	58	1608
Railway-joint.....	F. W. Bond.....	478,983	July 19	1410	349	60	305
Railway-joint.....	R. E. Greenwell.....	486,775	Nov. 22	2540	663	61	1132
Railway-joint.....	W. A. Guthrie.....	468,518	Feb. 9	962	245	58	721
Railway-joint.....	U. H. Hane.....	481,171	Aug. 23	2295	565	60	1063
Railway-joint.....	H. T. Hey.....	481,758	Aug. 30	3269	795	60	1264
Railway-joint chair.....	T. Sayers.....	481,122	Aug. 16	2196	543	60	1031
Railway joint or fastening.....	D. J. Mullin.....	467,674	Jan. 26	2226	566	58	446
Railway motor. Electric.....	F. O. Blackwell.....	470,817	Mar. 15	1841	472	58	1472
Railway motor. Electric.....	H. M. Byllesby.....	467,969	Feb. 2	89	22	58	542
Railway motor. Electric.....	J. F. Shawhan.....	475,970	May 31	3333	841	59	1337
Railway motor. Electric.....	S. H. Short.....	475,160	May 17	2035	513	59	1056
Railway nut-lock.....	G. Olliver.....	484,755	Oct. 18	1908	486	61	412
Railway or farm gate. Automatic.....	J. R. Benson.....	483,890	Oct. 4	545	138	61	113
Railway or tramway. Street.....	J. M. Price.....	469,392	Feb. 23	2317	596	58	1004
Railway or tramway support. Street.....	J. M. Price.....	478,362	July 5	473	115	60	94
Railway plant. Elevated.....	S. V. Day and C. D. Moody.....	470,992	Mar. 15	2106	539 540 541	58	1524
Railway point and signal apparatus. Interlocking.....	F. A. Atkinson.....	484,840	Oct. 25	2071	532	61	457
Railway pump or water-elevator.....	H. D. Layman.....	488,362	Dec. 20	1865	467	61	1726
Railway-rail.....	P. H. Dudley.....	486,633	Nov. 22	2310	603	61	1026
Railway-rail.....	B. G. Maercklein.....	474,094	May 3	336	80	59	702
Railway-rail.....	W. H. Mattson.....	466,612	Jan. 5	484	125	58	93
Railway-rail.....	A. J. Moxham.....	477,673	June 28	2320	579	59	1940
Railway-rail.....	A. J. Moxham.....	477,674	June 28	2321	580	59	1940
Railway-rail.....	A. J. Moxham.....	477,683	June 28	2333	583	59	1943
Railway-rail.....	J. T. O'Shea.....	476,165	May 31	3642	922	59	1401
Railway-rail.....	F. I. Smith.....	487,133	Nov. 29	3151	807 808	61	1270
Railway-rail.....	J. T. Smith.....	478,766	July 12	1072	266	60	229
Railway-rail and chair and making the same. Combined.....	A. J. Moxham.....	482,805	Sept. 20	1451	360	60	1645
Railway-rail and making the same.....	A. J. Moxham.....	477,690	June 28	2346	586	59	1946
Railway-rail bender.....	W. H. Cowell.....	479,491	July 26	2257	566	60	482
Railway-rail brace-chair.....	W. M. Brown.....	477,641	June 28	2272	569	59	1929
Railway-rail brace-chair.....	G. Murray.....	478,806	July 12	1145	283	60	243
Railway-rail chair.....	M. E. Clemons.....	475,539	May 24	2639	671	59	1189
Railway-rail chair.....	G. H. Graham.....	471,971	Mar. 29	3568	911	58	1823
Railway-rail chair.....	B. Jennings.....	481,032	Aug. 16	2034	507	60	1001
Railway-rail chair.....	W. H. Mattson.....	469,485	Feb. 23	2471	634	58	1032
Railway-rail chair.....	A. J. Moxham.....	482,801	Sept. 20	1447	359	60	1644
Railway-rail chair.....	A. J. Moxham.....	482,802	Sept. 20	1448	359	60	1644
Railway-rail chair and making the same.....	A. J. Moxham.....	482,804	Sept. 20	1450	360	60	1644
Railway-rail connection.....	W. A. Stofor.....	466,634	Jan. 5	512	132	58	99
Railway-rail curve.....	G. G. Jordan.....	477,901	June 28	2689	673	59	2010
Railway-rail-dressing device.....	D. W. Jones.....	471,977	Mar. 29	3578	913	58	1824
Railway-rail fastening.....	W. Goldie.....	488,195	Dec. 20	1585	397	61	1671
Railway-rail fastening.....	H. A. Lyddon.....	479,289	July 19	1882	471	60	394
Railway-rail fastening.....	R. Morrell.....	483,855	Oct. 4	499	124	61	103
Railway-rail fastening.....	S. R. Scharf.....	488,578	Dec. 27	2216	549	61	1811
Railway-rail joint.....	C. U. Agner and W. D. Armstrong.....	470,459	Mar. 8	1310	337	58	1357
Railway-rail joint.....	G. Bouscaren.....	476,241	June 7	9	2	59	1440
Railway-rail joint.....	W. H. Carr.....	478,920	July 12	1305	325	60	273
Railway-rail joint.....	G. W. Hanner.....	484,424	Oct. 18	1380	353	61	304
Railway-rail joint.....	C. E. Mark.....	481,576	Aug. 30	2969	729	60	1207
Railway-rail joint.....	A. J. Moxham.....	477,678	June 28	2326	581	59	1941
Railway-rail joint.....	A. J. Moxham.....	477,680	June 28	2327	581	59	1941
Railway-rail joint.....	A. J. Moxham.....	477,689	June 28	2344	586	59	1946
Railway-rail joint-plate.....	E. Samuel.....	487,078	Nov. 29	3062	786	61	1253
Railway-rail splice.....	W. F. Gould.....	466,408	Jan. 5	148	41	58	30
Railway-rail-straightening machine.....	E. Y. Marshall.....	485,768	Nov. 8	940	252	61	782
Railway-rail supporter.....	E. G. Patterson.....	472,071	Apr. 5	91	25	59	19
Railway-rails. Combined foot and brace for.....	V. Angerer.....	483,889	Oct. 4	544	137	61	113
Railway-rails. Combined foot and brace for.....	E. Samuel.....	483,873	Oct. 4	524	131 132	61	108
Railway-rails. Fish-plate for.....	A. B. Tbbotson.....	467,812	Jan. 26	2449	622	58	489
Railway-rails from spreading. Device for preventing.....	J. H. Burns.....	480,998	Aug. 16	1987	497	60	992
Railway-rails. Locking device for.....	J. Rigby.....	469,921	Mar. 1	406	102	58	1179
Railway-rails. Manufacturing brace and slide plates for.....	F. S. Guerber.....	477,536	June 21	2083	518	59	1877
Railway-rails. Metallic cross-tie and securing-plate for.....	J. J. Crane.....	467,790	Jan. 26	2410	613	58	481
Railway-rails to metal sleepers. Fastening.....	J. Conley.....	472,034	Apr. 5	37	7	59	9
Railway safety-gate.....	E. L. Paterson.....	485,771	Nov. 8	943	253	61	783
Railway safety-plate.....	T. B. Smith.....	486,741	Nov. 22	2481	647	61	1121
Railway-service. Semaphore for.....	A. M. Mozier.....	466,614	Jan. 5	486	125	58	93
Railway-siding.....	W. R. Kirk.....	474,665	May 10	1254	320 321 322	59	890
Railway-signal.....	G. A. Bartholomew.....	486,271	Nov. 15	1749	461 460	61	962
Railway-signal.....	T. M. Bates.....	469,623	Feb. 23	2665	686	58	1072
Railway-signal.....	A. S. von Blinnsdorf and C. Adler.....	476,866	June 14	983	238	59	1646
Railway-signal.....	R. T. Bowne.....	479,395	July 26	2073	530 531	60	446
Railway-signal.....	S. Emrich.....	479,258	July 19	1838	461	60	385
Railway-signal.....	T. E. Hill.....	470,876	Mar. 15	1931	494	58	1489
Railway-signal.....	U. S. Jackson.....	473,190	Apr. 19	1851	466	59	375
Railway-signal.....	C. R. Johnson.....	476,926	June 14	1082	261	59	1666

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di-g.	Vol.	Page.
Railway-signal.....	G. H. Lothrop.....	48,441	Dec. 20	1989	{ 496 497	61	1750
Railway-signal.....	O. C. Morris.....	470,436	Mar. 8	1271	{ 325 326	58	1350
Railway-signal.....	J. S. Parmenter.....	466,423	Jan. 5	182	47	58	35
Railway-signal.....	E. Schaefer.....	4-8,225	Dec. 20	1646	411	61	1683
Railway-signal.....	C. M. Stanley.....	475,166	May 17	2046	515	59	1058
Railway-signal.....	E. Urbain.....	484,068	Oct. 11	815	{ 206 207	61	182
Railway signal apparatus and system.....	J. W. Lattig.....	486,047	Nov. 8	1370	{ 364 365	61	869
Railway-signal. Automatic mechanical block.....	G. C. Young and G. O. Willever.....	481,884	Aug. 30	3472	851	60	1304
Railway-signal case.....	L. A. Boyd.....	483,528	Oct. 4	17	4	61	6
Railway signal device. Automatic.....	B. and J. Shoecraft.....	482,203	Sept. 6	459	111	60	1425
Railway-signal. Electric.....	J. M. Brasington.....	473,288	Apr. 19	2007	{ 504 505	59	407
Railway-signal. Electric.....	C. E. Corporan.....	473,614	Apr. 26	2569	647	59	537
Railway-signal. Electric.....	W. F. Z. Desant.....	467,478	Jan. 19	1899	485	58	378
Railway-signal. Electric.....	C. K. Hall.....	482,306	Sept. 6	631	151	60	1458
Railway-signal. Electric.....	W. Holloway, Jr.....	470,129	Mar. 1	726	180	58	1240
Railway-signal. Electric.....	F. F. Loomis.....	479,138	July 19	1654	413	60	349
Railway-signal. Electric.....	T. A. B. Putnam.....	479,333	July 19	1940	485	60	406
Railway-signal. Electric.....	F. P. Schlosser.....	488,615	Dec. 27	2269	563	61	1982
Railway-signal. Electric.....	E. T. Turney.....	471,296	Mar. 22	2566	652	58	1024
Railway-signal. Electric.....	E. C. Wiley.....	471,230	Mar. 22	2471	{ 627 628	58	1606
Railway-signal. Electric.....	A. J. Wilson.....	470,813	Mar. 15	1835	471	58	1471
Railway-signal. Electric.....	A. J. Wilson.....	485,728	Nov. 8	869	239	61	772
Railway-signal. Electrical.....	B. C. Seaton.....	484,614	Oct. 18	1679	426	61	364
Railway signal mechanism.....	T. E. Hill.....	472,608	Apr. 12	1218	313	59	243
Railway signal system.....	W. G. Wattson.....	475,955	May 31	3310	835	59	1333
Railway signaling.....	T. A. Edison.....	470,923	Mar. 15	1993	509	58	1501
Railway signaling apparatus.....	A. Hall.....	486,335	Nov. 15	1845	{ 485 486	61	981
Railway signaling apparatus.....	F. I. Myers.....	469,438	Feb. 23	2385	612	58	1017
Railway signaling apparatus. Electric.....	F. I. Myers.....	467,581	Jan. 26	2089	529	58	421
Railway signaling apparatus. Electric.....	A. J. Wilson.....	471,409	Mar. 22	2741	699	58	1658
Railway signaling apparatus. Electric.....	A. J. Wilson.....	471,410	Mar. 22	2743	700	58	1659
Railway signaling device.....	Z. Krnlis.....	487,904	Dec. 13	1098	275	61	1556
Railway signaling-lantern.....	G. E. Warren.....	476,585	June 7	536	128	59	1543
Railway signaling system.....	F. P. Benjamin.....	476,240	June 7	6	2	59	1439
Railway signaling system.....	T. A. Edison and E. T. Gilliland.....	486,634	Nov. 22	2311	{ 603 604	61	1087
Railway-spike.....	S. H. Bracey.....	487,111	Nov. 29	3119	800	61	1265
Railway-spike.....	S. Emrich.....	486,328	Nov. 15	1835	483	61	980
Railway-spike.....	J. M. Fennerty.....	477,171	June 14	1476	362	59	1746
Railway-station.....	J. G. Emery, Jr.....	469,882	Mar. 1	346	89	58	1168
Railway stock and cattle guard. Automatic.....	J. Walton.....	481,447	Aug. 23	2756	678	60	1149
Railway stock-guard.....	W. J. Bridges.....	467,913	Feb. 2	11	4	58	529
Railway structure. Elevated.....	J. L. Meigs.....	488,283	Dec. 20	1736	437	61	1700
Railway structure. Elevated.....	G. A. Stephenson.....	468,841	Feb. 16	1456	372	58	829
Railway-support. Metallic.....	J. M. Price.....	467,432	Jan. 19	1827	{ 466 467	58	363
Railway surface stock-guard.....	L. S. Gardner.....	472,574	Apr. 12	877	226	59	181
Railway-switch.....	B. Bennett.....	487,705	Dec. 13	760	195	61	1488
Railway-switch.....	W. E. Brown and L. H. Smith.....	488,263	Dec. 20	1701	425	61	1694
Railway-switch.....	D. M. Church.....	488,161	Dec. 13	1531	384	61	1644
Railway-switch.....	F. B. Erwin.....	466,491	Jan. 5	294	75	58	56
Railway-switch.....	C. E. Garey.....	473,387	Apr. 19	2184	{ 548 549 550	59	441
Railway-switch.....	L. Marchand, Jr.....	480,601	Aug. 9	1364	339	60	854
Railway-switch.....	J. D. Mattison.....	478,879	July 12	1238	307	60	260
Railway-switch.....	S. T. Mock.....	467,948	Feb. 2	65	15	58	538
Railway-switch.....	C. E. Nowlin.....	468,256	Feb. 2	532	{ 131 132	58	628
Railway-switch.....	S. Peterson and A. Baland.....	481,267	Aug. 23	2461	606	60	1095
Railway-switch.....	W. Raab.....	477,609	June 21	2190	{ 544 545	59	1897
Railway-switch.....	G. Saalmler.....	486,126	Nov. 15	1524	403	61	916
Railway-switch.....	A. A. Strom. (Reissue).....	11,261	Aug. 16	2268	560	60	1043
Railway-switch.....	J. N. Strong.....	483,818	Oct. 4	446	111	61	92
Railway-switch.....	J. B. Suffern. (Reissue).....	11,248	June 21	2250	564	59	1909
Railway-switch.....	T. J. Walsh.....	473,801	Apr. 26	2849	716	59	591
Railway-switch.....	B. F. Williston.....	467,730	Jan. 26	2324	590	58	464
Railway switch and operating device. Street- anism for operating	H. Blanchard.....	486,836	Nov. 22	2641	690	61	1154
Railway switch and signal interlocking gear. Mech- anism for operating	H. Dezer and T. W. Burley.....	469,645	Feb. 23	2693	693	58	1078
Railway switch and signal interlocking mechanism.....	J. W. Thomas, Jr.....	468,160	Feb. 2	380	{ 93 94 95	58	598
Railway-switch apparatus.....	J. J. Hill.....	485,868	Nov. 8	1078	286	61	809
Railway-switch appliance. Street- Automatic.....	J. P. Holdger.....	482,903	Sept. 20	1613	404	60	1675
Railway-switch. Automatic.....	W. H. Fisher.....	466,977	Jan. 12	1088	276	58	215
Railway-switch. Automatic.....	H. A. Hancox.....	467,409	Jan. 19	1769	456	58	356
Railway-switch. Automatic.....	J. Lipman and C. J. Rinderknecht.....	479,373	July 19	2028	506	60	423
Railway-switch. Automatic.....	G. S. Maxwell and J. Clark, Jr.....	472,063	Apr. 5	80	22	59	17
Railway-switch. Automatic.....	J. L. Morris and J. P. Nace.....	470,696	Mar. 15	1645	{ 427 428	58	1434
Railway-switch. Automatic.....	W. Spielman.....	481,248	Aug. 23	2435	600	60	1090
Railway-switch. Automatic safety.....	J. W. Kales.....	474,474	May 10	949	{ 244 245	59	830
Railway-switch-bar clip.....	F. S. Guerber.....	477,534	June 21	2082	517	59	1876

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &.	Vol.	Page.
Railway-switch brace and slide plate	F. S. Guerber	477,535	June 21	2082	518	59	1876
Railway switch. Cable	I. Bishop and A. F. L. Bell	473,652	Apr. 26	2629	662 } 663	59	548
Railway switch. Cable	K. Rasmussen	470,306	Mar. 8	1048	266	58	1310
Railway switch. Electric	C. A. Stone and E. S. Webster	485,668	Nov. 8	791	211	61	751
Railway-switch. Electrically-operated	C. A. Stone and E. S. Webster	484,123	Oct. 11	885	225 } 226	61	196
Railway-switch fastening	S. H. Corson	480,320	Aug. 9	925	234	60	770
Railway-switch lock	R. S. Thomas and C. E. Woltz	466,474	Jan. 5	265	67	58	51
Railway-switch operating mechanism	A. Bixby	479,584	July 26	2381	594	60	505
Railway-switch. Portable	J. E. Norwood	486,497	Nov. 22	2094	554	61	1045
Railway-switch signal	E. D. Bangs	469,927	Mar. 1	415	104	58	1180
Railway-switch signal	F. Harris	488,654	Dec. 27	2335	578	61	1835
Railway-switch signal	F. M. Nye	480,825	Aug. 16	1723	430 } 431	60	940
Railway-switch stand	F. P. Newell and H. Mohle	473,335	Apr. 19	2091	526	59	423
Railway-switch stand and distant signal	W. W. Le Grande	487,877	Dec. 13	1057	264 } 265	61	1547
Railway switch. Street	M. A. Cutter	477,046	June 14	1274	309	59	1765
Railway switch. Street	I. F. Harris	478,858	July 12	1216	302	60	256
Railway switch. Street	T. L. Johnson	482,426	Sept. 13	853	204 } 205	60	1515
Railway switch. Street	R. T. Smith	479,028	July 19	1482	369	60	317
Railway switch. Street	R. H. Snively	475,475	May 24	2534	645	59	1170
Railway switches and signals. Interlocking apparatus for	H. and A. H. Johnson	485,799	Nov. 8	974	261 } 262	61	789
Railway switching device. Street	I. F. Harris	478,859	July 12	1217	302	60	257
Railway system	H. T. Dunne	474,951	May 17	1711	435	59	994
Railway system	J. P. F. Kuhlmann	486,719	Nov. 22	2445	637	61	1114
Railway system. Electric	W. J. Ogden	468,575	Feb. 9	1054	268	58	739
Railway system. Electric	J. H. Pendleton	484,919	Oct. 25	2204	567 } 568	61	483
Railway system. Electric	A. L. Riker	483,366	Sept. 27	2352	591	60	1833
Railway system. Elevated	E. Norton	485,708	Nov. 8	854	229 } 230	61	764
Railway system. Multiple-arc	S. H. Short	473,361	Apr. 19	2133	535	59	431
Railway system. Passenger	C. M. Hollingsworth	474,657	May 10	1238	316 } 317	59	886
Railway systems. Conduit and trolley for electric	C. W. Carl and J. W. Phillips	472,982	Apr. 19	1488	380 } 381	59	310
Railway systems. Signal for electric	F. A. Cheney	468,787	Feb. 16	1379	348	58	813
Railway-tie	T. C. Anderson	470,094	Mar. 1	675	166	58	1230
Railway-tie	A. G. Badington	479,625	July 26	2445	610	60	516
Railway-tie	H. Daily	473,999	May 3	179	42	59	673
Railway-tie	J. F. Harris	466,942	Jan. 12	1030	262	58	205
Railway-tie	A. J. Hartford	478,058	June 28	2931	732	59	2057
Railway-tie	F. S. Ketchum	475,981	May 31	3352	815	59	1341
Railway-tie	W. R. Kinnear	483,154	Sept. 27	2002	506 } 507	60	1767
Railway-tie	O. M. Knox	473,934	May 3	82	17	59	652
Railway-tie	E. S. Moffat and T. G. Wolf	470,585	Mar. 8	1478	384 } 385	58	1392
Railway-tie	E. S. Moffat and T. G. Wolf	472,901	Apr. 12	1348	347	59	270
Railway-tie	R. Osborne	470,700	Mar. 15	1652	429	58	1436
Railway-tie	A. A. Warne	466,732	Jan. 5	680	174	58	129
Railway tie and chair	C. P. Howell	473,071	Apr. 19	1636	416	59	337
Railway-tie and fastening	J. L. Chapman	486,628	Nov. 22	2303	602	61	1085
Railway-tie and fastening	T. B. Moore and J. G. Hodgson	484,036	Oct. 11	776	195	61	174
Railway-tie and fastening	C. F. Nelson	468,360	Feb. 9	714	177	58	672
Railway-tie and fastening. Metallic	L. A. Kenyon	487,016	Nov. 29	2969	765	61	1233
Railway-tie and rail-fastener	C. M. Reed	487,642	Dec. 6	654	169	61	1451
Railway tie and stringer. Metallic	R. J. Colvin	474,216	May 3	509	122 } 123	59	736
Railway-tie and track-fastening	R. D. Price	487,351	Dec. 6	185	51	61	1357
Railway-tie. Metal	R. E. Daniels	482,997	Sept. 20	1757	444	60	1705
Railway-tie. Metal	A. Story	474,873	May 17	1590	405	59	969
Railway-tie. Metal	E. F. Taylor	474,877	May 17	1595	406	59	970
Railway-tie. Metal	S. H. Wilson	483,621	Oct. 4	450	112	61	93
Railway-tie. Metallic	W. A. Graeber	477,112	June 14	1379	336	59	1726
Railway-tie. Metallic	A. J. Hartford	487,733	Dec. 13	814	207	61	1499
Railway-tie. Metallic	C. B. Macneal	482,967	Sept. 20	1710	431	60	1695
Railway-tie. Metallic	A. Mattijetz	487,852	Dec. 13	1173	293	61	1570
Railway-tie. Metallic	R. Morrell	483,853	Oct. 4	497	123	61	103
Railway-tie. Metallic	B. F. and M. F. Sparr	483,773	Oct. 4	378	94	61	79
Railway-tie. Metallic	A. W. Stranh	470,904	Mar. 15	1966	503	58	1497
Railway-tie. Metallic	A. G. E. Westmacott and J. P. Hutchinson	471,582	Mar. 29	2984	760	58	1712
Railway-tie plate	C. H. Dunham	469,386	Feb. 23	2309	594	58	1002
Railway-tie plates. Apparatus for manufacturing	J. Churchward	468,928	Feb. 16	1597	404	54	855
Railway-tie wear-plate	B. Reece	488,662	Dec. 27	2348	581	61	1837
Railway-ties. Tamping	E. G. Patterson	472,072	Apr. 5	93	25	59	19
Railway time-signal	E. Fontaine	467,990	Feb. 2	124	30, 31	58	548
Railway time-signal	H. Gosman	470,821	Mar. 15	1850	474 } 475	58	1474
Railway time-signal	J. A. Guin	475,108	May 17	1964	497	59	1042
Railway time-signal	D. W. and E. L. Mitchell	481,581	Aug. 30	2977	730	60	1309
Railway time-signal	A. C. Scarr	469,066	Feb. 16	1824	467	58	301
Railway time-signal	W. Scott	482,699	Sept. 13	1281	314	60	1599
Railway time-signal	S. Smith	481,533	Aug. 23	2000	712	60	1178
Railway time-signal	A. H. Thorp	481,723	Aug. 30	3207	783	60	1252
Railway time-signal	G. A. Xander	473,662	Apr. 26	2950	744	59	610
Railway-track	C. W. Parks	479,836	Aug. 2	94	24	60	600
Railway track and switch guard	M. Riley	484,461	Oct. 18	1442	368	61	317
Railway-track cattle-guard	A. E. Shorthill	471,029	Mar. 15	2155	554	58	1533

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Di'g.	Vol.	Page.
Railway-track. Combination safety	S. G. Howe	478,059	June 28	2932	732	59	2057
Railway-track construction	T. W. Hutchins	479,808	Aug. 2	51	12	60	592
Railway-track. Elevated	M. J. Ferren	469,371	Feb. 23	2286	587	58	998
Railway-track fastening	A. G. E. Westmacott and J. P. Hutchinson.	471,583	Mar. 29	2985	760	58	1712
Railway-track foot-guard	M. Riley	485,480	Nov. 1	506	133	61	675
Railway-track gage	E. E. Buchwald	479,552	July 26	2345	585	60	498
Railway-track jack	A. Nutting	467,706	Jan. 26	2282	579	58	456
Railway-track jack	J. M. Wright	486,389	Nov. 15	1923	511	61	999
Railway-track nut-lock	J. D. Cay	478,686	July 12	947	235	60	204
Railway-track-sanding apparatus	A. A. Whipple	484,926	Oct. 25	2214	571	61	486
Railway-track. Street	J. A. Duggan	472,164	Apr. 5	239	64	59	45
Railway-track switch-pieces	A. J. Moxham	477,686	June 28	2338	584	59	1044
Railway-track wrench. Ratchet.	N. M. Weaver and D. D. Blount	471,765	Mar. 29	3265	833	58	1763
Railway-tracks. Circuit closing and breaking device for	T. H. Patenall	480,507	Aug. 9	1219	305	60	826
Railway-tracks. Device for illuminating	W. E. Ferguson	481,016	Aug. 16	2011	503	60	996
Railway-tracks. Weed-cutter for	W. G. Hay	483,150	Sept. 27	1990	504	60	1764
Railway-train-heating apparatus. Coupling and conduit for	R. S. Pettet	488,717	Dec. 27	2434	604	61	1854
Railway-train signal apparatus	C. Selden	478,135	July 5	82	21, 22	60	19
Railway-train signaling appliance	W. Glasgow	474,578	May 10	1120	287	59	864
Railway-trains. Electric control of	R. C. Sayer	481,062	Aug. 16	2105	{ 523 524 }	60	1014
Railway-trains. Electric signal for	L. Dunn	473,832	Apr. 26	2897	727	59	600
Railway-trains. Smoke and cinder conductor for	W. H. Moor	477,565	June 21	2125	{ 528 529 }	59	1885
Railway-trains. Smoke-conduit for	C. L. Morrison	473,769	Apr. 26	2797	703	59	581
Railway trolley. Conduit	B. Olbricht	486,985	Nov. 29	2924	754	61	1225
Railway trolley. Electric	C. A. Adams and T. J. Thorp	482,031	Sept. 6	178	43	60	1370
Railway trolley. Electric	T. A. Edison	476,985	June 14	1179	285	59	1685
Railway trolley. Electric	C. E. Friel	474,552	May 10	1077	276	59	855
Railway trolley. Electric	A. H. R. Guiley	486,333	Nov. 15	1843	484	61	981
Railway trolley. Electric	W. F. Jenkins	481,401	Aug. 23	2682	658	60	1134
Railway trolley. Electric	D. Mason	488,032	Dec. 13	1291	{ 322 323 }	61	1595
Railway trolley. Electric	D. Mason	488,023	Dec. 13	1293	323	61	1595
Railway trolley. Electric	W. H. Morgan	469,899	Mar. 1	372	93, 94	58	1172
Railway trolley. Electric	J. W. Newhouse	475,467	May 24	2521	642	59	1167
Railway trolley. Electric	J. M. C. Tyner and S. S. Irving	482,325	Sept. 6	679	162	60	1468
Railway trolley. Electric	C. J. Van Depoele	488,929	Dec. 27	2761	682	61	1922
Railway trolley. Electric	A. Wörner	487,813	Dec. 13	949	240	61	1527
Railway trolley. Overhead	N. E. Austin	469,460	Feb. 23	2425	621	58	1024
Railway-trolley safety attachment	M. A. Yeakley	476,028	May 31	3412	{ 861 862 863 }	59	1354
Railway trolley-stand. Electric	J. C. Hough	483,061	Sept. 20	1853	470	60	1726
Railway tunnel and constructing the same. Street	T. G. Gribble	468,282	Feb. 2	575	143	58	635
Railway-tunnel construction	J. W. Reno	469,453	Feb. 23	2413	618	58	1022
Railway use. Hand-torch for	J. H. Shephard	468,729	Feb. 9	1282	326	58	785
Railway-vehicles. Guard-shoe for	H. L. Simmons	481,068	Aug. 16	2112	525	60	1015
Railway wire-support. Electric	W. Q. Prewitt	466,800	Jan. 12	797	206	58	161
Railway-wire suspension. Electric	A. Phillipsborn and W. Reichel	472,810	Apr. 12	1221	313	59	244
Railway wires. Hanger for electric	C. B. Elliott	476,192	May 31	3688	931	59	1408
Railways. Apparatus for carrying ships, &c., upon	W. R. Knipple	485,044	Oct. 25	2399	{ 616 617 }	61	522
Railways. Automatic block-signal for	S. J. Stuckey	484,062	Oct. 11	808	204	61	180
Railways. Automatic block system for	B. and J. Shoecraft	483,479	Sept. 27	2504	631	60	1863
Railways. Automatic gipsy for cable	A. J. Smith	482,279	Sept. 6	582	139	60	1449
Railways. Automatic switch-stand for	H. A. Hancox	466,979	Jan. 12	1092	{ 276 277 }	58	216
Railways. Charging-table for electric	E. P. Usher	471,447	Mar. 22	2798	714	58	1668
Railways. Cleaning-brush for electric	R. M. Hunter	474,472	May 10	947	244	59	830
Railways. Closed conduit for electric	L. P. Bunce	482,993	Sept. 20	1750	442	60	1703
Railways. Closed conduit for electric	W. G. Creighton	483,761	Oct. 4	360	90	61	76
Railways. Closed conduit for electric	L. O. Dion	488,351	Dec. 20	1849	{ 462 463 }	61	1722
Railways. Closed conduit for electric	E. H. Johnson	479,809	Aug. 2	52	12	60	592
Railways. Closed conduit for electric	A. L. Lineff	480,409	Aug. 9	1060	{ 265 266 }	60	794
Railways. Closed conduit for electric	F. Mansfield	488,738	Dec. 27	2462	612	61	1860
Railways. Closed conduit for electric	B. F. Sutton	484,924	Oct. 25	2211	570	61	485
Railways. Closed conduit for electric	A. A. Vanderpool	487,654	Dec. 6	672	173	61	1454
Railways. Combined chair and fish-plate joint for	W. Wharton, Jr.	468,162	Feb. 2	386	95	58	599
Railways. Conduit for electric	W. Bradley	476,603	June 7	570	136	59	1549
Railways. Conduit system for electric	W. H. Ford	478,956	July 12	1354	335	60	283
Railways. Conduit system for electric	R. Lawrence	481,959	Sept. 6	56	13, 14	60	1345
Railways. Contact device for electric	F. O. Blackwell	470,657	Mar. 15	1584	413	58	1422
Railways. Converter system for electric	M. W. Dewey	473,253	Apr. 19	1947	{ 490 491 }	59	394
Railways. Converter system for electric	T. A. Edison	468,949	Feb. 16	1636	417	58	863
Railways. Crossing for underground cable	W. H. Page	481,966	Sept. 6	66	17	60	1347
Railways. Double-traction motor for elevated	G. A. Stephenson	468,842	Feb. 16	1458	{ 372 373 }	58	829
Railways. Fastening and seating of guard-rails, &c., for street	J. A. Duggan	472,165	Apr. 5	240	64	59	45
Railways. Inclosed conductor for electric	G. A. Dupuis	482,343	Sept. 13	710	169	60	1488
Railways. Inclosed supply system for electric	J. C. Fyfe	472,447	Apr. 5	686	{ 175 176 }	59	129
Railways. Means for operating the switches of street	W. H. Farmer and T. White	466,602	Jan. 5	468	120	58	90
Railways. Means for preventing collisions on	H. G. Held	477,212	June 21	1550	{ 380 381 382 383 }	59	1774

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Railways. Overhead conductor for electric.	E. M. Bentley	469,353	Feb. 23	2255	579	58	992
Railways. Power transmitting device for electric.	E. H. Johnson	469,944	Mar. 1	447	112	58	1186
Railways. Safety-catch for inclined.	D. and T. James	473,842	Apr. 26	2915	732	59	603
Railways. System of electric distribution for.	N. W. Perry	466,367	Jan. 5	68	24, 25	58	20
Railways. Trolley-track hanger for electric.	W. Q. Prewitt	483,388	Sept. 27	2392	601	60	1840
Railways. Turn-table connection for electric.	R. M. Hunt	468,912	Feb. 16	1563	397	58	849
Railways. Underground conduit for electric.	C. P. Tatiro	466,471	Jan. 5	260	66	58	50
Railways. Underground electric conduit and trolley-bar for electric.	J. S. Moss	485,555	Nov. 1	612	163	61	698
Railways. Utilizing stationary cables on cable.	J. P. Harper	469,330	Feb. 23	2224	570	58	985
Railways. Winding-drum for cable.	J. Walker	469,338	Feb. 23	2234	573	58	987
Raising and moving heavy bodies. Device for.	W. A. Stoner	466,585	Jan. 5	439	113	58	85
Raising and moving material. Apparatus for.	J. N. Drew	466,601	Jan. 5	466	120	58	90
Raisins. Device for seeding.	J. W. Calef	467,367	Jan. 19	1727	442	58	344
Rake:							
See Clam or oyster rake. Ore-rake.							
Hand-rake. Side-delivery rake.							
Hay-rake. Vine-rake.							
Horse-rake.							
Rake.	J. V. Rowlett	479,842	Aug. 2	101	26	60	602
Rake.	J. T. Thompson	486,361	Nov. 15	1882	495	61	989
Rake and broom. Combined.	J. W. Koonce	484,156	Oct. 11	950	214	61	208
Rake and portable baling-press. Combined.	C. C. Shero	483,515	Sept. 27	2568	644	60	1875
Rake-tooth.	J. Dain, Jr.	479,789	Aug. 2	23	6	60	586
Rakes. Combined guard and cleaner for lawn.	J. H. Haldeman	479,940	Aug. 2	255	63	60	631
Rakes. Making.	W. H. Cowdery	481,663	Aug. 30	3102	756	60	1232
Ram. Hydraulic.	L. T. Webster	484,266	Oct. 11	1132	299	61	244
Rand-guard.	J. L. Packard	473,428	Apr. 19	2243	564	59	452
Range and position finder.	B. A. Fiske	483,999	Oct. 11	720	181	61	162
Range attachment.	J. F. Myers	471,222	Mar. 22	2462	625	58	1604
Range. Field.	J. Marcee	479,652	July 26	2487	619	60	524
Range-finder.	C. M. Allen	484,726	Oct. 18	1854	471	61	399
Range-finder.	E. L. W. Haskett-Smith	470,487	Mar. 8	1349	350	58	1365
Range. Gas.	W. W. Goodwin	477,408	June 21	1877	462	59	1835
Range hot-closet door.	J. Tettelbach	479,857	Aug. 2	123	30	60	606
Range or stove.	A. Hepp	476,143	May 31	3603	911	59	1393
Ranges. Oven and closet door for.	F. W. Born	481,924	Sept. 6	6	2	60	1336
Ranges. Sheet-metal-oven bottom for.	W. H. Whitehead	479,770	July 26	2703	673	60	565
Rasp. Revolving wood-working.	F. H. Niernmann	474,680	May 10	1283	327	59	895
Ratchet-brace.	G. L. Holt	468,911	Feb. 16	1561	397	58	849
Ratchet-drill.	C. W. Higgins	472,120	Apr. 5	173	47	59	32
Ratchet-drill brace.	W. P. Nolan	484,231	Oct. 11	1071	272	61	232
Ratchet-wrench.	J. E. Brendlinger	478,680	July 12	937	233	60	201
Ratchet-wrench.	P. Cossette	481,690	Aug. 30	3145	767	60	1240
Ratchet-wrench.	G. N. Hupp	487,072	Nov. 29	3051	783	61	1250
Ratchet-wrench.	S. Hussey	484,753	Oct. 18	1905	486	61	411
Ratchet-wrench.	J. C. and D. C. Morley	467,688	Jan. 26	2247	572	58	450
Ratchet-wrench.	J. E. Sinclair	470,954	Mar. 15	2041	522	58	1511
Rattan fabric. Knit.	E. L. Taft	472,320	Apr. 5	491	127	59	92
Rattle. Campaign.	F. A. Wiskey	471,046	Mar. 15	2178	560	58	1538
Razor.	F. A. Clauberg	480,916	Aug. 16	1854	462	60	967
Razor-guard.	H. Hueg	473,464	Apr. 26	2315	535	59	488
Razor-pivot.	J. G. Bestgen	482,992	Sept. 20	1749	442	60	1703
Razor. Safety.	E. and G. A. Scharff	471,070	Mar. 15	2218	569	58	1546
Razor. Safety.	E. L. Schmitz	484,116	Oct. 11	877	223	61	194
Razor-sharpening device.	E. A. Sutphen	480,976	Aug. 16	1961	490	60	986
Razor-strop.	O. W. Castner	469,893	Mar. 1	363	92	58	1171
Razor-strop.	J. W. De Graff	487,826	Dec. 13	988	244	61	1531
Razor-strop.	F. Haas and W. D. Evans	468,407	Feb. 9	786	195	58	686
Razor-strop.	W. C. Howard	478,934	July 12	1326	329	60	278
Razor-strop.	F. R. and O. Kampfe	477,902	June 28	2630	673	59	2010
Razor-strop.	A. E. Witherell	478,946	July 12	1343	333	60	281
Razor-stropping device.	E. L. Schmitz	485,849	Nov. 8	1049	280	61	803
Razors. Machine for sharpening.	C. A. Worden	487,140	Nov. 29	3162	810	61	1272
Razors. Mechanism for concaving.	J. J. Fifield	466,777	Jan. 12	757	196	58	153
Reamer.	J. M. Chesnut	469,057	Feb. 16	1814	463	58	899
Reamer.	N. E. Smith	466,728	Jan. 5	672	173	58	127
Reamer.	J. W. Tompkins	479,682	July 26	2542	633	60	534
Reamer. Adjustable.	P. Weber	470,962	Mar. 15	2053	525	58	1513
Reamer. Expanding.	J. H. Phillips	478,069	June 28	2944	735	59	2060
Reamer. Metal.	F. J. Feldt and F. C. Mahler	470,295	Mar. 8	1024	262	58	1307
Reaming and drilling machine.	O. C. Opsion and J. V. Hooper	481,418	Aug. 23	2710	667	60	1140
Reaping and mowing machines. Finger-bar for.	J. F. Lydon and W. Stacy	471,560	Mar. 29	2949	751	58	1706
Reaping-machine.	A. D. Marble	477,189	June 14	1503	368	59	1751
Receptacles firmly on supports. Adjustable device for holding.	F. Kompst	467,419	Jan. 19	1802	460	58	358
Reclining-chair.	E. I. Galloway	487,919	Dec. 13	1124	281	61	1561
Reclining-chair.	C. H. Hacklaender	485,273	Nov. 1	177	53	61	609
Reclining-chair.	J. J. Hogan	469,569	Feb. 23	2600	667	58	1057
Reclining-chair.	C. C. Lockstaedt	477,906	June 28	2694	674	59	2011
Reclining-chair.	H. O. Meigs	469,357	Feb. 23	2264	581	58	993
Reclining-chair.	E. E. Peck	488,773	Dec. 27	2513	625	61	1870
Reclining-chair.	G. B. Valentine	478,247	July 5	301	73	60	60
Reclining-chair.	G. Weber	488,911	Dec. 27	2738	675	61	1916

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Reclining-chair. Adjustable	W. J. Williams, L. M. Bates, and H. H. James.	470,027	Mar. 1	572	142	58	1210
Record, diary, and ledger. Combined	H. Meyer	481,670	Aug. 30	3111	759	60	1234
Record of certain merchandise in retail establishments. Means for keeping stock-Recorder:	D. H. Stern	483,659	Oct. 4	208	52	61	43
See Cash-recorder. Pressure-recorder.							
Cash-till recorder. Speed-recorder.							
Oarsman's recorder. Time-recorder.							
Passenger-recorder.							
Recording the location and character of business. Method of and apparatus for	C. A. Keating	486,192	Nov. 15	1614	428	61	935
Rectifying apparatus	B. Hoff and J. Frommel	475,961	May 31	3322	838	59	1335
Reducing and swaging machine	A. B. Shippee	471,148	Mar. 22	2351	601	58	1583
Reel:							
See Belt-reel. Measure-reel.							
Bolting-reel. Measuring-reel.							
Clothes-line reel. Paper-reel.							
Fence-wire reel. Rope-reel.							
Fishing-reel. Sand-rope reel.							
Fishing-line reel. Wire-reel.							
Harvester-reel. Wire-supporting reel.							
Hose-reel.							
Reel	A. Dobson	483,907	Oct. 4	578	145	61	120
Reel	E. J. Hill	472,263	Apr. 5	403	104	59	75
Reel-carrier	E. E. Kittleson	481,328	Aug. 23	2569	630 631	60	1114
Reel-carrier	J. F. Schneider	481,641	Aug. 30	3066	748 749	60	1225
Reel-carrier and wire-stretcher. Combined	W. H. Johnson	483,355	Sept. 27	2337	588	60	1830
Reel for unwinding tubular-knitted goods and winding the yarn.	N. Tourangeau	482,932	Sept. 20	1648	415	60	1683
Reel-support	F. S. Reager	483,389	Sept. 27	2394	601	60	1840
Reflector	N. M. Abbott	470,854	Mar. 15	1896	485	58	1482
Reflector	C. A. Meadows	480,201	Aug. 2	707	180	60	716
Reflector	A. Zalud	483,197	Sept. 27	2075	524	60	1781
Reflector. Arc-light	R. S. Dobbie	479,183	July 19	1727	433	60	363
Reflector. Side	C. E. Plumtree	481,055	Aug. 16	2077	518	60	1010
Refrigerating and ice-making apparatus. Absorber for ammonia.	N. Johnson	469,945	Mar. 1	450	113	58	1186
Refrigerating apparatus	D. L. Holden	473,157	Apr. 19	1781	449	59	363
Refrigerating apparatus	D. L. Holden	473,176	Apr. 19	1826	460	59	370
Refrigerating apparatus	D. L. Holden	484,913	Oct. 25	2188	564	61	481
Refrigerating apparatus	C. W. Isbell	469,477	Feb. 23	2454	629	58	1029
Refrigerating apparatus	C. W. Nason and C. H. Leinert	482,268	Sept. 6	567	134 135	60	1445
Refrigerating apparatus	C. H. Parshall	485,217	Nov. 1	94	29	61	592
Refrigerating apparatus	C. E. Peirce	483,500	Sept. 27	2536	637 638	60	1869
Refrigerating apparatus	H. Stacey and J. G. Lightford	483,876	Oct. 4	526	132	61	109
Refrigerating apparatus	L. C. Williamson	486,655	Nov. 22	2345	613	61	1093
Refrigerating compound	W. C. Trussell	484,983	Oct. 25	2299		61	502
Refrigerating-counter and display-case. Combined	J. C. Dühm, E. Block, and J. Sauter	469,010	Feb. 16	1754	447	58	886
Refrigerating-cover for vessels	J. B. Mitchelltree	469,163	Feb. 16	1950	499	58	926
Refrigerating-machine	L. Block	487,706	Dec. 13	762	195	61	1489
Refrigerating-machine	D. L. Holden	473,156	Apr. 19	1779	449	59	362
Refrigerating-machine	C. F. Miller	481,146	Aug. 16	2246	553 554	60	1040
Refrigerating-machines. Gas-compressor for	B. H. Munsch	482,876	Sept. 20	1560	369	60	1667
Refrigerating or ice-making machines. Condenser for	H. F. Hodges and D. J. Havenstrite	473,876	Apr. 26	2975	750	59	614
Refrigeration. Electrical	M. W. Dewey	484,182	Oct. 11	988	253	61	215
Refrigerator	D. Barckdall	467,886	Jan. 26	2570	651	58	511
Refrigerator	J. H. Barrett	467,904	Jan. 26	2601	658	58	517
Refrigerator	C. A. Blum	478,080	July 5	8	2, 3	60	4
Refrigerator	C. Boldt	474,357	May 10	769	200	59	796
Refrigerator	O. H. Burnham and J. J. Meyers	471,944	Mar. 29	3532	903	58	1816
Refrigerator	A. I. Dexter	479,633	July 26	2460	612	60	519
Refrigerator	L. J. Everest and H. C. Betterman	467,225	Jan. 19	1509	386	58	304
Refrigerator	V. Hoerschelmann	477,803	June 23	2519	632	59	1978
Refrigerator	V. Hoerschelmann	477,804	June 23	2520	632	59	1979
Refrigerator	B. W. Kolb	477,944	June 24	2753	690	59	2024
Refrigerator	A. Leppert	468,351	Feb. 9	700	174	58	669
Refrigerator	A. McDowell	487,199	Nov. 29	3255	833	61	1290
Refrigerator	M. S. Millard	475,591	May 24	2715	689	59	1205
Refrigerator	M. S. Millard	475,592	May 24	2717	689	59	1205
Refrigerator	C. F. Paige	470,167	Mar. 1	786	194	58	1251
Refrigerator	C. W. Parks	468,523	Feb. 9	968	246	58	722
Refrigerator	R. C. Simmons	475,816	May 31	3081	780	59	1289
Refrigerator	W. Simms	472,773	Apr. 12	1171	300	59	234
Refrigerator	W. C. Trussell	466,841	Nov. 22	2649	692	61	1156
Refrigerator and elevating cupboard	J. T. Westwood	478,898	July 12	1268	313	60	266
Refrigerator and fruit-car. Combined	H. C. Goodell	483,552	Oct. 4	54	13, 14	61	13
Refrigerator and water-cooler. Combined	M. Greenebaum	486,286	Nov. 15	1772	466	61	967
Refrigerator. Automatic	W. E. Eastman	469,296	Feb. 23	2174	558	58	975
Refrigerator-building	D. P. Edgar	475,851	May 31	3146	798	59	1301
Refrigerator-car	G. A. Fowler	478,995	July 19	1432	354 355	60	308
Refrigerator-car	M. S. Millard	466,794	Jan. 12	786	204	58	159
Refrigerator-car	O. Veizin	482,703	Sept. 13	1288	316	60	1600
Refrigerator-car. Ventilated	H. C. Goodell	483,551	Oct. 4	52	13	61	13
Refrigerator-car. Ventilator	C. E. Lucas and A. A. Wood	466,715	Jan. 5	651	167 168	58	124
Refrigerator. Cigar	C. L. Pratt	474,923	May 17	1662	425	59	984

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Refrigerator-door	R. G. Chase	479,973	Aug. 2	314	77	60	642
Refrigerator. Portable or domestic.....	A. T. Ballantine	476,358	June 7	205	49	59	1476
Refrigerator-switch	G. W. Pitman	476,962	June 14	1146	50	59	1678
Refrigerator-tank car	E. R. Hutchins	474,603	May 10	1154	276	59	870
Refrigerator water-cooler	E. W. Rider	476,314	June 7	129	294	59	1463
Refrigerator. Water-cooling	W. H. Pickett	475,414	May 24	2435	31	59	1150
Refrigerators. Lever-latch for	S. M. Atherton	472,933	Apr. 12	1407	620	59	281
Refuse-carrier frame	J. W. Zimmerman	470,093	Mar. 1	674	360	59	1230
Refuse of cities. Apparatus for treating the	J. J. Storer	481,680	Aug. 30	3129	166	60	1237
Regenerative furnace	W. Hill	468,617	Feb. 9	1111	764	58	750
Register:							
See Autographic regis- Hotel-register.							
ter. Measure-register.							
Barber's register. Miner's register.							
Cash-register. Passenger-register.							
Current-register. Pocket-register.							
Duplicating register. Pool-game register.							
Engine-register. Revolution-register.							
Fare-register. Valve-register.							
Gas-meter register. Warm-air register.							
Hot-air register.							
Register	E. C. Beecher	470,174	Mar. 8	812	201	58	1265
Register	T. C. Howe	473,751	Apr. 26	2778	698	59	576
Register	C. Michaelsen	470,694	Mar. 15	1643	426	58	1434
Registers. Index-hand for counting.....	R. Cartwright	476,129	May 31	3582	427	59	1388
Registers. Pointer and dial for counting.....	J. Thomson	476,105	May 31	3543	902	59	1380
Registering and indicating device	J. J. Mosher and M. R. Jewell.....	485,967	Nov. 8	1244	891	61	843
Registering apparatus. Autographic.....	J. B. Thies. (Reissue)	11,235	Apr. 26	3014	328	61	843
Registering-lock for cash-registers	G. W. Grove	485,930	Nov. 8	1179	759	61	829
Registering mechanisms. Electric actuator for	C. F. Holt	475,399	May 24	2410	310	61	829
Registering sales of tickets, &c. Apparatus for	C. P. Gott	473,113	Apr. 19	1710	615	59	1147
Regulator:							
See Automatic regula- Feed-box regulator.							
tor. Feed-water regulator							
Car-brake regulator. Fluid-regulator.							
Clock-regulator. Furnace-regulator.							
Damper-regulator. Gas-regulator.							
Dental regulator. Gas-pressure regulator.							
Draft-regulator. Pressure-regulator.							
Dynamo-regulator. Speed-regulator.							
Electric-current-reg- Temperature-regulator.							
ulator. Thermostatic regulator.							
Electric-generator Touch-regulator.							
regulator. Watch-regulator.							
Electric-machine Water-supply regulator.							
regulator. Windmill-regulator.							
Feed-regulator.							
Regulator	E. Hayes	477,253	June 21	1634	398	59	1788
Regulator	H. Keller	487,392	Dec. 6	251	67, 68	61	1370
Rein-button	W. H. Sanborn	479,847	Aug. 2	107	27	60	603
Rein-guard	A. C. Massey	478,800	July 12	1135	280	60	240
Rein-holder	G. C. Fuller	466,405	Jan. 5	146	40	58	30
Rein-holder	O. B. Hathorn	488,975	Dec. 27	2838	700	61	1939
Rein-holder	C. A. Hughes	477,547	June 21	2097	521	59	1879
Rein-holder	T. A. Jones	470,683	Mar. 15	1625	421	58	1430
Rein-holder	E. Rankin, Jr.	479,096	July 19	1586	397	60	337
Rein-holder	J. D. Shurmon	478,375	July 5	493	119	60	97
Rein-holder	G. W. Thompson	487,975	Dec. 13	1203	300	61	1576
Rein-holder	H. G. Weatherill	473,684	Apr. 26	2675	674	59	557
Rein-holder	J. A. Young	474,433	May 10	887	231	59	820
Rein-spreader	J. H. and F. S. Pew	478,712	July 12	977	243	60	210
Rein-support	K. M. Dean	472,013	Mar. 29	3628	927	58	1835
Rein-support	D. Hand	474,737	May 10	1368	346	59	912
Rein-support	F. C. Kriz	473,583	Apr. 26	2522	636	59	529
Rein-support	F. A. Lee	473,584	Apr. 26	2523	636	59	529
Rein-support	A. McNicol	484,444	Oct. 18	1417	361	61	311
Rein-support	S. J. Myers	475,465	May 24	2518	642	59	1167
Relay. Electrically-adjusting	W. S. Richards	482,137	Sept. 6	344	82	60	1403
Releasing device	S. G. Todd	487,062	Nov. 29	3037	779	61	1247
Releasing device. Electric	W. R. Hewitt	486,612	Nov. 22	2278	594	61	1078
Relief or intaglio. Manufacture of articles having surface figures in	J. Baynes	468,758	Feb. 9	1324	.....	58	793
Relief-plates for pictorially burning or searing wood. Producing metallic	J. W. Robbins	475,047	May 17	1864	473	59	1023
Remedial or medical appliance	M. F. and J. H. Potts	468,946	Feb. 16	1632	415	58	861
Repeater. Automatic	R. Watkins	474,706	May 10	1318	336	59	902
Reproducing characters. Device for	H. C. Bridger	478,152	July 5	120	30	60	27
Resawing-machine	F. R. Lee	483,226	Sept. 27	2121	537	60	1790
Resistance-box	J. Waring	487,306	Dec. 6	107	31	61	1343
Resonator	H. Crocker	482,786	Sept. 20	1431	354	60	1640
Respirator	G. Pozdena	476,486	June 7	402	93, 94	59	1515
Respirator. Nasal	J. E. Midgley and D. D. Case.....	480,505	Aug. 9	1217	304	60	825
Retort-furnace	J. A. Yeaton and W. Adgie	477,286	June 21	1686	413	59	1798
Retorts, &c. Machine for making.....	E. Rooms	480,138	Aug. 2	607	154	60	698
Reversible seat	H. C. Moir	476,474	June 7	380	88	59	1511
Revolution-register	G. G. Weitz	470,526	Mar. 8	1403	366	58	1376

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Revolver.....	C. Foehl and C. A. Weeks.....	468,243	Feb. 2	504	124	58	624
Revolvers. Barrel-strap catch for.....	C. Foehl and C. A. Weeks.....	471,112	Mar. 22	2290	588	58	1572
Revolvers. Combined sear and rebound catch for.....	A. Fyberg.....	469,387	Feb. 23	2310	594	58	1002
Revolvers. Safety-lock for.....	C. J. Ehbets.....	469,465	Feb. 23	2431	624	58	1025
Revolvers. Sear and rebound-catch for.....	G. F. Brooks.....	466,952	Jan. 12	1050	266	58	208
Revolving case.....	W. L. Yost.....	488,594	Dec. 27	2243	556	61	1817
Revolving roaster.....	R. Köhler.....	475,060	May 17	1883	477 478	59	1027
Rheostat.....	F. O. Blackwell.....	467,078	Jan. 12	1256	317 318	58	247
Rheostat.....	A. C. Carey.....	473,209	Apr. 19	1879	473	59	380
Rheostat.....	C. E. Carpenter.....	481,781	Aug. 30	3312	809	60	1273
Rheostat.....	G. K. Cummings.....	477,247	June 21	1626	397	59	1726
Rheostat.....	W. P. Eays.....	478,276	July 5	343	83	60	69
Rheostat.....	A. B. Herrick.....	474,957	May 17	1718	437	59	996
Rheostat.....	H. W. Lawrence.....	482,093	Sept. 6	278	67	60	1390
Rheostat.....	J. R. Masury.....	472,062	Apr. 5	78	21	59	17
Rheostat.....	J. A. Mosher.....	467,611	Jan. 26	2133	541	58	428
Rheostat.....	F. W. A. Schneider.....	475,898	May 31	3221	815	59	1316
Rheostat.....	A. J. Shaw.....	468,752	Feb. 9	1315	333	58	791
Rheostat.....	W. A. Sterling.....	475,255	May 17	2181	555	59	1086
Rheostat.....	C. W. Tobey.....	480,151	Aug. 2	623	158	60	701
Rheostat.....	J. Waring.....	479,101	July 19	1593	399	60	338
Rheostat.....	E. Weston.....	480,892	Aug. 16	1817	453	60	959
Rheostat.....	E. Weston.....	480,893	Aug. 16	1819	454	60	960
Rheostat.....	C. Willms.....	467,338	Jan. 19	1689	432	58	337
Rheostat.....	C. Willms.....	475,528	May 24	2621	667	59	1186
Rheostat.....	C. Willms.....	475,529	May 24	2623	667	59	1187
Rheostat. Liquid.....	H. Lemp.....	467,255	Jan. 19	1556	396	58	313
Rheostats. Contact-board for.....	S. H. Short.....	467,613	Jan. 26	2135	542	58	429
Ribbon and ehow case.....	E. Stewart.....	483,024	Sept. 20	1804	455 456	60	1715
Ribbon-case.....	G. W. Bishop.....	474,518	May 10	1091	262	59	845
Ribbon-holder.....	J. C. Abbott.....	470,775	Mar. 15	1763	455	58	1458
Ribbon-holder.....	G. H. Brown.....	480,556	Aug. 9	1290	323	60	840
Rice-hulling machine.....	E. L. Cantwell.....	483,899	Oct. 4	558	140 141	61	116
Rice, &c. Polishing.....	G. B. Prochaska.....	483,868	Oct. 4	518	130	61	107
Rice-scourer.....	S. A. Pickett.....	482,192	Sept. 6	445	107	60	1422
Ridg-r, pulverizer, seed-planter, and fertilizer-dis- tributer. Combined.....	F. F. Ferguson.....	471,852	Mar. 29	3407	899	58	1791
Rifle-sight.....	R. W. Parker.....	468,206	Feb. 2	450	112	58	613
Rifle-sight. Telescopic.....	L. C. Cummine.....	476,874	June 14	995	241 242	59	1648
Rig or derrick. Movable.....	T. Smith.....	474,463	May 10	937	241	59	828
Rigid and ratchet wrench. Combined.....	J. A. Miller.....	485,290	Nov. 1	203	58	61	614
Ring: See Armature-ring. Key-ring. Chill-ring. Lap-ring. Curtain-ring. Napkin-ring. Ear-ring. Spinning-ring. Finger-ring. Traverse-ring. Hat-packing ring.							
Ring.....	R. B. Ackerman.....	482,670	Sept. 13	1229	299	60	1588
Ring-forming apparatus.....	H. V. Bernhardt.....	472,959	Apr. 12	1443	368	59	298
Ring-forming apparatus.....	H. V. Bernhardt.....	473,139	Apr. 19	1754	442	59	357
Ring-holder.....	J. Smith.....	483,399	Sept. 27	2405	605	60	1842
Ring-traveler.....	A. F. Bentley.....	481,131	Aug. 16	2210	546	60	1033
Riprap. Anchor.....	D. Neale.....	486,887	Nov. 29	2728	711	61	1187
Riprap. Metallic.....	D. T. McIntyre.....	486,885	Nov. 29	2726	711	61	1186
Rivers or other water-channels. Deepening.....	J. Schaffer.....	486,957	Nov. 29	2880	744	61	1217
Rivet.....	J. L. Thomson.....	481,123	Aug. 16	2196	543	60	1031
Rivet.....	J. J. Unbehend.....	481,125	Aug. 16	2198	544	60	1031
Rivet-holder.....	J. J. Unbehend.....	488,510	Dec. 20	2102	522	61	1774
Rivet-setting machine.....	M. N. Bray and E. M. Pope.....	483,598	Oct. 4	121	30, 31	61	26
Rivet-setting tool.....	W. C. Bray and E. A. Hemmenway.....	477,241	June 21	1615	395	59	1784
Rivets or bolts. Making.....	E. Sears.....	469,724	Mar. 1	89	24	58	1116
Riveter.....	J. J. Kropacek.....	478,114	July 5	56	15	60	13
Riveting-machine.....	M. Arnold.....	469,891	Mar. 1	360	91	58	1170
Riveting-machine.....	J. Baum.....	486,071	Nov. 15	1416	374	61	896
Riveting-machine.....	G. E. Hopkin.....	469,143	Feb. 16	1923	492	58	921
Riveting-machine.....	E. D. Middlekauff.....	474,177	May 3	451	109	59	725
Riveting-machine.....	F. H. Steelow.....	484,473	Oct. 18	1460	371 372 373	61	319
Riveting-machine.....	J. J. Unbehend.....	468,734	Feb. 9	1289	328	58	787
Riveting-machine. Hydraulic.....	A. Piat.....	467,309	Jan. 19	1640	417	58	328
Riveting-machine. Loop.....	E. H. Griffin.....	487,618	Dec. 6	613	157	61	1443
Riveting-machine or hammer.....	W. R. Webster.....	466,476	Jan. 5	268	67	58	51
Road. Gravel.....	F. J. Hoyt.....	478,862	July 12	1231	.....	60	257
Road grading and grading machine.....	G. Huebner.....	466,465	Jan. 5	249	63	58	47
Road making and repairing machine.....	M. G. Bunnell.....	488,112	Dec. 13	1448	364	61	1628
Road-roller. Combination.....	R. C. Rnthven.....	482,757	Sept. 20	1381	342 343	60	1630
Road-roller. Steam.....	H. W. Laster.....	486,481	Nov. 22	2072	549	61	1040
Road-rut cutter.....	O. Culver.....	488,185	Dec. 20	1573	394	61	1669
Road-working machine.....	M. G. Bunnell.....	479,700	July 26	2569	630 640	60	539
Roads. Machine for making and repairing.....	M. G. Bunnell.....	469,771	Mar. 1	161	43	58	1132
Roadway. Logging.....	D. Evans.....	487,557	Dec. 6	527	136	61	1425
Roaster: See Ore-roaster. Revolving roaster.							
Roaster and baker.....	C. McConalogue.....	475,946	May 31	3297	832	59	1330
Roasting and smelting apparatus.....	R. H. and W. Lanyon.....	474,019	May 3	213	50, 51	59	679

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Rock-boring apparatus	C. Hoffmann	474,297	May 3	642	162	59	761
Rock-catcher	G. W. Veronee	471,041	May 15	2171	559	58	1536
Rock-catcher	G. W. Veronee, (Reissue)	11,293	Dec. 6	750	192	61	1463
Rock-channeling tool	G. M. Githens	479,499	July 26	2967	568	60	483
Rock-core drill	M. C. Bullock	473,908	May 3	20	4, 5	59	640
Rock-core drilling	M. C. Bullock	473,910	May 3	28	6	59	642
Rock-crusher	H. L. Kent	482,795	Sept. 20	1441	357	60	1642
Rock-crushing machine	G. W. Weller	485,517	Nov. 1	552	147 148	61	685
Rock-drill	P. P. Belt	479,615	July 26	2433	606	60	514
Rock-drill	T. F. Farrell	479,356	July 19	1998	500	60	417
Rock-drill	S. G. McKiernan	488,269	Dec. 20	1712	431	61	1696
Rock-drill	N. Monday	486,567	Nov. 22	2196	578	61	1061
Rock-drill	B. G. Oncal	467,190	Jan. 19	1457	372	58	293
Rock-drill	J. Sprenger	474,069	May 3	297	72	59	695
Rock-drill	A. J. Sypher	485,720	Nov. 8	872	234	61	769
Rock-drill	A. J. Sypher	485,721	Nov. 8	876	234	61	769
Rock-drill	A. J. Sypher	485,722	Nov. 8	879	235	61	770
Rock-drill	H. G. Williams	475,910	May 31	3240	818	59	1319
Rock-drill core-barrel	S. W. Douglass	474,337	May 3	729	190	59	777
Rock-drill machine	W. Arnold	471,331	Mar. 22	2614	663	58	1634
Rock-drill. Steam-actuated	S. and W. R. Lloyd	481,632	Aug. 30	3054	746	60	1223
Rock-drill support	J. Bervin	474,206	May 3	495	119	59	733
Rock-drill tripod	A. Ball	471,300	Mar. 22	2573	653	58	1626
Rock-drills, &c. Construction of stands or tripods for	A. W. and Z. W. Daw	487,256	Dec. 6	27	8, 9	61	1326
Rock drilling and splitting	G. M. Githens	486,101	Nov. 15	1483	391	61	909
Rock-drilling apparatus	M. C. Bullock	473,909	May 3	25	5	59	641
Rock-drilling apparatus	M. C. Bullock and S. W. Douglass	474,060	May 3	311	75	59	697
Rock-drilling machine	W. X. Stevens	481,598	Aug. 30	3004	735	60	1213
Rock-drilling machine	N. Widman	481,610	Aug. 30	3023	739	60	1217
Rock-drilling machinery	A. E. Chodzko	483,901	Oct. 4	565	142	61	117
Rock-drilling tool	G. L. Weller	479,041	July 19	1503	373	60	322
Rock. Splitting	G. L. Weller	475,647	May 24	2800	709	59	1222
Rocker	W. M. Boenning	472,330	Apr. 5	510	132	59	96
Rocket. Dynamite	P. Cunningham	479,738	July 26	2646	656	60	553
Rocking and ewinging apparatus. Auxiliary power mechanism for	C. N. Wilcox	467,842	Jan. 26	2495	632 633	58	498
Rocking-chair	J. W. H. Doubler	474,314	May 3	680	176	59	768
Rocking-chair	E. P. Koontz	476,152	May 31	3619	915	59	1396
Rocking-chair attachment	W. I. Bunker	477,501	June 21	2025	502	59	1864
Rocking-chair. Folding	J. Thornbeck	488,704	Dec. 27	2414	599	61	1850
Rocking-chair. Reclining	J. G. Whittier	475,370	May 24	2365	606	59	1130
Rocking-horse	E. Keuser	479,370	July 19	2023	505	60	422
Rod:							
See Curtain-rod.	Gun-rod.						
Engineer's leveling-rod.	Spray-rod.						
Fence-rod.	Stair-rod.						
Fishing-rod.	Wantage-rod.						
	Wiping-rod.						
Rod-coupling	L. Buese and J. Cowling	483,896	Oct. 4	553	140	61	115
Rod joint and bearing. Connecting	M. A. Clennam	471,953	Mar. 29	3543	906	58	1818
Rod joint or coupling	I. Jones	477,536	June 21	2174	539	59	1894
Rod-reeling apparatus	A. Hamilton	469,521	Feb. 23	2522	648	58	1042
Roll-carriage	T. Waterhouse	486,203	Nov. 15	1632	432	61	938
Roll. Rolling-mill	W. Pollard	476,552	June 7	489	116	59	1534
Rolls. Housing for	J. A. Burns	469,397	Feb. 23	2323	598	58	1005
Roller:							
See Barrel-roller.	Impression-roller.						
Curtain-roller.	Inking-roller.						
Disintegrating-roller.	Land-roller.						
er.	Muscle-roller.						
Felt roller.	Road-roller.						
Friction-roller.	Shade-roller.						
Gate-roller.							
Roller and harrow. Combined	F. B. Harvey and B. F. Hartman	476,142	May 31	3601	910	59	1392
Roller and roller-bearing	G. A. Weher	487,884	Dec. 13	1066	267	61	1549
Roller-brake	H. C. Finkler	488,066	Dec. 13	1383	343	61	1614
Roller-mill	E. G. Dewald	470,235	Mar. 8	910	225	58	1285
Roller-mill feed	H. R. Shaw	483,983	Oct. 4	694	173	61	143
Roller-mills. Adjustable scraper for	J. Harvey	481,866	Aug. 30	3444	845	60	1299
Roller-mills. Automatic feeder for	J. L. Willford	482,419	Sept. 13	839	201 202	60	1513
Rolling and expanding metal tubes. Machinery for	T. C. Barraclough	473,651	Apr. 26	2627	662	59	548
Rolling axle-blanks. Mill for	L. D. Hill	470,243	Mar. 8	919	227	58	1286
Rolling hollow rods or bars. Machine for	J. S. Griffin	468,655	Feb. 9	1167	297 298	58	751
Rolling-machine	R. H. Brown	470,908	Mar. 15	1970	504	58	1498
Rolling machine. Metal	J. J. Anderson	488,048	Dec. 13	1347	334	61	1606
Rolling machine. Metal	E. T. Horner	484,368	Oct. 11	1287	328 329	61	274
Rolling machine. Metal	F. W. Wood	471,727	Mar. 29	3213	818	58	1753
Rolling machine. Sheet-metal	W. S. Shippe	480,440	Aug. 9	1112	278	60	804
Rolling metals	D. K. Miller	467,512	Jan. 26	1968	500	58	398
Rolling-mill	H. Aiken	484,767	Oct. 25	1939	495	61	431
Rolling-mill	C. W. Bray	488,935	Dec. 27	2770	684	61	1923
Rolling-mill	G. W. Jones	483,926	Oct. 4	603	153	61	124
Rolling-mill	P. L. Kimberly	483,920	Oct. 4	606	154	61	125
Rolling-mill	J. A. Potter	477,821	June 28	2552	639	59	1984
Rolling-mill	J. A. Potter and P. T. Berg	485,982	Nov. 8	1268	334 335	61	849
Rolling-mill guide device	H. Aiken	484,768	Oct. 25	1940	495 496	61	431
Rolling mill. Metal	F. Nevegold	480,609	Aug. 9	1375	342	60	857

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Rolling-mill plant	E. L. Clark. (Reissue)	11,280	Oct. 25	2572	{ 659 660	{ 61	557
Rolling-mill. Universal	A. Recse	481,058	Aug. 16	2086	520	60	1011
Rolling screen	T. A. Seip	486,592	Nov. 22	2241	588	61	1073
Rolling screws. Method of and means for	H. K. Jones	470,805	Mar. 15	1817	{ 466 467	{ 58	1467
Rolling sheet metal into curved forms. Machine for.	W. C. Westaway	471,407	Mar. 22	2736	699	58	1657
Rolling thin sheet steel or iron	B. C. Lanth	478,193	July 5	189	48	60	40
Rolling up strips or webs. Apparatus for.	C. Faure	479,875	Aug. 2	152	37, 38	60	612
Roof	S. R. Hawthorne	476,381	June 7	242	59	59	1484
Roof	J. J. McCarthy	483,262	Sept. 27	2207	554	69	1805
Roof	L. H. Montross	483,966	Oct. 4	665	167	61	138
Roof	G. F. Ullmann	485,516	Nov. 1	551	147	61	685
Roof, floor, or ceiling.	G. Fugman	475,854	May 31	3151	799	59	1302
Roof. Portable	E. Rankin, Jr.	473,128	Apr. 19	1736	438	59	354
Roof. Portable	J. H. Rice	477,701	June 28	2361	590	59	1949
Roof. Portable	J. H. Rice	480,859	Aug. 16	1768	443	60	949
Roof-scaffold bracket.	H. McCornack	482,096	Sept. 6	281	68	60	1391
Roof. Sheet-metal.	L. H. Britton	487,172	Nov. 29	3215	823	61	1283
Roof-valley	F. C. Tinnemeyer	484,263	Oct. 11	1128	287	61	243
Roofs. Gutter or valley on	C. C. Meader	480,602	Aug. 9	1366	339	60	854
Roofs. Snow-iron for	J. M. Laird	473,512	Apr. 26	2392	606	59	502
Roofers bending-tool	W. L. and H. Heberling	468,016	Feb. 2	166	41	58	556
Roofers bending-tool	W. L. and H. Heberling	471,637	Mar. 29	3060	779	58	1725
Roofing and siding	J. Winslow	481,541	Aug. 23	2911	714	60	1180
Roofing and siding screw or fastening	R. B. L. Westover	481,724	Aug. 30	3209	784	60	1252
Roofing compound	S. Herbert	484,794	Oct. 25	1986		61	441
Roofing-joint.	W. H. Jellison	484,320	Oct. 11	1217	310	61	259
Roofing-machine	W. C. Bell	487,361	Dec. 6	204	56	61	1361
Roofing. Machine for joining and rolling sheets for.	W. A. List	480,665	Aug. 9	1472	367	60	875
Roofing. Metal	W. L. and H. Heberling	468,015	Feb. 2	165	40	58	556
Roofing. Metallic	F. C. Robbins	471,338	Mar. 22	2623	666	58	1636
Roofing. Metallic standing-seam	J. B. Goodwin	466,850	Jan. 12	878	225	58	176
Roofing-plate. Metal	C. F. Bellino	468,126	Feb. 2	329	80	58	588
Roofing plate or shingle	L. H. Montross	487,372	Dec. 6	220	60	61	1384
Roofing. Sheet-metal	W. C. Berger	485,782	Nov. 8	955	256	61	785
Roofing. Sheet-metal	E. Norton	484,640	Oct. 18	1721	437	61	371
Roofing. Tile	J. M. Wood	477,346	June 21	1777	435	59	1816
Roofing-tile. Metallic	E. B. Repp	482,025	Sept. 6	171	41	60	1368
Roofing-tool	L. L. Sagendorph	478,642	July 12	886	219	60	191
Root-cutter	D. Maxwell	483,743	Oct. 4	330	83	61	69
Rope-clamp	O. J. Baldwin	488,348	Dec. 20	1845	461	61	1721
Rope-clamp	E. Covert	466,656	Jan. 5	544	141	58	105
Rope-clamp	R. M. Downie	480,810	Aug. 16	1697	423	60	934
Rope-clamp	J. S. McAnarney	468,819	Feb. 16	1424	362	58	822
Rope-clamp	H. J. Mohme	487,287	Dec. 6	78	23	61	1337
Rope clamp and stopper	T. P. Inglesby and T. J. Davis	475,115	May 17	1975	500	59	1044
Rope-driving apparatus	T. H. Macdonald, O. R. Williams, and L. D. Hitzeroth.	478,875	July 12	1234	306	60	260
Rope-grip	T. J. Cope	482,975	Sept. 20	1792	435	60	1698
Rope-grip	J. A. Dean	466,736	Jan. 5	683	176	58	130
Rope-guiding sheave	S. Murray	479,296	July 19	1893	474	60	396
Rope-hold.	E. T. Rugg	482,756	Sept. 20	1380	342	60	1630
Rope-holder.	G. B. Warner and L. J. Allen	476,969	June 14	1156	279	59	1680
Rope-hook	J. Milne	474,675	May 10	1276	325	59	893
Rope-oiling device	J. A. Hopkins	470,000	Mar. 1	538	134	58	1203
Rope or cord fastening	B. F. Mooney	475,245	May 17	2169	552	59	1083
Rope-reel	H. O. Kunath	477,554	June 21	2111	524	59	1882
Rope-slide	A. W. Porter	468,537	Feb. 9	995	255	58	727
Rope take-up	A. and C. L. Kleitz	488,565	Dec. 27	2195	542	61	1807
Ropeway clip. Wire	B. McIntire	488,085	Dec. 13	1407	349	61	1620
Ropeway. Wire	W. S. Hall	475,766	May 31	2990	758	59	1271
Rosette	C. Wirt	484,077	Oct. 11	831	210	61	185
Rosin. Package for bleaching and packing	D. W. Ketchum	487,091	Nov. 29	3086	792	61	1258
Rotary cutter for woodwork	C. E. Zimmermann	486,269	Nov. 15	1745	460	61	962
Rotary die	A. B. Shipfee	470,215	Mar. 8	880	217	58	1279
Rotary engine.	F. M. Bailey	484,769	Oct. 25	1943	496	61	431
Rotary engine.	A. Beard	478,271	July 5	337	81	60	68
Rotary engine.	H. Betten	481,096	Aug. 16	2156	535	60	1023
Rotary engine.	S. H. Bloomer	475,176	May 17	2061	{ 518 519	{ 59	1062
Rotary engine.	A. H. Brintnell	476,868	June 14	926	239	59	1647
Rotary engine.	A. F. G. Brown.	478,843	July 12	1202	298	60	253
Rotary engine.	G. Elrick	476,451	June 7	347	79	59	1505
Rotary engine.	W. Fogler	471,816	Mar. 29	3361	855	58	1781
Rotary engine.	G. H. Graham	468,198	Feb. 2	440	{ 109 110	{ 58	610
Rotary engine.	J. R. Hamilton	488,277	Dec. 20	1723	{ 434 435	{ 61	1698
Rotary engine.	E. Hammesfahr.	477,363	June 21	1811	443	59	1821
Rotary engine.	C. S. Irish	467,416	Jan. 19	1799	{ 458 459	{ 58	358
Rotary engine.	A. C. Lewis	466,540	Jan. 5	367	92	58	71
Rotary engine.	W. S. Lyeon	470,064	Mar. 1	629	156	58	1221
Rotary engine.	J. Snelling	479,080	July 19	1557	{ 389 390 457	{ 60	331
Rotary engine.	E. Towlson	483,027	Sept. 20	1809	{ 458 459	{ 60	1716
Rotary engine.	E. Waldron.	479,479	July 26	2236	{ 561 562	{ 60	477
Rotary engine.	S. Westfall	470,405	Mar. 8	1218	312	58	1340
Rotary engine. Compound	J. Gambetta and C. D. Harsin	487,217	Nov. 29	3281	838	61	1295
Rotary engine. Reciprocating	C. W. and E. B. Dake	476,369	June 7	227	56	59	1480

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Rotary fluid-pressure engine	E. Towlson	481,441	Aug. 23	2748	676	60	1147
Rotary knife	C. Zies	473,049	Apr. 19	1603	408	59	331
Rotary machines. Reversing mechanism for	J. G. Johnson	483,456	Sept. 27	2479	624	60	1858
Rotary motion. Device for transmitting	F. W. Gordon	467,593	Jan. 26	2108	534	58	424
Rotary motor	R. Hewson	487,221	Nov. 29	3290	839	61	1296
Rotary motor	C. S. Irish	469,404	Feb. 23	2340	601	58	1008
Rotary shears	S. Trothewey	479,037	July 19	1496	372	60	321
Rotary steam-engine	W. B. Coulter	482,166	Sept. 6	405	96, 97	60	1414
Rotary steam-engine	J. L. Rowan	478,240	July 5	287	70	60	58
Rotary steam-engine	F. A. Small	483,726	Oct. 4	299	75	61	63
Rotary stock-cutter	I. Fraleigh and F. L. Hemmer	485,792	Nov. 8	967	259	61	788
Rotating motor	A. Springer	485,235	Nov. 1	120	37	61	598
Roundabout.	F. S. Baldwin	476,597	June 7	562	134	59	1547
Roundabout.	J. L. Buford	483,530	Oct. 4	20	5	61	7
Roundabout.	J. F. Fralinger	472,212	Apr. 5	324	84	59	61
Roundabout.	J. F. Fralinger	485,495	Nov. 1	524	133	61	679
Roundabout.	C. M. Hollingsworth	474,658	May 10	1243	{ 317 318 }	59	887
Roundabout.	W. E. Meissner	473,177	Apr. 19	1827	460	59	370
Roundabout.	W. Schäfer	480,477	Aug. 9	1178	296	60	817
Roundabout.	F. Stutzman	475,256	May 17	2182	556	59	1086
Roundabout. Cable	J. F. Fralinger	472,211	Apr. 5	323	83, 84	59	61
Roundabout. Marine.	J. A. Criss	484,409	Oct. 18	1355	346	61	299
Rotting-machine.	W. Greaves	483,671	Oct. 4	223	56	61	46
Rotting-machine.	M. A. Taylor	487,589	Dec. 6	568	{ 145 146 }	61	1434
Roving-can	A. B. Fisher	481,554	Aug. 30	2937	722	60	1201
Roving-frame	E. P. Morgan and J. H. McMullan	483,573	Oct. 4	84	22	61	19
Roving-frames. Means for driving bobbins in	S. Schofield	488,952	Dec. 27	2804	691	61	1930
Roving-machines. Sliver-tension regulator for	H. M. Heflin	486,252	Nov. 15	1716	452	61	955
Rowlock	W. Vondersaar	468,960	Feb. 16	1653	422	58	866
Rubber	T. C. Bronson	470,101	Mar. 1	686	168	58	1232
Rubber articles. Manufacturing hollow	E. L. Perry	472,225	Apr. 5	344	89	59	64
Rubber dam	C. P. Pitman	484,046	Oct. 11	789	198	61	176
Rubber-dam clamp	A. I. F. Buxbaum	482,618	Sept. 13	1161	281	60	1575
Rubber-dam clamp	J. W. Haughawout	487,670	Dec. 6	701	179	61	1460
Rubber-dam clamp	W. S. How	477,546	June 21	2095	521	59	1879
Rubber-dam clamp	N. Kuns	484,800	Oct. 25	2000	513	61	443
Rubber-dam clamp	C. A. Meister	485,963	Nov. 8	1240	327	61	843
Rubber-fastener	L. A. Sherman	485,302	Nov. 1	220	62	61	617
Rubber-heater. Steam	G. W. Melotte	480,472	Aug. 9	1168	294	60	815
Rubber. Manufacture of india.	A. I. Rath	468,627	Feb. 9	1126	58	753	
Rubber sandal	J. C. Hammond, Jr.	472,118	Apr. 5	171	47	59	32
Rubber shoe	B. Horovitz	480,097	Aug. 2	534	135	60	684
Rubber shoe	S. W. Powell and J. W. Marshall	477,958	June 28	2770	694	59	2028
Rubber shoe	E. A. Saunders	477,851	June 28	2605	652	59	1994
Rubber shoe	F. C. Williams	473,650	Apr. 26	2626	661	59	548
Rubber stamps. Apparatus for making	J. C. Barton	480,420	Aug. 9	1084	{ 271 272 }	60	798
Rubbing, polishing, and sandpapering machine.	H. C. Strobel	467,209	Jan. 19	1484	380	58	299
Rubbing, polishing, and sandpapering machines. Attachment for	H. C. Strobel	467,208	Jan. 19	1483	380	58	299
Rudder-indicator.	C. Cory	482,421	Sept. 13	844	{ 202 203 }	60	1514
Rug and cloak. Combined	J. A. Shelton	471,903	Mar. 29	3473	887	58	1804
Rule. Board.	G. B. Howland	469,363	Feb. 23	2272	583	58	995
Rule. Caliper.	S. Darling	477,104	June 14	1370	334	59	1724
Rule. Caliper.	S. Darling	477,105	June 14	1371	334	59	1724
Rule. Caliper.	G. D. McLane	477,183	June 14	1494	365	59	1750
Rule. Folding.	J. Satter	475,419	May 24	2446	624	59	1153
Rule. Key-seat.	S. Darling	470,864	Mar. 15	1909	488	58	1485
Ruler	V. M. Ariza	471,459	Mar. 22	2815	718	58	1671
Ruler and blotter. Combined	S. G. Young	477,586	June 21	2159	536	59	1891
Ruler and paper-cutter. Combined	G. Hartig	470,754	Mar. 15	1734	446	58	1452
Ruler for use on desks	W. B. Schofield	468,921	Feb. 16	1583	401	58	853
Ruler, gage, and circle-scriber. Combined	L. M. Weaver and Z. C. Leiser	482,886	Sept. 20	1585	398	60	1670
Ruler, paper-cutter, and blotter. Combined	W. J. Stanton, Jr.	469,915	Mar. 1	398	100	58	1177
Ruler. Roller-blotter	F. M. Priestley	472,510	Apr. 5	790	202	59	150
Ruling and printing machine feeding apparatus	J. McAdams	476,476	June 7	388	89, 90	59	1512
Ruling apparatus. Knockdown slate	E. S. Cross	471,957	Mar. 29	3552	908	58	1819
Ruling-machine	J. Hope	480,498	Aug. 9	1206	302	60	823
Ruling-machine	J. McAdams	477,380	June 21	1836	451	59	1826
Ruling-machine	J. Murray	468,549	Feb. 9	1009	{ 258 259 }	58	730
Running-gear	W. Bonnar	477,401	June 21	1867	{ 459 460 }	59	1833
Running-gear	J. R. McCardell, C. H. West, and M. J. McDonald.	485,875	Nov. 8	1088	289	61	811
Saccharine solutions. Purifying and manufacturing.	M. Weinrich	475,025	May 17	1832	59	1017	
Sack	H. V. W. Stivers and J. Hoagland	483,402	Sept. 27	2410	606	60	1844
Sack-fastener	J. H. Shaw	471,623	Mar. 29	3041	774	58	1722
Sack filling and sewing machine. Automatic.	J. T. Bibb and A. T. Timewell	476,778	June 14	834	{ 205 206 }	59	1616
Sack-holder	J. C. Bratney	478,913	July 12	1294	322	60	271
Sack-holder	J. Kyle	469,255	Feb. 23	2104	{ 540 541 }	58	962
Sacks for filling same. Device for holding open grain and other	A. L. Klank	481,957	Sept. 6	53	12	60	1345
Sacramental case or box	H. Eummelen	470,319	Mar. 8	1067	272	58	1313
Sad-iron	C. G. Etto and B. H. Sanders	478,929	July 12	1320	328	60	276
Sad-iron	W. Hunter	477,660	June 28	2295	575	59	1934
Sad-iron	J. Sabold	483,769	Oct. 4	373	93	61	78
Sad-iron	W. R. Sanford	470,367	Mar. 8	1156	295	58	1329
Sad-iron	J. Wagner	474,704	May 10	1315	335	59	902

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sad-iron. Gas	G. J. Gray	474,470	May 10	945	243	59	830
Sad-iron heater	F. R. Sutton	483,878	Oct. 4	530	133	61	110
Sad-iron heater	S. Thomason	472,149	Apr. 5	217	58	59	41
Sad-iron stand	F. B. Ware	466,588	Jan. 5	442	113	58	85
Saddle	E. P. Blood	469,957	Mar. 1	470	117	58	1190
Saddle	G. B. Griggs	476,743	June 7	775	190	59	1592
Saddle	E. F. Haas	472,993	Apr. 19	1513	386	59	314
Saddle attachment	H. Hartman	469,565	Feb. 23	2596	665	58	1057
Saddle-bags and hand-case	W. S. Marshall	476,545	June 7	481	114	59	1533
Saddle. Cart	J. Rodgers	473,962	May 3	125	29	59	661
Saddle. Glg.	L. Duff	471,634	Mar. 29	3056	778	58	1725
Saddle. Harness	A. B. Arnold	478,535	July 5	738	180	60	146
Saddle. Harness	P. Ballentyne	484,771	Oct. 25	1946	496	61	432
Saddle. Harness	J. G. and H. Bruggeman	480,996	Aug. 16	1965	497	60	991
Saddle. Harness	C. Horner	473,627	Apr. 26	2593	652	59	541
Saddle. Harness	J. A. Jamison	472,360	Apr. 5	551	143	59	103
Saddle. Harness	S. S. Kurtz	484,801	Oct. 25	2001	514	61	443
Saddle. Harness	D. F. Maine	481,765	Aug. 30	3287	800	60	1269
Saddle. Harness	L. A. Mancini	474,752	May 10	1388	350	59	916
Saddle. Harness	S. A. Marker	468,943	Feb. 16	1617	409	58	859
Saddle. Harness	S. A. Nolen	478,205	July 5	213	53	60	44
Saddle. Harness	I. S. Remson	469,979	Mar. 1	512	127	58	1198
Saddle. Harness	O. Taber	486,912	Nov. 29	2813	728	61	1203
Saddle. Harness	A. D. Ulrich	468,848	Feb. 16	1463	374	58	831
Saddle pad. Harness	R. Whitman	483,754	Oct. 4	346	87	61	72
Saddle. Riding	R. M. Dennis and C. E. Claggett	474,226	May 3	529	129	59	740
Saddle. Riding	V. D. Hart	481,945	Sept. 6	38	9	60	1342
Saddle. Riding	W. J. and M. J. Mohan	477,016	June 14	1223	296	59	1695
Saddle. Side	F. L. Gee	488,733	Dec. 27	2455	610	61	1258
Saddle. Side	T. G. Smith and F. W. Mayhew	481,073	Aug. 16	2118	527	60	1017
Saddle. Track	F. A. Oberer and J. S. Kalb	477,570	June 21	2131	530	59	1886
Saddletree	R. C. Barry	483,037	Sept. 20	1823	463	60	1719
Saddletree	O. Taber	480,218	Aug. 2	746	188	60	723
Saddletree	O. Taber	480,219	Aug. 2	747	189	60	723
Saddletree	O. Taber	480,220	Aug. 2	748	189	60	723
Saddletree	O. Taber	480,221	Aug. 2	749	189	60	724
Safe	T. M. Brintnall	481,137	Aug. 16	2229	549	60	1036
Safe	T. M. Brintnall	488,960	Dec. 27	2815	694	61	1933
Safe	T. M. Brintnall	488,961	Dec. 27	2817	695	61	1934
Safe	T. M. Brintnall	488,962	Dec. 27	2818	695	61	1934
Safe	W. Corliss	478,989	July 19	1421	351	60	306
Safe	G. L. Damon and G. W. Adams	470,818	Mar. 15	1843	473	58	1472
Safe	M. S. Goldsmith	477,800	June 28	2516	631	59	1978
Safe	W. C. Ireland	483,153	Sept. 27	2001	506	60	1766
Safe	A. A. Root	479,464	July 26	2198	552	60	471
Safe	L. Simmons	470,017	Mar. 1	558	133	58	1307
Safe	C. O. Yale	488,603	Dec. 27	2564	636	61	1880
Safe. Burglar-proof	M. S. Goldsmith	470,482	Mar. 8	1343	349	58	1363
Safe. Burglar-proof	T. M. Martin	469,971	Mar. 1	497	123	58	1194
Safe. Burglar-proof	M. Mosler (Reissne)	11,219	Feb. 2	641	160	58	648
Safe-door	M. Mosler	472,584	Apr. 12	892	229	59	184
Safe-lock	W. J. Van Broek	473,800	Apr. 26	2849	715	59	590
Safe-lock	J. White	481,319	Aug. 23	2555	627	60	1111
Safe. Provision	J. Schrib	473,478	Apr. 26	2334	591	59	492
Safes. Portable and adjustable track for moving	C. E. Parker	469,591	Feb. 23	2630	674	58	1064
Safes. Slot-protector for money	J. Loch	480,108	Aug. 2	552	139	60	688
Safety attachment	S. T. Mosby	486,490	Nov. 22	2082	551	61	1043
Safety-bolt	A. C. Goodman	470,238	Mar. 8	913	226	58	1225
Safety-brake. Self-acting	D. M. Gerhard	466,339	Jan. 5	48	12	58	12
Safety-gate	C. H. and G. D. Westover	471,738	Mar. 29	3231	822	58	1756
Safety-hook	L. King	486,181	Nov. 15	1601	425	61	932
Safety-pin	A. E. Divine	485,263	Nov. 1	165	48	61	606
Safety-pin	A. T. Snell	481,834	Aug. 30	3397	834	60	1289
Safety-pin	J. H. Wein	488,931	Dec. 27	2766	683	61	1923
Safety-pin. Hook-and-eye	E. M. Wright	483,886	Oct. 4	540	136	61	112
Safety-switch	R. T. Murphy	488,172	Dec. 13	1551	389	61	1648
Safety-switch	M. M. Turner and I. H. Grant	481,153	Aug. 16	2261	558	60	1042
Sail	A. S. Comstock	481,614	Aug. 30	3029	740	60	1213
Sail-oringle	W. R. Cutler	479,404	July 26	2089	523	60	449
Sail for vessels	J. H. Coffin	479,133	July 19	1644	411	60	347
Sail-reefing	T. W. Newcomb and D. F. Wiley	471,847	Mar. 29	3400	867	58	1789
Sale and delivery mechanism. Prepayment	J. F. Sawyer and J. L. Purves	468,999	Feb. 16	1726	440	58	881
Salicylaldehyde. alaphenylmethyl hydrazone. Making.	I. Roos	483,290	Sept. 27	2250	.....	60	1813
Salicylate of phenyl. Making	P. Ernert	486,770	Nov. 22	2532	.....	61	1131
Salt	C. F., A. W., and A. L. Lawton	475,577	May 24	2697	683	59	1201
Salt. Apparatus for the manufacture of	C. F., A. L., and A. W. Lawton	475,575	May 24	2693	683	59	1200
Salt container and sprinkler	F. N. Dixon	470,421	Mar. 8	1241	317	58	1345
Salt container and sprinkler	F. N. Dixon	470,422	Mar. 8	1243	317	58	1345
Salt-grainer	N. S. Scoville	473,560	Apr. 26	2471	625	59	518
Salt-holder	H. A. Lee	483,328	Nov. 1	272	74	61	627
Salt. Manufacturing	C. F., A. W., and A. L. Lawton	475,576	May 24	2694	683	59	1201
Salt-manufacturing apparatus	C. F., A. W., and A. L. Lawton	475,574	May 24	2692	683	59	1200
Salts from molasses. Process of obtaining ammonia or other	L. Sternberg	486,647	Nov. 22	2333	.....	61	1091
Salts of fluoride of antimony and sulphate of ammonia. Double	C. Wachendorff	479,925	Aug. 2	233	.....	60	627
Sample-case	J. E. Hitch	470,567	Mar. 8	1453	378	58	1386

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sand and slimes. Separating.....	G. Gates.....	482,241	Sept. 6	521	124	60	1436
Sand-band.....	R. Cole.....	466,326	Jan. 5	28	6	58	8
Sand-blast machine.....	H. F. Nehr.....	469,642	Feb. 23	2688	692	58	1076
Sand-box and axle-collar.....	S. F. Welch.....	471,365	Mar. 22	2671	679	58	1645
Sand-box. Electrically-heated.....	L. E. Pease.....	475,703	May 24	2885	730	59	1237
Sand-drier.....	G. D. Grannis.....	469,939	Mar. 1	435	109	58	1185
Sand-molding machine.....	C. S. Snead.....	475,523	May 24	2614	665	59	1185
Sand molds for pipes, &c. Apparatus for forming.....	P. H. Sharp.....	475,349	May 24	2334	{ 593 } 599	{ 59 }	1133
Sandpaper-holder.....	W. Shempp.....	470,794	Mar. 15	1797	461	58	1464
Sandpapering-machine.....	J. L. Perry.....	474,686	May 10	1290	{ 330 } 331	{ 59 }	897
Sandpapering-roll.....	J. A. Everett and J. Finn, Jr.....	481,938	Sept. 6	29	7	60	1340
Sand. Plant for heating and controlling.....	F. V. Greene.....	481,489	Aug. 23	2823	694	60	1163
Sand-raising apparatus.....	A. McDougall.....	460,841	Mar. 1	280	73	58	1155
Sand-rope reel.....	W. A. Lloyd.....	485,203	Nov. 1	76	24	61	588
Sand-screen.....	C. Monjeau.....	482,020	Sept. 6	163	39	60	1367
Sanding apparatus.....	W. W. Wallace and R. C. Penfield.....	483,088	Sept. 20	1896	479	60	1734
Sanitary seal for covers of toilet vessels.....	C. Smart.....	483,948	Oct. 4	634	159	61	130
Sanitary trap. Two-way.....	T. J. Barrow.....	485,833	Nov. 8	1023	274	61	798
Sanitary ventilator.....	W. L. Potter.....	479,224	July 19	1786	447	60	374
Sash-balance.....	W. Berry.....	470,655	Mar. 15	1582	412	58	1422
Sash-balance.....	A. D. Carle.....	477,099	June 14	1363	332	59	1723
Sash-balance.....	H. P. Cayce.....	481,103	Aug. 16	2169	537	60	1025
Sash-balance.....	G. C. Gardner.....	469,690	Mar. 1	29	10	58	1104
Sash-balance.....	S. N. Goldy.....	466,941	Jan. 12	1029	262	58	204
Sash-balance.....	N. Hamlet.....	481,302	Aug. 23	2527	620	60	1106
Sash-balance.....	S. Jenkinson.....	478,160	July 5	134	34	60	29
Sash-balance.....	A. Johnson.....	472,887	Apr. 12	1329	341	59	266
Sash-balance.....	F. N. Kimball.....	479,150	July 19	1671	418	60	353
Sash-balance.....	A. Lang.....	477,807	June 23	2521	633	59	1979
Sash-balance.....	J. P. Magney.....	476,277	June 7	84	20	59	1454
Sash-balance.....	J. P. Magney.....	481,145	Aug. 16	2245	553	60	1040
Sash-balance.....	P. H. Niles.....	487,290	Dec. 6	81	24	61	1338
Sash-balance.....	J. J. O'Connor.....	478,352	July 5	419	112	60	92
Sash-balance.....	G. T. Peters.....	479,657	July 26	2496	621	60	526
Sash-balance.....	B. H. Rose.....	469,598	Feb. 23	2637	676	58	1065
Sash-balance.....	B. H. Rose.....	474,329	May 3	708	183	59	773
Sash-balance.....	F. L. Rosentreter.....	487,335	Dec. 6	158	45	61	1352
Sash-balance.....	A. J. Rosentreter and J. G. O'Brien.....	488,699	Dec. 27	2409	597	61	1349
Sash-balance.....	J. W. Sheppard.....	473,129	Apr. 19	1737	439	59	354
Sash-balance.....	J. M. Smelser.....	483,294	Dec. 20	1753	441	61	1704
Sash-balance.....	C. E. Whipple.....	473,169	Apr. 19	1801	454	59	367
Sash-balance.....	L. Binns.....	473,287	Apr. 19	2006	504	59	407
Sash cord and securer.....	W. H. Naylor.....	476,163	May 31	3639	921	59	1400
Sash-cord fastener.....	F. S. Clarkson.....	467,156	Jan. 19	1409	361	58	285
Sash-cord fastener.....	G. L. Fowler.....	469,689	Mar. 1	28	10	58	1104
Sash-cord fastener.....	G. C. Gardner.....	474,522	May 10	1028	264	59	846
Sash-cord fastener.....	R. M. Gardner.....	469,691	Mar. 1	30	10	58	1104
Sash-cord fastener.....	M. J. Huffman.....	487,570	Dec. 6	544	140	61	1429
Sash-cord fastener.....	W. Hutchins.....	478,234	July 5	273	67	60	55
Sash-cord fastener.....	T. Vollten.....	472,565	Apr. 12	867	223	59	179
Sash-cord fastener.....	A. Wilson.....	475,956	May 31	3312	835	59	1333
Sash-cord guide.....	C. M. Burgess.....	487,712	Dec. 13	772	198	61	1491
Sash-cord guide.....	F. S. Clarkson.....	475,202	May 17	2103	531	59	1071
Sash-cord guide.....	T. Corscaden.....	467,668	Jan. 26	2215	564	58	444
Sash-cord guide.....	C. Wolcott.....	487,812	Dec. 13	948	{ 239 } 240	{ 61 }	1527
Sash-fastener.....	C. Alteman and D. C. C. Macdonald.....	472,325	Apr. 5	497	129	59	93
Sash-fastener.....	E. Aze.....	474,570	May 10	1107	283	59	861
Sash-fastener.....	E. L. Badgley.....	469,769	Mar. 1	159	42	58	1131
Sash-fastener.....	E. S. Bennett.....	480,688	Aug. 9	1511	375	60	882
Sash-fastener.....	C. O. Birney.....	481,546	Aug. 30	2920	718	60	1198
Sash-fastener.....	R. T. Bishop.....	467,615	Jan. 26	2138	543	58	429
Sash-fastener.....	T. B. Bomar.....	478,272	July 5	338	81	60	68
Sash-fastener.....	M. Bourke.....	486,425	Nov. 22	1993	529	61	1024
Sash-fastener.....	L. M. Bronson.....	477,500	June 21	2023	{ 501 } 502	{ 59 }	1863
Sash-fastener.....	I. A. Brown.....	485,606	Nov. 8	694	183	61	731
Sash-fastener.....	W. Conlter.....	470,988	Mar. 15	2096	536	58	1322
Sash-fastener.....	M. L. Dudley.....	475,739	May 24	2946	747	59	1248
Sash-fastener.....	J. L. Ebert.....	479,409	July 26	2096	525	60	450
Sash-fastener.....	J. N. Euwer.....	477,891	June 28	2674	669	59	2007
Sash-fastener.....	C. S. Fay.....	484,149	Oct. 11	936	240	61	205
Sash-fastener.....	E. R. Ferry.....	466,821	Jan. 12	826	212	58	167
Sash-fastener.....	A. S. Fisher.....	483,837	Oct. 4	473	118	61	98
Sash-fastener.....	G. W. Galbreath.....	466,672	Jan. 5	572	148	58	111
Sash-fastener.....	J. P. H. Gastrell.....	475,765	May 31	2988	{ 757 } 758	{ 59 }	1271
Sash-fastener.....	G. Gibson.....	473,389	Apr. 19	2191	550	59	443
Sash-fastener.....	G. Gibson.....	473,390	Apr. 19	2192	550	59	443
Sash-fastener.....	G. Gibson.....	473,418	Apr. 19	2233	561	59	450
Sash-fastener.....	G. Gibson.....	473,419	Apr. 19	2234	561	59	451
Sash-fastener.....	G. Gibson.....	484,709	Oct. 18	1827	465	61	394
Sash-fastener.....	G. Gibson.....	484,710	Oct. 18	1829	465	61	395
Sash-fastener.....	D. Gutermute.....	477,537	June 21	2085	518	59	1877
Sash-fastener.....	M. Higgins.....	471,118	Mar. 22	2299	590	58	1574
Sash-fastener.....	H. W. Hood.....	488,358	Dec. 20	1860	465	61	1725
Sash-fastener.....	G. G. Hopkins.....	479,595	July 26	2400	598	60	508
Sash-fastener.....	N. B. Hurd.....	471,553	Mar. 29	2940	748	58	1704
Sash-fastener.....	A. Johnson.....	472,886	Apr. 12	1327	341	59	265
Sash-fastener.....	J. Kane.....	473,757	Apr. 26	2784	700	59	578
Sash-fastener.....	E. L. King.....	481,669	Aug. 30	3110	759	60	1233
Sash-fastener.....	W. H. King.....	476,050	May 31	3448	870	59	1361
Sash-fastener.....	J. W. Klapperich.....	472,364	Apr. 5	559	144	59	16

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sash-fastener	W. Koenen	473,572	May 24	2690	682	59	1200
Sash-fastener	A. Lamplough	488,360	Dec. 20	1863	466	61	1725
Sash-fastener	C. G. Lindskog	476,947	June 14	1123	270	59	1674
Sash-fastener	D. O. Livermore. (Reissue)	11,230	Mar. 15	2242	375	58	1551
Sash-fastener	B. G. Lowrey	474,299	May 3	644	163	59	762
Sash-fastener	W. H. Lynch	473,557	Apr. 26	2466	624	59	517
Sash-fastener	S. McClellan	479,152	July 19	1674	418	60	353
Sash-fastener	W. M. Morton	470,945	Mar. 15	2029	519	58	1508
Sash-fastener	W. M. Morton	475,966	May 31	3329	840	59	1337
Sash-fastener	A. A. Page	485,474	Nov. 1	499	132	61	673
Sash-fastener	J. C. Plunkett	484,235	Oct. 11	1078	273	61	234
Sash-fastener	O. K. Putnam	474,405	May 10	840	220	59	810
Sash-fastener	F. J. Rabbeth	467,954	Feb. 2	71	17	58	539
Sash-fastener	F. J. Rabbeth	480,343	Aug. 9	956	242	60	776
Sash-fastener	M. B. Reynolds	470,791	Mar. 15	1788	460	58	1462
Sash-fastener	C. F. Russell	473,670	Apr. 26	2654	669	59	553
Sash-fastener	G. B. Sloan, Jr.	471,363	Mar. 22	2669	678	58	1644
Sash-fastener	W. M. Taber	470,719	Mar. 15	1679	434	58	1441
Sash-fastener	D. H. Taylor	481,449	Aug. 23	2747	675	60	1147
Sash-fastener	E. R. Theby	480,148	Aug. 2	620	157	60	701
Sash-fastener	L. P. Treadwell	476,431	June 7	321	73	59	1500
Sash-fastener	L. P. Treadwell	476,432	June 7	322	74	59	1500
Sash-fastener	L. C. Walker	472,088	Apr. 5	114	31	59	23
Sash-fastener	L. C. Walker. (Reissue)	11,287	Nov. 22	2653	693	61	1157
Sash-fastener	C. Wolcott	487,314	Dec. 6	121	37	61	1345
Sash-fastener	J. W. Wright	469,313	Feb. 23	2198	563	58	979
Sash-fastener. Automatic	G. Solari	482,280	Sept. 6	586	139 140	60	1449
Sash-holder	J. G. and W. B. Albright	473,137	Apr. 19	1752	442	59	357
Sash-holder	J. A. Baldwin	473,898	May 3	3	1	59	637
Sash-holder	W. A. Bomar	477,291	June 21	1693	415	59	1799
Sash-holder	E. Broggelwirth	479,324	July 19	1930	482	60	403
Sash-holder	J. M. Brohard	472,851	Apr. 12	1274	326	59	255
Sash-holder	F. A. Buse	466,533	Jan. 5	357	90	58	69
Sash-holder	W. H. Dalbey	482,710	Sept. 13	1299	318	60	1603
Sash-holder	L. Damon	477,103	June 14	1369	333 334	59	1724
Sash-holder	R. L. Hanscome and R. Ferguson	470,396	Mar. 8	1205	308	58	1338
Sash-holder	H. B. Hayes	477,801	June 28	2517	632	59	1978
Sash-holder	G. Heffner	470,914	Mar. 15	1981	506	58	1499
Sash-holder	J. W. Kales	486,340	Nov. 15	1852	487	61	983
Sash-holder	C. D. Kelsey	486,476	Nov. 22	2065	547	61	1039
Sash-holder	F. Keyser	471,241	Mar. 22	2486	631	58	1608
Sash-holder	P. R. Miller and P. Barker	469,316	Feb. 23	2201	564	58	980
Sash-holder	R. Monday	450,337	Aug. 9	946	240	60	774
Sash-holder	H. S. Moore	486,788	Nov. 22	2559	667	61	1136
Sash-holder	S. B. Morris	481,622	Aug. 30	3040	742	60	1220
Sash-holder	P. Motley	467,934	Dec. 13	1147	287	61	1565
Sash-holder	J. B. Okey	485,131	Oct. 25	2520	648	61	547
Sash-holder	W. Purdon	487,155	Nov. 29	3190	817	61	1278
Sash-holder	J. E. Rose	473,711	Apr. 26	2717	684	59	565
Sash-holder	C. Scheibel	473,354	Apr. 19	2121	532	59	429
Sash-holder	I. A. Shaw	487,131	Nov. 29	3149	807	61	1270
Sash-holder	F. Shealy, Jr.	472,276	Apr. 5	419	108	59	79
Sash-lift	R. Gorton	468,869	Feb. 16	1499	382	58	837
Sash-lift	H. E. Willer	481,320	Aug. 23	2559	628	60	1111
Sash-machine	E. B. Hayes	476,202	May 31	3703	935 936	59	1411
Sash-operating mechanism	H. J. Casey	486,765	Nov. 22	2517	657	61	1128
Sash-pull	R. Schenck	478,471	July 5	628	153	60	124
Sash. Reversible window	A. Culpin	469,079	Feb. 16	1842	471	58	904
Sash. Reversible window	G. Hoersch	483,763	Oct. 4	362	91	61	76
Sash. Reversible window	G. Schmidt	485,887	Nov. 8	1119	295	61	817
Sash. Window	J. B. Cohen	470,139	Mar. 1	737	184	58	1213
Sash. Window	H. A. Howe	472,458	Apr. 5	704	180	59	133
Sash. Window	E. Moore	480,203	Aug. 2	709	181	60	716
Sash. Window	S. C. Young	471,663	Mar. 29	3097	788	58	1732
Sash. Window or door	G. B. Lee	479,433	July 26	2140	535	60	459
Sashes, &c. Bar and fastening for	W. Henderson	482,087	Sept. 6	269	65	60	1388
Sashes. Swinging jack for window	V. Schirmer	486,740	Nov. 22	2478	646	61	1121
Satchel. Collapsing	J. L. Bates	476,862	June 14	977	237	59	1645
Satchel or bag frame	R. Flocke	477,109	June 14	1375	335	59	1725
Satchel or other receptacle	C. H. Shaw	480,675	Aug. 9	1486	370	60	878
Satchel-strap	E. G. Wheeler	471,159	Mar. 22	2364	604	58	1555
Satchels, hand-bags, &c. Fastening for	B. Bernstein	476,865	June 14	982	233	59	1646
Saturating articles or substances	J. A. Titzel	486,744	Nov. 22	2483	648	61	1122
Sausage-guts. Machine for filling	G. Wassermann	475,367	May 24	2360	604 605	59	1138
Sausage-stuffer	F. L. Ezell	467,029	Jan. 12	1168	296	58	230
Sausage-stuffing machine	J. Eppler	485,576	Nov. 1	649	173	61	707
Sausage twisting and linking machine	H. A. Smallfield and H. Edwards	480,293	Aug. 9	877	223 224	60	762
Savings-receptacle	J. Loch	466,353	Jan. 5	67	17	58	15
Saw	J. Class. (Reissue)	11,246	June 21	2248	563	59	1908
Saw	D. Hazard	486,226	Nov. 15	1668	441	61	945
Saw	K. W. Ottstadt and R. Wirth	469,172	Feb. 16	1960	501	58	928
Saw	D. C. Schlahach	481,201	Aug. 23	2337	576	60	1072
Saw	A. Smith	488,844	Dec. 27	2630	652	61	1894
Saw attachment	H. C. Webb	483,971	Oct. 4	677	169	61	140
Sawbuck	J. Chattaway	482,162	Sept. 6	397	94	60	1413
Sawbuck	F. M. Tribbett	486,415	Nov. 15	1973	523	61	1007
Saw. Buck	P. Woodring	482,606	Sept. 13	1140	275	60	1571
Saw-bit. Insertible	M. A. Howe	471,326	Mar. 22	2607	661	58	1632
Saw. Butcher's or bow	H. Hoefor	480,697	Aug. 9	1520	378	60	884
Saw-clamp	T. E. McCracken	473,518	Apr. 26	2491	608	59	504

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Saw. Core.....	E. B. Roberts.....	467,383	Jan. 19	1751	447	58	349
Saw. Crosscut.....	W. H. H. Keizur.....	482,365	Sept. 13	753	182	60	1497
Saw. Crosscut.....	W. Kerr.....	468,150	Feb. 2	368	91	58	596
Saw. Crosscut.....	I. S. Wilson.....	481,321	Aug. 23	2559	628	60	1112
Saw. Cut-off.....	E. B. Hayes.....	477,756	June 28	2452	613	59	1936
Saw. Drag.....	L. S. Washburn.....	475,098	May 17	1947	493	59	1039
Sawdust-burning and air-blast apparatus	T. T. Scott and J. J. Sheafar.....	477,387	June 21	1847	454	59	1629
Saw filing and setting machine.....	E. Christensen.....	472,031	Apr. 5	29	6	59	8
Saw filing and setting machine.....	J. Richardson.....	461,823	Aug. 30	3379	{ 827 828 }	60	1285
Saw-filing clamp.....	L. C. Strong.....	469,022	Feb. 16	1767	451	58	889
Saw-filing machine.....	G. N. Clemson.....	473,294	Apr. 19	2015	{ 506 507 }	59	409
Saw-filing machine.....	J. H. Diehl.....	468,221	Feb. 2	468	116	58	617
Saw-filing machine.....	T. S. Disston.....	482,572	Sept. 13	1092	265	60	1562
Saw frame. Hack.....	J. A. Whelpley.....	487,358	Dec. 6	200	55	61	1360
Saw-gage.....	C. E. King.....	467,010	Jan. 12	1140	289	58	225
Saw. Gang band.....	T. H. Brown.....	487,658	Dec. 6	678	174	61	1456
Saw-gin.....	B. F. Browne.....	484,906	Oct. 25	2175	559	61	479
Saw-guide.....	G. M. Hinkley.....	477,861	June 28	2622	657	59	1997
Saw-gummer.....	J. W. Ramsey.....	468,031	Feb. 2	189	46	58	561
Saw gummer. Stave.....	A. Scamahorn.....	482,386	Sept. 13	791	190	60	1504
Saw. Hack.....	H. Ericson.....	468,742	Feb. 9	1302	330	58	789
Saw-handle.....	W. H. Kidd.....	472,890	Apr. 12	1335	342	59	267
Saw-handle.....	J. Neimeyer.....	480,856	Aug. 16	1765	442	60	949
Saw-handle attachment.....	M. Pyper.....	486,736	Nov. 22	2471	645	61	1119
Saw handle. Crosscut.....	J. Green.....	479,361	July 19	2010	502	60	419
Saw handle. Crosscut.....	J. W. Miller.....	487,371	Dec. 6	219	60	61	1364
Saw handle. Crosscut.....	M. E. True.....	476,936	June 14	1104	266	59	1670
Saw-handle fastening.....	R. C. Taggart.....	488,703	Dec. 27	2413	598	61	1849
Saw-holding machine.....	S. W. Daly.....	471,168	Mar. 22	2375	{ 606 607 }	58	1588
Saw-jointing machine.....	A. H. Flower.....	484,494	Oct. 18	1496	380	61	326
Saw machine. Band.....	J. H. Landis.....	473,468	Apr. 26	2320	{ 587 588 }	59	489
Saw machine. Drag.....	J. W. Calef.....	470,779	Mar. 15	1773	456	58	1459
Saw machine. Hack.....	H. D. Lanfair.....	466,929	Jan. 12	1014	259	58	202
Saw machine. Rip.....	G. W. Bugbee and F. Danner.....	470,357	Mar. 8	1140	292	58	1326
Saw. Meat.....	G. F. Sellstrom.....	473,130	Apr. 19	1738	439	59	354
Sawmill.....	G. W. Stinebring.....	468,733	Feb. 9	1288	327	58	786
Sawmill attachment.....	T. J. Williams and T. S. Murray.....	468,215	Feb. 2	462	114	58	615
Saw mill. Band.....	C. M. Emerson.....	477,299	June 21	1705	{ 417 418 }	59	1801
Saw mill. Band.....	C. J. Keofoed.....	468,303	Feb. 2	619	154	58	643
Saw mill. Band.....	C. B. Long.....	475,328	May 24	2293	{ 589 590 }	59	1125
Saw mill. Band.....	F. McDonough.....	485,970	Nov. 8	1248	{ 329 330 331 }	61	844
Saw mill. Band.....	D. C. Prescott.....	472,586	Apr. 12	895	{ 229 230 231 }	59	184
Saw mill. Band.....	D. C. Prescott.....	478,817	July 12	1166	{ 289 290 291 }	60	247
Sawmill-carriage.....	J. M. Bussey.....	473,726	Apr. 26	2739	{ 689 690 }	59	569
Sawmill-carriage.....	J. P. Hanson.....	472,995	Apr. 19	1517	387	59	315
Sawmill-carriage.....	G. M. Hinkley.....	467,007	Jan. 12	1130	{ 286 287 }	58	223
Sawmill-carriage feed.....	A. B. Palmer.....	475,046	May 17	1862	{ 472 473 }	59	1023
Sawmill-carriages. Canting-block for.....	P. C. Roche and C. Colclough.....	472,821	Apr. 12	1237	317	59	247
Sawmill-carriages. Indicator for.....	I. Burlingame.....	471,943	Mar. 29	3531	902	58	1816
Saw mill. Circular.....	J. P. Williams.....	468,856	Feb. 16	1483	378	58	834
Sawmill. Combined band and circular.....	H. J. Andersen.....	470,964	Mar. 15	2055	526	58	1514
Sawmill-dog.....	M. M. Appleman.....	485,251	Nov. 1	148	43	61	603
Sawmill-dog.....	E. Christman.....	470,289	Mar. 8	1012	259	58	1305
Sawmill-dog.....	J. Class.....	470,543	Mar. 8	1424	371	58	1380
Sawmill-dog.....	{ P. J. Doyle, F. E. Thrall, and M. B. Wilkinson. }	473,658	Apr. 26	2637	{ 604 665 }	59	550
Sawmill-dog.....	G. F. Knight.....	483,223	Sept. 27	2113	536	60	1789
Sawmill-dog.....	G. F. Knight.....	483,224	Sept. 27	2115	536	60	1789
Sawmill-dog.....	V. Martin and M. Hanna.....	484,332	Oct. 11	1238	315	61	264
Sawmill-dog.....	C. H. Pitkin.....	474,687	May 10	1294	331	59	897
Sawmill-dog.....	J. N. Richey, S. N. Hench, and W. A. Dromgold.....	488,906	Dec. 27	2733	674	61	1915
Sawmill feed mechanism.....	J. L. Barnes.....	474,435	May 10	888	231	59	820
Saw mill. Gang.....	F. O. Kilgore.....	471,125	Mar. 22	2308	{ 592 593 }	58	1575
Sawmill pawl and ratchet.....	G. W. Stinebring.....	477,710	June 28	2378	594	59	1952
Sawmill-scraper.....	C. M. Cronkhite.....	477,518	June 21	2051	511	59	1870
Sawmill-setsworks.....	H. Gawley.....	484,360	Oct. 11	1276	325	61	272
Sawmill-setsworks.....	J. T. Rice.....	485,564	Nov. 1	625	167	61	701
Sawmill variable feed.....	C. Harbaugh.....	479,272	July 19	1857	465	60	389
Sawmills, &c. Roller-case for.....	D. Burns.....	484,490	Oct. 18	1490	379	61	325
Sawmills. Variable friction-feed for.....	P. Stovall.....	488,618	Dec. 27	2272	564	61	1823
Saw planing attachment.....	I. S. Wilson.....	474,492	May 10	977	252	59	836
Saw pulleys. Scraper for band.....	J. H. Wentz.....	478,148	July 5	115	29	60	26
Saw-rest.....	L. Duemer.....	468,438	Feb. 9	824	208	58	693
Saw-set.....	C. Baker.....	479,239	July 19	1809	453	60	379
Saw-set.....	J. M. Basket.....	471,461	Mar. 22	2817	718	58	1672
Saw-set.....	S. W. Buence and A. Bash.....	481,221	Aug. 23	2377	585	60	1080
Saw-set.....	W. F. Crapson.....	467,159	Jan. 19	1414	361	58	285
Saw-set.....	W. M. Grelick.....	480,581	Aug. 9	1331	{ 331 332 }	60	848
Saw-set.....	J. McCarthy.....	468,889	Feb. 16	1529	389	58	842
Saw-set.....	J. McIntosh.....	476,235	May 31	3769	951	59	1424

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Saw-set	C. Morrill	468,816	Feb. 16	1419	361	58	821
Saw-set	A. Reck	468,577	Feb. 9	1056	268	58	739
Saw-set	H. B. Smith	483,793	Oct. 4	408	101	61	85
Saw-set	C. C. Taintor	475,359	May 24	2346	601	59	1135
Saw set and clamp	R. Rasmussen	474,460	May 10	935	240	59	827
Saw set and gage	C. F. Heath	482,250	Sept. 6	533	127	60	1438
Saw setting and filing machine	A. Pinke	488,829	Dec. 27	2598	644 645	61	1888
Saw-setting device	G. Lutz	473,515	Apr. 26	2397	607	59	503
Saw setting, gaging, and jointing tool	M. Meagher	466,697	Jan. 5	606	157	58	117
Saw-setting machine	F. J. Drake	482,624	Sept. 13	1169	283	60	1576
Saw-setting machine	J. B. Ivey	471,641	Mar. 29	3064	779	58	1726
Saw-sharpening machine	F. J. Drake	472,865	Apr. 12	1295	332	59	259
Saw-sharpening machine	L. P. Halladay	466,411	Jan. 5	158	42, 43	58	31
Saw-straining device	M. Jincks	481,496	Aug. 23	2837	698	60	1166
Saw-swage	N. H. Roberts	469,410	Feb. 23	2349	603	58	1010
Saw-swage	N. H. Roberts	469,411	Feb. 23	2352	604	58	1010
Saw-swage	L. L. Watson	468,470	Feb. 9	875	223	58	704
Saw-swaging device	A. L. Navone	478,886	July 12	1254	310	60	263
Saw-swaging device	H. Williamson	476,850	June 14	950	233	59	1641
Saw. Swing cut-off	G. Luppert	469,156	Feb. 16	1941	497	58	925
Saw. Swinging	B. Bronson	481,744	Aug. 30	3246	790	60	1260
Saw-teeth. Device for side-dressing	D. B. Hanson. (Reissue)	11,218	Jan. 19	1915	490	58	382
Saw-teeth. Holder for insertible	G. S. Black	468,012	Feb. 2	162	39	58	555
Saw-teeth. Tool for dressing	G. C. Ferguson	473,622	Apr. 26	2587	651	59	539
Saw-tooth	R. J. Bamford	470,967	Mar. 15	2059	528	58	1515
Saw-tooth	W. E. Brooke	470,977	Mar. 15	2079	532	58	1519
Saw-tooth	J. W. Todd	481,836	Aug. 30	3400	835	60	1289
Saw-tooth. Removable	I. N. and J. O. Kendall	488,336	Dec. 20	1825	456	61	1717
Saw-tooth-setting machine	J. R. Little	483,497	Sept. 27	2529	636	60	1868
Saw-tooth swage	W. W. Ryder	484,163	Oct. 11	960	246 247	61	210
Saw-tooth. Tubular inserted	L. L. Lewis	485,503	Nov. 1	536	142	61	682
Saw. Tree-felling	G. E. Desmond	471,810	Mar. 29	3351	853	58	1779
Saw. Veneer	A. E. Hoffman	480,428	Aug. 9	1097	274	60	800
Saws. Adjustable mandrel for wabbling	H. L. Mann	474,844	May 17	1547	395	59	960
Saws. Detachable planer-bit for	T. L. Slaughter and E. C. Drew	473,968	May 3	134	30	59	663
Saws. Insertible tooth for diamond	H. Forster	474,084	May 3	322	76	59	699
Saws. Machine for side-filing	J. W. Stokoe	468,476	Feb. 9	888	225 226	58	706
Saws. Roller-guide for hoop-pole-band	B. F. Veach	470,724	Mar. 15	1689	435	58	1443
Sawing-machine	D. Chase	479,244	July 19	1821	457	60	381
Sawing-machine	F. G. Hodges	469,447	Feb. 23	2405	616	58	1020
Sawing-machine	B. G. Luther	468,882	Feb. 16	1518	387	58	840
Sawing-machine	T. V. Rankin	474,189	May 3	470	114	59	729
Sawing-machine	A. Rodgers, Sr	482,319	Sept. 6	665	159	60	1465
Sawing-machine	A. Rodgers, Sr	482,697	Sept. 13	1279	313	60	1599
Sawing-machine	F. M. Teegarden	477,972	June 28	2785	698	59	2030
Sawing-machine	A. Wadsworth	483,315	Sept. 27	2284	574 575	60	1819
Sawing-machine. Automatic cut-off	E. Fischer	483,998	Oct. 11	717	180 181	61	162
Sawing-machine. Band	G. P. Myers	488,364	Dec. 20	1867	467 468	61	1726
Sawing-machine. Band	J. Sperry	469,177	Feb. 16	1970	504	58	930
Sawing machine. Block	D. R. Edwards	474,233	May 3	538	131 132	58	741
Sawing machine. Circular	J. H. Gateley	487,947	Dec. 13	1168	291	61	1569
Sawing-machine. Cut-off	M. E. and C. C. Blood	479,049	July 19	1512	377	60	324
Sawing machine. Drag	L. Forsman	481,555	Aug. 30	2938	722	60	1201
Sawing machine. Drag	C. L. Kirksey and F. P. Bowden	483,630	Oct. 4	168	42	61	35
Sawing-machine. Portable band	A. C. Speer	482,103	Sept. 6	297	70	60	1393
Sawing machine. Power back	O. Colborne	479,399	July 26	2081	522	60	447
Sawing-machine. Radial-center	J. S. Reid	476,820	June 14	910	223	59	1632
Sawing machine. Rail	E. C. Smith and J. Brady	481,874	Aug. 30	3456	848	60	1301
Sawing machine. Wood	J. P. Currie	469,734	Mar. 1	102	28	58	1119
Sawing machine. Wood	J. Shanahan	476,831	June 14	924	226	59	1634
Sawing machine. Wood	A. W. Violett, Jr.	485,755	Nov. 8	922	247	61	778
Sawing up slabs, &c. Machine for	S. Maffett and R. Weir	482,799	Sept. 20	1445	358	60	1643
Scaffold	L. Chalfant	475,665	May 24	2827	716	59	1227
Scaffold	H. L. Clark	472,160	Apr. 5	235	62	59	44
Scaffold	J. Dunbar	482,625	Sept. 13	1171	283	60	1577
Scaffold	F. B. Gilbreth	479,591	July 26	2394	596	60	507
Scaffold	H. Knippe	474,255	May 3	566	139	59	748
Scaffold	W. J. Sankey	472,514	Apr. 5	794	203	59	151
Scaffold	I. Smith	472,406	Apr. 5	624	159	59	117
Scaffold-bracket	A. W. Gnthat	470,856	Mar. 15	1898	486	58	1483
Scaffold-bracket	C. Ragsdale	479,662	July 26	2501	623	60	527
Scaffold-bracket	M. Ramsey	474,406	May 10	841	220	59	810
Scaffold-bracket for painters	J. F. Shoop	471,762	Mar. 29	3262	833	58	1763
Scaffold. Builder's	J. E. Ennis	485,463	Nov. 1	481	127 128	61	670
Scaffold. Builder's	L. Korn	488,437	Dec. 20	1983	495	61	1749
Scaffold. Portable	J. Harper	467,096	Jan. 12	1285	325 326	58	252
Scaffold. Portable window	A. and C. Stauber	480,046	Aug. 2	466	118	60	671
Scaffold. Roof	J. B. Cotton	485,318	Nov. 1	255	69	61	624
Scaffolding	J. Anderson	470,032	Mar. 1	580	145	58	1211
Scaffolding	H. Heiland	469,567	Feb. 23	2597	665 666	58	1057
Scale attachment	L. F. Robare	482,138	Sept. 6	345	83	60	1403
Scale. Automatic electric	P. J. Kuhbacher	485,950	Nov. 8	1217	321	61	838
Scale. Automatic grain	T. F. Gray	472,872	Apr. 12	1304	335	59	261
Scale. Automatic grain-weighing	J. H. Gunder	474,825	May 17	1511	386 387	59	954

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Scale. Automatic weighing.....	N. Lombard.....	475,405	May 24	2417	617	59	1148
Scale. Automatic weighing.....	N. Nilson.....	476,610	June 14	892	219	59	1628
Scale. Balance.....	R. E. McClelland.....	475,792	May 31	3030	768	59	1279
Scale-beams. Poise for.....	G. Wilkening.....	466,641	Jan. 5	524	136	58	101
Scale. Coin-operated weighing.....	G. G. Merry.....	483,787	Oct. 4	401	100	61	84
Scale. Computing.....	J. W. Culmer.....	486,633	Nov. 22	2356	617 618	61	1095
Scale. Computing.....	J. W. Culmer.....	486,695	Nov. 22	2410	629	61	1106
Scale for measuring grain. Drop.....	F. M. Gladish.....	468,173	Feb. 2	403	100	58	603
Scale frame. Platform.....	J. W. Burroughs.....	470,177	Mar. 8	821	203	58	1267
Scale. Hydrostatic.....	M. W. Newton.....	473,772	Apr. 26	2801	704	59	582
Scale. Pendulum.....	E. S. Chase and C. E. Smock.....	475,295	May 24	2244	578	59	1115
Scale. Pendulum.....	D. Olmsted.....	482,831	Sept. 20	1485	370	60	1652
Scale. Platform.....	M. M. Mollnau.....	488,284	Dec. 20	1737	437	61	1701
Scale-poise. Computing.....	J. W. Culmer.....	487,824	Dec. 13	961	243	61	1530
Scale. Price.....	A. D. Hoffman.....	487,272	Dec. 6	52	16	61	1332
Scale. Registering pendulum.....	J. P. Armstrong.....	478,534	July 5	735	179	60	146
Scale. Spring.....	J. P. Chatillon.....	467,496	Jan. 26	1929	493	58	392
Scale. Spring.....	L. E. A. Kovsky.....	478,699	July 12	959	238	60	206
Scale. Spring platform.....	J. P. Chatillon.....	469,024	Feb. 16	1769	451	58	890
Scale. Wagon.....	L. G. Clawson and E. G. Wheeler.....	467,918	Feb. 2	19	5	58	530
Scale. Weighing.....	J. P. Firth.....	488,882	Dec. 27	2683	664	61	1905
Scale. Weighing and price.....	G. Lundberg.....	486,787	Nov. 22	2557	667	61	1136
Scale. Weighing and recording.....	R. McFarlane.....	483,675	Oct. 4	228	57	61	47
Scales. Recording device for.....	G. E. Miller.....	472,642	Apr. 12	977	253	59	199
Scales. Weighing.....	E. C. Judd.....	480,020	Aug. 2	419	105	60	661
Scalloping-machine.....	H. Loewer.....	486,408	Nov. 15	1960	521	61	1005
Scalpel.....	W. Schott.....	488,616	Dec. 27	2271	563	61	1822
Scalpel.....	R. Steinle.....	485,236	Nov. 1	121	37	61	598
Scalpel.....	E. Willbrandt.....	479,102	July 19	1594	399	60	339
Scalper and grader. Combined.....	J. B. Martin.....	473,425	Apr. 19	2240	563	59	452
Scalper, purifier, and grader. Combined.....	N. W. Holt.....	484,292	Oct. 11	1017	260 261	61	221
Scarf-clasp.....	J. J. Hallahan.....	483,783	Oct. 4	397	98	61	83
Scarf-pin.....	A. Epple.....	474,004	May 3	188	44	59	675
Scene-shifting apparatus.....	J. Newell.....	484,506	Oct. 18	1515	385	61	330
Scenic effects. Apparatus for producing.....	F. Seymour.....	486,606	Nov. 23	2267	592	61	1077
Scholar's companion.....	G. W. Patterson.....	469,593	Feb. 23	2632	675	58	1064
School-seat.....	F. R. Beal.....	475,076	May 17	1906	484	59	1031
Scissors-sharpener.....	G. S. Collum.....	479,737	July 26	2645	656	60	553
Scissors-sharpener.....	E. A. Thissell.....	488,043	Dec. 13	1339	332	61	1605
Scourer: See Grain-scourer. Wheat-scourer. Rice-scourer.							
Scraper.....	B. F. Stuart.....	476,691	June 7	697	171	59	1575
Scraper. Agricultural.....	R. E. Wilson.....	484,273	Oct. 11	1147	292	61	247
Scraper. Cotton.....	J. R. McAlister and T. W. Waddell.....	477,691	June 23	2347	587	59	1947
Scraper. Dirt.....	W. P. Ball.....	474,896	May 17	1626	415	59	977
Scraper. Earth.....	J. D. Brainard.....	482,711	Sept. 13	1301	318	60	1603
Scraper. Earth.....	J. A. Grant.....	476,262	June 7	53	11	59	1447
Scraper. Earth.....	T. O. O. Stidington.....	475,818	May 31	3064	780 781	59	1289
Scraper or cleaner for boots or shoes.....	F. A. Cahn.....	478,845	July 12	1203	299	60	254
Scraper. Road.....	J. M. Brooks.....	481,169	Aug. 23	2279	562	60	1060
Scraper. Road.....	J. M. Holland.....	484,429	Oct. 18	1390	355 356	61	305
Scraper. Road.....	S. B. Jamieson.....	483,303	Sept. 27	2267	570 571	60	1816
Scraper. Road.....	C. A. McAlpine.....	471,800	Mar. 29	3336	849 850	58	1776
Scraper. Road.....	T. R. McKnight.....	470,208	Mar. 8	868	215	58	1277
Scraper. Road.....	W. F. Mentley.....	486,566	Nov. 22	2194	578	61	1063
Scraper. Road.....	J. S. Palmer.....	483,081	Sept. 20	1883	477	60	1732
Scraper. Wheeled.....	P. M. Broadfoot.....	485,085	Oct. 25	2456	632	61	534
Scraper. Wheeled.....	C. Rath.....	482,414	Sept. 13	829	199	60	1511
Screen: See Artist's sketching. Gravel-screen. screen. Lamp or gas-light screen. Carding-engine Oat-screen. screen. Oven-screen. Coal-screen. Paper-pulp screen. Coal-scuttle screen. Pulp-screen. Corn-separating Rolling screen. screen. Sand-screen. Door or window Stove-screen. screen. Window-screen. Grain-screen. Window and door screen.							
Screen and conveyer. Combined.....	M. T. Singleton.....	467,838	Jan. 26	2489	631	58	497
Screen-frame.....	H. A. Way.....	487,656	Dec. 6	675	174	61	1455
Screen-frame. Adjustable.....	G. J. Rotham.....	476,077	May 31	3490	880	59	1371
Screen or picture frame.....	O. Rohlen.....	467,561	Jan. 26	2061	521	58	416
Screening and assorting machines. Removable tread for.....	P. W. Gates.....	488,760	Dec. 27	2493	620	61	1866
Screw.....	C. C. Holt.....	468,543	Feb. 9	1002	256	58	729
Screw.....	L. J. H. Vinson.....	481,445	Aug. 23	2753	677	60	1149
Screw and clamp. Box.....	W. H. Miller and T. L. Farrow.....	484,159	Oct. 11	954	245	61	209
Screw and making the same. Wood.....	C. D. Rogers.....	479,175	July 19	1712	429 430	60	361
Screw-blanks. Machine for operating upon.....	E. L. Bowers and J. E. Titus.....	469,324	Feb. 23	2215	568 569	58	983
Screw cutting and pointing machine.....	E. Phillips.....	468,524	Feb. 9	970	248 249	58	722
Screw-cutting die.....	C. L. Butler.....	477,293	June 21	1696	416	59	1400
Screw-cutting machine.....	J. A. Hamer.....	483,112	Sept. 20	1932	489	60	1742

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Screw-cutting machine. Automatic	C. Rosine	471,194	Mar. 22	2415	{ 614 615 }	58	1594
Screw-cutting plate	H. B. Keiper	473,582	Apr. 26	2520	636	59	528
Screw-cutting tool	W. Hutcheson	475,564	May 24	2679	680	59	1197
Screw. Device for holding and operating the jaws or ends of the reins of a temper.	O. J. Baldwin	476,721	June 7	737	182	59	1584
Screw-driver	W. M. Carr	486,395	Nov. 15	1938	513	61	1001
Screw-driver	W. E. Daily	484,654	Oct. 18	1754	446	61	379
Screw-driver	T. Jr., and J. J. Edwards	487,946	Dec. 13	1165	291	61	1569
Screw-driver	G. E. Gay and J. H. Parsons	484,004	Oct. 11	731	183	61	164
Screw-driver	F. A. Howard	470,001	Mar. 1	539	134	58	1203
Screw-driver	J. W. Jones	470,055	Mar. 1	617	154	58	1219
Screw-driver	J. Koelzer	470,687	Mar. 15	1631	423	58	1431
Screw-driver	J. F. Steward	472,591	Apr. 12	903	231	59	186
Screw-driver attachment	L. H. Boyden	470,778	Mar. 15	1772	456	58	1459
Screw-driver. Changeable-speed	H. Hubbell	481,304	Aug. 23	2529	621	60	1106
Screw-driver. Pendant set	D. Mendelson	485,420	Nov. 1	420	112	61	658
Screw-driving and washer-feeding machine	F. W. Tobey	480,530	Aug. 9	1251	{ 314 315 }	60	832
Screw-head. Self-countersinking	C. L. Holland	466,463	Jan. 5	246	62	58	47
Screw-jack	F. H. Sleeper	479,850	Aug. 2	113	28	60	604
Screw. Jack	W. H. Wild	483,487	Sept. 27	2515	633	60	1865
Screw-machine	E. L. Bowers and J. E. Titus	469,325	Feb. 23	2218	569	58	984
Screw-machine	E. J. McClellan	467,568	Jan. 26	2071	523	58	417
Screw-machines. Stock-feeding device for	J. Hartness	467,098	Jan. 12	1288	{ 326 327 }	58	253
Screw-machines. Turret-head for	W. N. Woodruff	466,646	Jan. 5	530	138	58	102
Screw-making machine	J. B. Clyne	469,201	Feb. 16	2024	517	58	938
Screw-stopper for water-bags, &c	G. H. F. Schrader	483,330	Sept. 27	2308	580	60	1824
Screw-swaging die	H. P. Boyd	478,219	July 5	237	58	60	49
Screw. Temper	E. T. Sntley and W. H. Nicholson	467,866	Jan. 26	2537	643	58	505
Screw-threading die	R. J. Dearborn	480,175	Aug. 2	663	169	60	708
Screw-threading machine	F. F. Voigt	485,245	Nov. 1	137	41	61	601
Screw. Wood	H. K. Jones	470,804	Mar. 15	1815	466	58	1467
Screw. Wood	H. K. Jones	471,179	Mar. 22	2393	610	58	1591
Screws. Lathe attachment for cutting	R. Norwell	477,777	June 28	2479	620	59	1972
Screws. Machine for making	P. Baron	467,787	Jan. 26	2403	{ 610 611 612 613 }	58	480
Scrubber and mop-head. Combined	E. F. Rowe	472,486	Apr. 5	748	190	59	142
Scrubbing and sweeping machine. Combined	G. M. Bennett	479,616	July 26	2434	606	60	514
Scrubbing-machine	E. S. Hawks	466,681	Jan. 5	585	151	58	113
Scrubbing-machine	H. Prud'homme	478,636	July 12	874	{ 215 216 }	60	189
Sculpture. Translucent	F. A. Shaw	478,765	July 12	1071	266	60	228
Scuffle and skylight	G. Weber	477,876	June 28	2651	663	59	2003
Scythe attachment	W. C. Blount	472,652	Apr. 12	990	256	59	201
Scythe-snath	C. C. Myers	472,626	Apr. 12	959	248	59	196
Sea-walls. Construction of	B. C. Kenway	482,059	Sept. 6	224	53	60	1379
Seal	E. J. Brooks	481,892	Aug. 30	3486	854	60	1307
Seal	S. E. Cheeseman	481,472	Aug. 23	2798	688	60	1157
Seal	B. E. von Possanner-Ehrnthall	470,257	Mar. 8	938	233	58	1290
Seal. Bag	W. D. Kenyon	485,415	Nov. 1	414	111	61	657
Seal. Center	J. Hearne	485,629	Nov. 8	727	190	61	737
Seal. Envelope	H. Denis	479,975	Aug. 2	317	78	60	642
Seal. Hasp	G. J. Saurbrey	474,411	May 10	854	224	59	813
Seal-lock	P. H. Conger	476,250	June 7	98	6	59	1444
Seal-lock	C. E. Davis	466,396	Jan. 5	133	37	58	27
Seal-lock	J. Dowling	476,617	June 7	591	141	59	1554
Seal-lock	J. Dowling	482,118	Sept. 6	320	76	60	1398
Seal-lock	J. B. Price	483,867	Oct. 4	515	129	61	107
Seal-lock	W. Simpson and J. George	481,206	Aug. 23	2345	578	60	1073
Seal-lock	O. E. Wheaton	487,591	Dec. 6	571	146	61	1435
Seal-press	E. J. Brooks	485,370	Nov. 1	343	91, 92	61	649
Seal-press	S. E. Cheeseman	487,346	Dec. 6	172	48	61	1354
Seal-press	A. G. Douthit	487,321	Dec. 6	138	40	61	1348
Sealed can	G. W. Carnrick	482,055	Sept. 6	217	51	60	1377
Sealing device	C. Cuttriss	475,442	May 24	2478	632	59	1159
Sealing device	L. Wurzburg	482,216	Sept. 6	485	116	60	1429
Seam folder. Double	H. L. Totten	478,723	July 12	996	247	60	214
Seam for sheet metal	C. E. Bertels	475,656	May 24	2814	713	59	1225
Seam-iron	E. J. Weller	468,554	Feb. 9	1026	261	58	733
Seam-pressing device	J. E. Brown	476,606	June 7	573	137	59	1550
Seam-pressing frame	F. J. Kellogg	480,589	Aug. 9	1343	335	60	851
Seaming-machine	G. F. E. Kanzleiter	481,033	Aug. 16	2035	508	60	1001
Seaming-machine. Can	C. W. Ellsworth	478,580	July 12	799	197	60	174
Seaming-machine. Can	J. B. Foote	476,258	June 7	44	10	59	1446
Seaming-machine. Sheet-metal	C. Hoff	470,755	Mar. 15	1734	447	58	1452
Seaming metal cans, tins, &c. Apparatus for double	W. Woolnough	486,999	Nov. 29	2944	759	61	1223
Seaming the heads upon cans. Device for	E. Norton	487,764	Dec. 13	865	220	61	1510
Seaming tool. Metal	C. H. A. Dissinger	487,320	Dec. 6	137	40	61	1348
Seaside-seat	H. Petrie	470,255	Mar. 8	935	232	58	1289
Seat:							
See Adjustable seat.	Seaside-seat.						
Bicyclo-seat.	Spring-seat.						
Boat-seat.	Tilting seat.						
Car-seat.	Vehicle-seat.						
Coin-freed seat.	Vehicle jump-seat.						
Folding seat.	Vehicle shifting seat.						
Harvester-seat.	Velocipede-seat.						
Operator's seat.	Wagon-seat.						
Reversible seat.	Window-seat.						
School-seat.							
Seat	E. C. Haeseler	488,555	Dec. 27	2171	536	61	1802

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Seat.....	T. H. Hicks.....	484,367	Oct. 11	1286	328	61	274
Seat.....	C. C. A. Schindler.....	483,265	Sept. 27	2211	555	60	1806
Seat.....	C. C. A. Schindler.....	483,266	Sept. 27	2212	556	60	1806
Seats and valves. Hardening.....	J. Powell.....	481,332	Aug. 23	2577	633	60	1115
Seats. Reversible back for car or other.....	M. N. Forney.....	482,447	Sept. 13	886	{ 213 214 }	60	1521
Secondary battery.....	A. E. Colgate.....	479,753	July 26	2669	663	60	558
Secondary battery.....	H. E. Dey.....	473,146	Apr. 19	1764	446	59	360
Secondary battery.....	H. E. Dey.....	473,147	Apr. 19	1766	446	59	360
Secondary battery.....	R. Eickemeyer.....	486,094	Nov. 15	1471	{ 387 388 }	61	906
Secondary battery.....	J. B. Entz and W. A. Phillips.....	467,573	Jan. 26	2079	526	58	418
Secondary battery.....	J. H. Gerry and C. E. Long.....	478,230	July 5	262	65	60	53
Secondary battery.....	W. W. Griscom.....	481,560	Aug. 30	2946	723	60	1203
Secondary battery.....	H. H. Lloyd.....	477,182	June 14	1492	365	59	1749
Secondary battery.....	W. Main.....	485,013	Oct. 25	2349	605	61	512
Secondary battery.....	G. F. Parker and C. E. Crapo.....	470,701	Mar. 15	1653	429	58	1436
Secondary battery.....	I. L. Roberts. (Reissue).....	11,238	Apr. 26	3020	761	59	623
Secondary battery.....	W. L. Silvey.....	477,914	June 28	2707	678	59	2014
Secondary battery.....	W. L. Silvey.....	484,120	Oct. 11	882	224	61	195
Secondary battery.....	C. F. Winkler.....	471,590	Mar. 29	2998	763	58	1714
Secondary battery.....	C. F. Winkler.....	471,592	Mar. 29	3001	763	58	1715
Secondary battery.....	N. Wladimiroff.....	488,726	Dec. 27	2445	607	61	1856
Secondary-battery plate.....	E. C. Paramore.....	476,483	June 7	399	92	59	1515
Section-liner and protractor. Combined.....	L. Miller.....	471,428	Mar. 22	2767	706	58	1662
Sectional boiler. Cast-iron.....	H. A. Smith.....	482,657	Sept. 13	1207	{ 294 295 }	60	1584
Sectional heater.....	E. P. Waggoner.....	474,311	May 3	675	{ 174 175 }	59	767
Seed-cleaner.....	R. W. Jessup.....	469,252	Feb. 23	2101	540	58	961
Seed-delinting machine. Cotton.....	J. H. McCormick.....	481,416	Aug. 23	2708	666	60	1140
Seed-drill.....	E. E. Barclay.....	466,762	Jan. 12	729	189	58	149
Seed-drill.....	R. P. Howard.....	488,072	Dec. 13	1391	{ 345 346 }	61	1616
Seed-drill.....	P. Scandracof and I. Dimovich.....	488,775	Dec. 27	2516	626	61	1870
Seed-drills. Spring-hoe for.....	P. R. Wells.....	474,430	May 10	884	230	59	819
Seed-extracting machine.....	B. L. Hubert.....	469,026	Feb. 16	1772	452	58	890
Seed-hopper feed device.....	T. R. Crane.....	487,720	Dec. 13	792	203	61	1495
Seed-hull-linting machine. Cotton.....	J. J. Faulkner.....	466,669	Jan. 5	569	147	58	110
Seed huller. Cotton.....	J. J. Faulkner.....	477,997	June 28	2832	{ 708 709 }	59	2040
Seeder.....	F. A. Crane.....	482,470	Sept. 13	924	225	60	1528
Seeder and gang-plow. Combined.....	M. C. Egan.....	471,050	Mar. 15	2183	562	58	1538
Seeder and harrow. Combined.....	H. S. Nelson and F. M. Heuett.....	486,494	Nov. 22	2088	553	61	1043
Seeder. Broadcast.....	D. G. Daniels.....	477,325	June 21	1749	428	59	1810
Seeder. Broadcast.....	A. Stansel.....	484,683	Oct. 15	1796	457	61	388
Seeder. Grain.....	S. H. Purdy.....	471,192	Mar. 22	2411	613	58	1594
Seeder, roller, and pulverizer.....	H. W. Campbell.....	479,242	July 19	1818	{ 455 456 }	60	381
Seeding-machine.....	J. M. Fender and J. L. Riter.....	486,637	Nov. 22	2317	606	61	1088
Seeding-machine.....	A. A. Higden and S. Carlsson.....	470,379	Mar. 8	1175	301	58	1332
Seeding-machine.....	G. W. Kirkpatrick.....	472,891	Apr. 12	1336	342	59	267
Seeding-machine.....	G. W. Kirkpatrick and J. B. Ralston.....	485,948	Nov. 8	1214	320	61	837
Seeding-machine.....	A. Lindgren.....	473,324	Apr. 19	2063	519	59	418
Seeding-machine.....	G. Osten.....	474,758	May 10	1395	353	59	917
Seeding-machine driving-gear.....	T. H. Noxon.....	481,539	Aug. 23	2909	714	60	1180
Seesaw.....	C. J. Hatch.....	477,052	June 14	1283	{ 311 312 }	59	1707
Seesaw.....	C. A. Woodbury.....	481,994	Sept. 6	111	28	60	1356
Semaphore.....	A. A. Strom.....	469,002	Feb. 16	1736	442	58	883
Semaphore-signal.....	P. G. Stuart.....	479,316	July 19	1921	480	60	401
Semi-elliptic spring.....	E. Cliff.....	474,159	May 3	422	101	59	720
Separating apparatus.....	E. L. Howe.....	478,159	July 5	132	33	60	29
Separating particles of different degrees of specific gravity.....	O. B. Peck.....	479,453	July 26	2178	544	60	467
Separating powdered or finely-divided particles, &c.....	O. B. Peck.....	479,455	July 26	2182	{ 545 546 }	60	468
Separating powdered or finely-divided particles.....	O. B. Peck.....	479,953	Aug. 2	278	68, 69	60	635
Separation of materials of different specific weight, and different size. Means for dry.....	H. Pape and W. Henneberg.....	472,682	Apr. 12	1032	{ 266 267 }	59	207
Separator: See Centrifugal separator.	Ore-separator. Phosphate-separator.						
Clay-separator.	Potato-separator.						
Coal-separator.	Slag-separator.						
Cockle-separator.	Spinning-frame yarn-separator.						
Cream-separator.	Steam-separator.						
Dental separator.	Wheat-separator.						
Grain-separator.	Yarn-separator.						
Liquid-separator.							
Magnetic separator.							
Separator.....	A. A. Goubert.....	482,354	Sept. 13	737	177	60	1494
Separator.....	A. Kleinstiver.....	467,133	Jan. 12	1362	{ 347 348 }	58	267
Separator.....	F. H. Wheelan.....	468,066	Feb. 2	240	58	58	570
Separator.....	F. H. Wheelan.....	474,930	May 17	1671	427	59	986
Separator for crushed cement, &c.....	J. R. Berthelet.....	479,617	July 26	2436	607	60	514
Separators. Carriage for.....	A. C. Hopkins.....	470,867	Mar. 15	1913	489	58	1486
Softenead bed. Combined.....	J. Alexander.....	473,863	Apr. 26	2951	744	59	610
Sewage. Disinfecting.....	H. Wollheim.....	486,172	Nov. 15	1591	.....	61	930
Sewage. Purifying.....	E. R. Conder.....	475,670	May 24	2832	.....	59	1228
Sewage-purifying apparatus.....	E. E. Scruby.....	484,823	Oct. 25	2033	521	61	450
Sewage-purifying apparatus.....	J. Wilson.....	479,865	Aug. 2	139	34	60	608
Sewage-purifying apparatus.....	J. Wilson.....	479,866	Aug. 2	140	34	60	609
Sewage-purifying apparatus.....	J. Wilson.....	482,052	Sept. 6	211	50	60	1376

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Sewage-purifying apparatus.....	J. Wilson.....	482,053	Sept. 6	213	51	60	1377
Sewage separating and purifying apparatus.....	W. F. Goodhue.....	478,539	July 5	741	181	60	147
Sewer-gate.....	J. Downs.....	468,985	Feb. 16	1707	435	58	877
Sewer-pipe. Device for handling.....	A. Garce.....	481,707	Oct. 18	1825	464	61	394
Sewer-trap.....	D. H. Donaldson.....	471,105	Mar. 22	2279	585	58	1570
Sewer-trap.....	R. Newton.....	478,808	July 12	1147	284	60	243
Sewer-trap.....	R. Newton.....	468,365	Dec. 20	1870	468	61	1727
Sewers. Door for catch-basins of street.....	G. W. White.....	472,567	Apr. 12	870	224	59	160
Sewers. Flood-gate for.....	E. E. Fitzpatrick.....	470,669	Mar. 15	1609	418	58	1427
Sewers, &c. Machine for digging.....	R. Fobes.....	468,486	Feb. 9	909	231	58	710
Sewerage system.....	S. E. Babcock.....	473,489	Apr. 26	2352	596	59	495
Sewerage system and hollow tile for use in same.....	S. E. Babcock.....	473,490	Apr. 26	2353	597	59	495
Sewerage system. Pneumatic.....	C. T. Liernur.....	482,439	Sept. 13	873	208	60	1519
Sewing knit fabrics. Machine for.....	L. N. D. Williams.....	468,490	Feb. 9	917	232	58	711
Sewing long lengths of fabrics. Machine for.....	C. McNeil.....	468,457	Feb. 9	853	216	58	699
Sewing looped fabrics. Machine for.....	L. Muther.....	469,525	Feb. 23	2530	651	58	1044
Sewing-machine.....	A. W. Bigelow.....	480,229	Aug. 2	761	192	60	736
Sewing-machine.....	J. Bolton.....	470,281	Mar. 8	987	243	58	1300
Sewing-machine.....	E. Calm.....	472,333	Apr. 5	515	133	59	97
Sewing-machine.....	J. H. Clark.....	485,371	Nov. 1	344	92	61	643
Sewing-machine.....	A. A. Cumming.....	485,176	Nov. 1	33	11, 12	61	579
Sewing-machine.....	W. F. Dial.....	480,181	Aug. 2	670	170	60	710
Sewing-machine.....	G. H. Dimond.....	479,739	July 26	2647	656	60	554
Sewing-machine.....	G. H. Dimond.....	479,740	July 26	2650	657	60	554
Sewing-machine.....	O. C. Dolloff.....	488,964	Dec. 27	2820	695	61	1935
Sewing-machine.....	A. Eppler.....	487,214	Nov. 29	3274	836	61	1293
Sewing-machine.....	H. H. Fefel.....	476,455	June 7	351	81, 82	59	1505
Sewing-machine.....	H. H. Fefel.....	476,456	June 7	353	82	59	1506
Sewing-machine.....	B. Fischer.....	466,559	Jan. 5	401	102	58	77
Sewing-machine.....	J. H. Griffin.....	470,891	Mar. 15	1946	498	58	1493
Sewing-machine.....	C. M. Hine.....	477,302	June 21	1714	419	59	1803
Sewing-machine.....	C. B. Hunt.....	474,663	May 10	1252	420	59	889
Sewing-machine.....	C. B. Hunt.....	476,647	June 7	635	154	59	1563
Sewing-machine.....	C. B. Hunt.....	483,454	Sept. 27	2477	623	60	1857
Sewing-machine.....	H. L. Kemp.....	466,607	Jan. 5	477	123	58	91
Sewing-machine.....	F. Kern.....	479,369	July 19	2022	505	60	422
Sewing-machine.....	E. Kohler.....	466,906	Jan. 12	978	249	58	195
Sewing-machine.....	A. Legg and C. W. Weston.....	474,840	May 17	1542	392	59	959
Sewing-machine.....	A. Legg and C. W. Weston.....	474,842	May 17	1545	393	59	960
Sewing-machine.....	F. Lichtfeldt.....	478,063	June 28	2935	394	59	2058
Sewing-machine.....	C. Luraschi.....	476,664	June 7	657	395	59	1567
Sewing-machine.....	A. H. Metcalf and C. S. Gooding.....	469,374	Feb. 23	2294	733	58	1000
Sewing-machine.....	W. A. Neely.....	467,299	Jan. 19	1628	589	58	325
Sewing-machine.....	W. Y. Ober.....	471,017	Mar. 15	2141	590	58	1530
Sewing-machine.....	W. Y. Ober.....	471,494	Mar. 22	2863	549	58	1681
Sewing-machine.....	E. Patten.....	481,266	Aug. 23	2460	550	60	1095
Sewing-machine.....	G. R. Peare.....	467,878	Jan. 26	2558	728	58	509
Sewing-machine.....	M. H. Pearson.....	479,838	Aug. 2	96	729	60	601
Sewing-machine.....	J. W. Ramsden and H. S. Ellis.....	467,136	Jan. 12	1371	24, 25	58	269
Sewing-machine.....	J. W. Ramsden and H. S. Ellis.....	469,217	Feb. 16	2050	350	58	943
Sewing-machine.....	J. Reece.....	484,671	Oct. 18	1779	352	61	384
Sewing-machine.....	E. H. Smith.....	473,894	Apr. 26	3009	524	59	621
Sewing-machine.....	J. P. Stiles.....	478,030	June 28	2885	454	59	2049
Sewing-machine.....	R. W. Thomson and E. M. Phelps.....	469,610	Feb. 23	2650	759	58	1068
Sewing-machine.....	H. R. Tracy.....	469,367	Feb. 23	2279	721	58	907
Sewing-machine.....	J. Vannette.....	480,298	Aug. 9	888	680	60	763
Sewing-machine.....	T. A. Weber.....	469,458	Feb. 23	2420	681	58	1024
Sewing-machine.....	W. R. Wheaton.....	487,383	Dec. 6	234	620	61	1367
Sewing-machine.....	C. H. Willcox and S. Borton.....	472,094	Apr. 5	120	63	59	24
Sewing-machine.....	C. H. Willcox and S. Borton.....	472,095	Apr. 5	127	32	59	25
Sewing-machine attachment.....	A. A. Bilton.....	483,697	Sept. 20	1910	33	60	1737
Sewing machine. Book.....	H. Brehmer.....	466,554	Jan. 5	389	44	58	75
Sewing machine. Book.....	D. M. Smyth.....	468,117	Feb. 2	313	90	58	584
Sewing machine. Book.....	D. M. Smyth.....	468,118	Feb. 2	315	76, 77	58	585

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr's	Vol.	Page.
Sewing machine. Boot or shoe	C. S. Gooding and T. K. Keith	484,958	Oct. 25	2256	{ 581 582 583 }	61	494
Sewing-machine. Boot or shoe	D. Mills	477,435	June 21	1918	{ 473 474 }	59	1842
Sewing-machine. Boot or shoe	D. Mills	477,436	June 21	1919	{ 473 474 }	59	1843
Sewing machine. Boot or shoe	D. and D. Mills, Jr.	477,431	June 21	1908	{ 470 471 }	59	1841
Sewing-machine brake	E. F. Hustis	485,631	Nov. 8	730	{ 190 191 }	61	738
Sewing machine. Broom	G. F. McCombs	487,196	Nov. 29	3251	{ 631 632 }	61	1229
Sewing machine. Broom	G. F. McCombs	487,197	Nov. 29	3252	{ 632 633 }	61	1229
Sewing-machine. Buttonhole	E. B. Allen	473,564	Apr. 26	2480	{ 627 628 629 }	59	520
Sewing-machine. Buttonhole	J. Reece	488,028	Dec. 13	1304	{ 324 325 326 }	61	1598
Sewing-machine buttonhole attachment	T. Powell	467,643	Jan. 26	2176	{ 553 554 }	58	437
Sewing-machine buttonhole attachment	W. Wallick	467,841	Jan. 26	2493	{ 632 633 }	58	498
Sewing-machine clamp. Buttonhole	C. A. French	478,536	July 12	807	{ 199 200 }	60	175
Sewing-machine cop	C. E. Wilkinson	476,436	June 7	327	{ 75 76 }	59	1501
Sewing-machine embroidering attachment	R. W. Whitney	475,426	May 24	2456	{ 626 627 }	59	1155
Sewing-machine fan attachment	G. W. Miller	485,534	Nov. 1	611	{ 163 164 }	61	698
Sewing-machine feed-regulating attachment	R. Todd	473,660	July 12	907	{ 225 226 }	60	195
Sewing-machine feeding mechanism	B. F. Bellows	463,800	Oct. 4	417	{ 103 104 }	61	87
Sewing-machine feeding mechanism	J. Bolton	470,282	Mar. 8	989	{ 244 245 }	58	1300
Sewing-machine feeding mechanism	J. Bolton	484,396	Oct. 18	1338	{ 341 342 }	61	296
Sewing-machine feeding mechanism	J. Bolton	484,402	Oct. 18	1345	{ 343 344 }	61	298
Sewing-machine feeding mechanism	W. S. Brown	469,199	Feb. 16	2008	{ 512 513 }	58	937
Sewing-machine feeding mechanism	A. A. Cuming	485,175	Nov. 1	31	{ 11 12 }	61	579
Sewing-machine feeding mechanism	G. Schrade	487,079	Nov. 29	3064	{ 787 788 }	61	1253
Sewing-machine feeding mechanism	H. R. Tracy	471,036	Mar. 15	2166	{ 557 558 }	58	1535
Sewing-machine feeding mechanism	A. O. Very	486,961	Nov. 29	2886	{ 746 747 }	61	1218
Sewing-machine feeding mechanism	R. G. Woodward	470,092	Mar. 1	673	{ 166 167 }	58	1229
Sewing-machine for finishing buttonhole-pieces	J. Reece	479,572	July 26	2371	{ 591 592 }	60	503
Sewing-machine for finishing buttonhole-pieces	R. W. Thomson and E. M. Phelps	477,028	June 14	1341	{ 201 202 }	59	1698
Sewing-machine for finishing buttonholes	E. M. Phelps and R. W. Thomson	473,178	Apr. 19	1828	{ 461 462 }	59	370
Sewing-machine for forming fringe upon fabrics	G., J. G., and M. O. Rehfuess	469,452	Feb. 23	2411	{ 617 618 619 }	58	1022
Sewing-machine for lasting boots or shoes	T. K. Keith	488,279	Dec. 20	1728	{ 435 436 437 }	61	1699
Sewing-machine for lasting boots or shoes	T. K. Keith	488,523	Dec. 20	2130	{ 527 528 }	61	1778
Sewing-machine for lasting boots or shoes	A. Seaver	487,023	Nov. 29	2980	{ 767 768 769 }	61	1235
Sewing-machine for over stitching buttonhole-thrums	E. M. Phelps	484,744	Oct. 18	1889	{ 481 482 483 }	61	408
Sewing-machine for stitching buttonholes	J. T. Hogan	472,501	Apr. 5	775	{ 197 198 199 }	59	147
Sewing-machine frame	B. F. Bellows	482,958	Sept. 20	1695	{ 426 427 }	60	1692
Sewing-machine grinding attachment	H. W. Hock	473,000	Apr. 19	1523	{ 389 390 }	59	316
Sewing-machine guide	G. H. Curtis	488,186	Dec. 20	1575	{ 395 396 }	61	1670
Sewing-machine guide	G. H. Curtis	488,187	Dec. 20	1576	{ 395 396 }	61	1670
Sewing-machine guide	T. C. Robinson	486,811	Nov. 22	2597	{ 676 677 }	61	1144
Sewing-machine guide	S. and S. A. Winters	488,862	Dec. 27	2658	{ 658 659 }	61	1900
Sewing-machine guiding device	L. S. Chaffee	486,821	Nov. 22	2616	{ 682 683 }	61	1149
Sewing-machine guiding device	W. H. Symington and W. Anderson	477,341	June 21	1771	{ 433 434 }	59	1814
Sewing-machine hand attachment	J. Slaughter	486,358	Nov. 15	1879	{ 495 496 }	61	988
Sewing-machine lap-seam guide	A. Iversen	488,073	Dec. 13	1393	{ 346 347 }	61	1617
Sewing-machine loop-taker	W. F. Dial	480,180	Aug. 2	668	{ 170 171 }	60	709
Sewing-machine loop-taker	W. F. Dial	480,182	Aug. 2	674	{ 171 172 }	60	710
Sewing-machine loop-taker	J. A. Russell	472,512	Apr. 5	792	{ 203 204 }	59	151
Sewing-machine loop-taker	H. R. Tracy	471,035	Mar. 15	2164	{ 557 558 }	58	1535
Sewing-machine motor	A. H. Clayton	485,487	Nov. 1	516	{ 136 137 }	61	677
Sewing-machine motor	B. Reichelt	472,818	Apr. 12	1232	{ 316 317 }	59	246
Sewing-machine needle	J. E. Chenette	474,211	May 3	502	{ 120 121 }	59	735
Sewing-machine needle	E. J. Hall	467,408	Jan. 19	1787	{ 455 456 }	58	356
Sewing-machine needle	E. J. Hall	471,857	Mar. 23	3413	{ 871 872 }	58	1792
Sewing-machine needle	E. J. Hall	471,972	Mar. 23	3569	{ 911 912 }	58	1823
Sewing-machine needle	A. Legg and C. W. Weston	474,841	May 17	1544	{ 394 395 }	59	959
Sewing-machine needle	C. H. Willcox and S. Borton	472,096	Apr. 5	133	{ 36 37 }	59	26
Sewing-machine needle-hair	P. Diehl	478,576	July 12	794	{ 196 197 }	60	173
Sewing-machine needle. Cylindrical	M. R. Thruston	480,150	Aug. 2	622	{ 157 158 }	60	701
Sewing-machine needle-threader	E. C. Jenkins	479,420	July 26	2131	{ 532 533 }	60	457
Sewing-machine needle-threader	E. C. Jenkins	479,427	July 26	2132	{ 533 534 }	60	458
Sewing-machine needle-threader	E. C. Jenkins	479,428	July 26	2133	{ 533 534 }	60	458
Sewing-machine operating attachment	M. L. Birdsong	471,462	Mar. 22	2818	{ 718 719 }	58	1672
Sewing-machine oscillating hook	A. Rontke	484,462	Oct. 18	1443	{ 368 369 }	61	317
Sewing-machine. Overedge	J. G. Greene	472,046	Apr. 5	55	{ 13 14 }	59	13
Sewing-machine. Overseaming	P. Diehl	478,994	July 19	1429	{ 354 355 356 }	60	308
Sewing-machine plaiting attachment	J. Douglas	488,547	Dec. 27	2159	{ 534 535 536 }	61	1799
Sewing-machine plaiting attachment	J. G. Greene	480,200	Aug. 9	828	{ 211 212 }	60	752
Sewing-machine presser-foot	J. Douglas	478,095	July 5	31	{ 10 11 }	60	9
Sewing-machine quilting attachment	J. W. Clayton	482,467	Sept. 13	913	{ 223 224 }	60	1526
Sewing-machine quilting attachment	C. W. Delany	480,252	Aug. 9	805	{ 207 208 }	60	747
Sewing-machine quilting attachment	J. S. Dickey	488,350	Dec. 20	1847	{ 462 463 }	61	1732
Sewing-machine quilting attachment	J. C. Galloway	485,100	Oct. 25	2479	{ 637 638 }	61	539
Sewing-machine quilting-frame	G. M. Moore and G. W. Stoen	479,634	July 26	2492	{ 621 622 }	60	525
Sewing-machine ruffling mechanism	O. M. Chamberlain	472,431	Apr. 5	660	{ 168 169 }	59	124
Sewing-machine scalloping attachment	G. W. Kemp	483,496	Sept. 27	2527	{ 636 637 }	60	1868
Sewing machine. Shoe	G. Hooper, 2d	474,450	May 10	921	{ 237 238 }	59	825
Sewing machine. Shoe	W. Y. Ober	467,429	Jan. 19	1821	{ 465 466 }	58	362
Sewing machine. Shoe	J. A. True	480,882	Aug. 16	1800	{ 450 451 }	60	956

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Sewing-machine shuttle.	J. Bolton	470,283	Mar. 8	990	245	58	1301
Sewing-machine shuttle.	J. Bolton	484,393	Oct. 18	1338	340	61	296
Sewing-machine shuttle.	A. M. Leslie	482,850	Sept. 20	1515	377	60	1658
Sewing-machine shuttle-actuating mechanism	R. H. St. John	485,897	Nov. 8	1132	300	61	820
Sewing-machine shuttle-actuating mechanism	H. R. Tracy	471,037	Mar. 15	2167	557	58	1535
Sewing-machine shuttle-carrier.	S. Benson	467,461	Jan. 19	1866	476	58	372
Sewing-machine-shuttle cop-holder.	C. E. Wilkinson and M. V. Palmer	487,910	Dec. 13	1109	277	61	1557
Sewing-machine shuttle-operating mechanism	J. Bolton	484,397	Oct. 18	1340	341	61	296
Sewing-machine shuttle-operating mechanism	J. Bolton	484,400	Oct. 18	1343	342	61	297
Sewing-machine. Sole.	Z. T. French and W. C. Meyer	473,870	Apr. 26	2963	746 747 748	59	612
Sewing-machine. Sole.	Z. T. French and W. C. Meyer	474,774	May 10	1420	361	59	923
Sewing-machine spool-holder.	L. A. Miller	475,511	May 24	2593	660	59	1181
Sewing-machine spool-holder.	S. Whittier	471,366	Mar. 22	2671	679	58	1645
Sewing-machine stand.	J. Bolton	484,401	Oct. 18	1344	342 343	61	297
Sewing-machine table.	H. R. Tracy	470,959	Mar. 15	2049	524	58	1512
Sewing-machine tacking attachment	J. W. Blodgett	477,636	June 28	2263	566 567	59	1928
Sewing-machine take-up	J. Bolton	484,398	Oct. 18	1341	341	61	296
Sewing-machine take-up	D. Snitzer and M. Kuehn	485,019	Oct. 25	2366	608	61	515
Sewing-machine tension	W. J. Stewart	477,078	June 14	1334	323	59	1717
Sewing-machine-tension apparatus.	C. H. Willcox and S. Borton	472,097	Apr. 5	134	37	59	26
Sewing-machine tension device	C. B. Hunt	485,546	Nov. 1	601	160	61	696
Sewing-machine tension device	I. La Chapelle	488,505	Dec. 20	2095	520	61	1773
Sewing-machine tension device.	A. C. Spencer	488,508	Dec. 20	2099	521	61	1774
Sewing-machine tension device. Shoe.	F. H. Hagadorn and M. J. Nicol	474,381	May 10	804	210	59	803
Sewing-machine tension-releasing device.	G. H. Dimond	473,869	Apr. 26	2959	746	59	612
Sewing-machine thread-controlling device	S. W. Wardwell, Jr.	482,215	Sept. 6	483	115 116	60	1429
Sewing-machine thread-tension device.	W. D. Huse	467,103	Jan. 12	1308	330	58	258
Sewing-machine thread-unwinding device.	N. Howe and A. L. Bush	471,054	Mar. 15	2188	564	58	1540
Sewing-machine thread-unwinding device.	M. B. Reigh	477,611	June 21	2200	546	59	1899
Sewing-machine thread-unwinding device.	M. B. Reigh	485,136	Oct. 25	2531	650	61	549
Sewing-machine treadle. Swinging	C. W. Smart	470,843	Mar. 15	1884	483	58	1480
Sewing-machine trimmer.	A. O. Very	476,339	June 7	177	42	59	1471
Sewing-machine trimmer.	R. G. Woodward and C. Tium	480,377	Aug. 9	1012	254	60	786
Sewing-machine trimming attachment.	A. G. Forbes and G. W. Kemp	485,538	Nov. 1	591	158	61	694
Sewing-machine tuck-creaser	H. P. Steward	481,599	Aug. 30	3008	736	60	1214
Sewing-machine waxing device.	M. H. Pearson	483,083	Sept. 20	1886	477	60	1732
Sewing-machine work-compressing mechanism	C. S. Gooding	488,629	Dec. 27	2225	563	61	1827
Sewing-machine work guiding and grooving attachment.	J. S. Henderson	477,896	June 28	2680	670	59	2008
Sewing-machine work-guiding device	E. K. Morrison	468,056	Feb. 2	224	55	58	568
Sewing-machines. Attachment-holder for	T. S. Maxwell	468,153	Feb. 2	370	92	58	597
Sewing-machines. Carriage for carrying and operating	M. W. Lawrence	482,829	Sept. 20	1483	369	60	1652
Sewing-machines. Feeding mechanism for hoot or shoe	D. Mills	477,434	June 21	1915	472	59	1842
Sewing-machines. Guiding attachment for fur.	C. Booss	476,725	June 7	747	184 185	59	1586
Sewing-machines. Leading-in device for overedge.	E. B. Rudolph	473,996	May 3	174	41	59	672
Sewing-machines. Motor for driving	G. Caspani	469,077	Feb. 16	1840	471	58	904
Sewing-machines. Rotating hook mechanism for hoot or shoe	D. Mills	477,433	June 21	1913	472	59	1841
Sewing-machines. Suspending-clamp for use with carpet.	F. Ames	472,779	Apr. 12	1180	302	59	236
Sewing on buttons. Machine for	P. Schoen	487,972	Dec. 13	1197	299 300	61	1575
Sewing or embroidery table.	A. R. P. Morton	486,602	Nov. 22	2260	590	61	1076
Sewing straw covers for bottles. Machine for	V. Fleckenstein	480,082	Aug. 2	515	131 132	60	680
Sewing sweat-bands in hats. Machine for	W. P. Gammons, Jr.	477,750	June 28	2443	610	59	1964
Shade and curtain fixture	J. H. Herring	486,040	Nov. 8	1362	362	61	868
Shade attachment.	E. T. Burrowes	476,783	June 14	842	208	59	1618
Shade attachment. Window.	H. L. Hall	483,490	Sept. 27	2519	634	60	1866
Shade bracket. Window.	J. R. Ligon, Sr.	473,402	Apr. 19	2207	554	59	446
Shade-finishing clamp.	L. Doll	473,917	May 3	49	9	59	645
Shade fixture. Window.	G. Biehn	477,495	June 21	2015	499 500	59	1862
Shade fixture. Window.	F. M. Carthy and T. F. Flynn	487,714	Dec. 13	775	199	61	1492
Shade fixture. Window.	J. C. Perkins	479,766	July 26	2696	671	60	563
Shade fixture. Window.	W. W. Wythe	475,228	May 17	2141	543	59	1078
Shade-holder	F. Adams	482,887	Sept. 20	1586	398 399	60	1670
Shade-holder	E. F. Gennert and J. F. Cunningham.	480,425	Aug. 9	1095	273	60	800
Shade-holder	L. Spitzer	487,858	Dec. 13	1027	257	61	1542
Shade holder. Curtain.	C. E. Dodd	487,211	Nov. 29	3270	835	61	1293
Shade or screen. Window	M. M. Killinger	482,798	Sept. 20	1443	358	60	1643
Shade-roller fixture	H. W. Simms	469,032	Feb. 16	1780	454	58	892
Shade-roller. Spring	E. F. Hartshorn	483,553	Oct. 4	56	14	61	13
Shade-roller. Spring	S. Hartshorn	466,413	Jan. 5	161	43	58	32
Shade-roller. Spring	J. C. Perkins	481,733	Aug. 30	3224	787	60	1255
Shade-rollers. Spindle-tip for spring	J. C. Perkins and L. E. Leigh	482,563	Sept. 13	1082	263	60	1560
Shade supporter. Window.	S. T. Stuver	483,796	Oct. 4	412	102	61	86
Shade. Window.	M. M. Killinger	482,797	Sept. 20	1442	357	60	1642
Shade. Window.	P. Michel	467,567	Jan. 26	2070	523	58	417
Shades to rollers. Attaching window.	E. F. Hartshorn	484,962	Oct. 25	2264	584	61	496
Shaft attachment.	D. W. Locke	485,874	Nov. 8	1087	289	61	811
Shaft attachment. Vehicle.	L. G. Hagne	487,524	Dec. 6	479	125	61	1416
Shaft attachment. Vehicle.	F. M. Merrick	483,568	Oct. 4	78	19	61	18
Shaft attachment. Vehicle.	C. H. Sherman	468,936	Feb. 16	1608	407	58	858

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Shaft-bearing. Adjustable	B. W. Grist	486,461	Nov. 15	1949	{ 516 517	{ 61	1003
Shaft-bearing. Turbine	J. Gulden	471,694	Mar. 29	3150	{ 803 521	{ 58	1742
Shaft-bending machine. Vehicle	T. E. Montague	473,329	Apr. 19	2071	{ 522 523	{ 59	420
Shaft-coupling	C. W. Barnaby	481,092	Aug. 16	2150	534	60	1022
Shaft-coupling	J. T. Ferris	469,780	Mar. 1	183	48	58	1136
Shaft. Flexible	G. H. Coates	486,852	Nov. 29	2675	700	61	1176
Shaft-guard. Vehicle	F. De La Matyr	482,726	Sept. 20	1328	324	60	1620
Shaft-hangers. Roller-box for	J. W. Hyatt	485,938	Nov. 8	1196	316	61	834
Shaft-holder. Vehicle	G. W. Killian	468,565	Feb. 9	1039	264	58	736
Shaft-lubricator. Upright	W. G. Stevenson	473,269	Apr. 19	1976	495	59	401
Shaft or pole support	J. H. Kennet	476,390	June 7	259	62	59	1488
Shaft. Sectional vehicle	W. J. Pohrer	483,474	Sept. 27	2498	629	60	1862
Shaft-sinking apparatus	F. Gardner	473,570	Apr. 26	2499	631	59	523
Shaft-straightener	H. F. Busking	485,735	Nov. 8	901	241	61	774
Shaft support. Vehicle	H. L. Cordrey	479,631	July 26	2457	612	60	519
Shaft support. Vehicle	C. H. Ellis	488,000	Dec. 13	1254	312	61	1587
Shaft. Vehicle	J. Atkins	475,916	May 31	3248	820	59	1331
Shaft. Vehicle	G. A. Fraas	480,869	Aug. 16	1783	446	60	953
Shaft. Wagon	G. J. F. Paul	488,772	Dec. 27	2512	624	61	1869
Shafts and pulleys. Clutching, reversing, and speed-changing device for	P. R. Gilbert	469,468	Feb. 23	2437	625	58	1026
Shafts. Bending vehicle	O. A. Goldsworthy	482,475	Sept. 13	929	227	60	1529
Shafts. Cam-clutch for rotating	B. J. Abbott	474,312	May 3	678	170	59	767
Shafts. Dust-proof bearing for	T. A. Edison	472,288	Apr. 5	440	113	59	83
Shafts. Vehicle	W. B. Cullison	482,471	Sept. 13	925	926	60	1528
Shafts. Vehicle	H. Prenzlau	487,037	Nov. 29	3001	772	61	1239
Shafting and hanger therefor. Flexible	J. H. Beebee	475,104	May 17	1955	495	59	1040
Shafting-hanger	A. H. Wagner	482,287	Sept. 6	599	142	60	1452
Shafting. Level-hanger for	N. D. Poole	487,427	Dec. 6	325	83	61	1386
Shafting-support	J. A. Evans	484,148	Oct. 11	935	240	61	205
Shampooing apparatus. Portable	H. J. Garbutt	465,921	Nov. 8	1169	308	61	828
Shaper	C. Douglas	469,852	Mar. 1	306	78	58	1159
Shaper and cutter head	J. J. Quinn	485,427	Nov. 1	428	114	61	660
Shaper. Reversible universal	M. Morton	472,061	Apr. 5	75	20	21	59
Share attachment	J. Gilbert	487,120	Nov. 29	3135	804	61	1267
Sharpening device	F. B. French	477,592	June 21	2168	537	59	1893
Sharpening matcher-heads. Machine for	W. E. Hazard	484,094	Oct. 11	853	216	61	189
Shaving-case	H. T. Peters	483,579	Oct. 4	99	24	61	22
Shavings-washing machine	R. H. Herder	482,684	Sept. 13	1254	306	60	1593
Shawl-strap	W. J. Acheson	471,988	Mar. 29	3592	917	58	1827
Shawl-strap	E. G. Wheeler	474,071	May 3	299	73	59	695
Sheaf-carrier	W. A. Kirby	481,144	Aug. 16	2343	{ 552 553	{ 60	1039
Shearing and punching machine. Combined	G. Van Wagenen	484,832	Oct. 25	2048	{ 524 525	{ 61	453
Shearing-machine	J. B. Foote	474,822	May 17	1507	385	59	953
Shearing-machine	C. Kieser	472,928	Apr. 12	1392	357	59	279
Shearing-machine	J. M. Long	479,122	July 19	1631	408	60	345
Shearing-machine	P. Rohan	478,023	June 28	2875	719	59	2047
Shearing-machine. Bevel	H. C. Jones	477,900	June 28	2687	672	59	2010
Shearing-machine. Hydraulic	E. W. Naylor	471,824	Mar. 29	3369	858	58	1783
Shears:							
See Animal-shears. Metal-shears.							
Fruit clipping and holding shears. Sheep-shears.							
Grass-shears.							
Shears	T. Berridge	474,284	May 3	615	152	59	756
Shears	G. Brandenburg	488,959	Dec. 27	2815	693	61	1933
Shears	F. B. Finnigan	467,130	Jan. 12	1358	346	58	286
Shears	C. Hamann and J. A. Schmidt	476,459	June 7	359	83	59	1507
Shears	H. Heinrichs	467,808	Jan. 26	2442	620	58	487
Shears	H. Herder	479,090	July 19	1576	395	60	335
Shears	A. Prohaska	468,207	Feb. 2	452	112	58	613
Shears	A. Rimmelin	473,710	Apr. 26	2716	683	59	564
Shears	E. A. Sanders	481,200	Aug. 23	2335	575	60	1071
Shears	J. H. Stratton	477,711	June 28	2379	594	59	1953
Shears	T. N. Underwood	482,857	Sept. 20	1526	379	60	1660
Shears	E. F. Weber	477,343	June 21	1774	434	59	1815
Shears	W. Wilkinson	469,988	Mar. 1	523	130	58	1200
Shears	R. Wreden	467,025	Jan. 12	1164	295	58	230
Sheave-support. Adjustable	B. W. Grist	486,402	Nov. 15	1950	517	61	1003
Shed. Portable	J. T. Richmond	467,314	Jan. 19	1647	419	58	329
Shed. Portable hay or grain	T. J. Kelley	487,927	Dec. 13	1138	284	61	1563
Sheep box and vat. Combined	G. G. and S. B. Gayman	477,894	June 28	2677	669	59	2008
Sheep-rack	J. N. Scudder	486,508	Nov. 22	2109	557	61	1048
Sheep-shearing machine	A. Melchior	478,286	July 5	357	87	60	72
Sheep-shears	J. D. Todd	484,379	Oct. 11	1307	334	61	278
Sheet-delivery mechanism	W. Scott	484,251	Oct. 11	1104	{ 279 280	{ 61	239
Sheet-gathering machine	A. Bredenber	466,719	Jan. 5	657	169	58	125
Sheet-metal and wire-cutting tool	W. H. Flinn	472,210	Apr. 5	322	83	59	60
Sheet-metal. Apparatus for galvanizing	M. Bayliss	471,065	Mar. 15	2269	567	58	1543
Sheet-metal articles. Enameling	H. Claus	472,033	Apr. 5	36	59	59	9
Sheet-metal articles. Forming-machine for	S. O'Brien	483,362	Sept. 27	2345	590	60	1831
Sheet-metal articles. Machine for the manufacture of	J. R. Paddock	488,633	Dec. 27	2301	570	61	1828
Sheet-metal articles. Manufacturing	F. Vohringer	475,642	May 24	2793	708	59	1221
Sheet-metal articles. Means for ornamenting	B. M. Abell and W. Ostrander	482,837	Sept. 20	1495	372	60	1654
Sheet-metal-bending machine	J. Clark	480,396	Aug. 9	1044	262	60	792
Sheet-metal-bending machine	C. J. Colling	475,299	May 24	2250	580	59	1116
Sheet-metal-bending machine	W. R. Kinnear	468,462	Feb. 9	862	{ 218 219	{ 58	701

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &.	Vol.	Page.
Sheet-metal binding-pieces. Machine for making curved	J. H. Williams	469,763	Mar. 1	149	39	58	1129
Sheet-metal box	G. B. Cooper	478,049	June 28	2913	727	59	2054
Sheet-metal box	E. W. Mersereau	470,859	Mar. 15	1902	487	58	1484
Sheet-metal can	A. Kleinfeldt and F. P. McColl	466,991	Jan. 12	1111	281	58	220
Sheet-metal can	A. Kleinfeldt and F. P. McColl	466,992	Jan. 12	1112	281	58	220
Sheet-metal can	G. A. Waeber	474,427	May 10	879	229	59	818
Sheet-metal cans. Apparatus for forming and soldering	W. P. Quentell	480,034	Aug. 2	443	{112 113}	60	666
Sheet-metal cans. Machine for making	G. B. Hopper	484,014	Oct. 11	746	{187 188}	61	167
Sheet metal. Coating	E. Norton	488,527	Dec. 20	2136	529	61	1779
Sheet-metal cones. Method of and dies for forming	F. Hart	460,785	Mar. 1	189	49	58	1137
Sheet-metal-cutting machine	D. A. Ritchie	467,646	Jan. 26	2182	{554 555}	58	438
Sheet metal. Die for drawing	E. Norton	483,008	Sept. 20	1773	449	60	1709
Sheet-metal elbow	W. C. Berger	425,733	Nov. 8	956	256	61	785
Sheet-metal-folding machine	T. C. Belding	474,283	May 3	613	152	59	756
Sheet-metal-folding machine	M. E. Hastings	485,192	Nov. 1	58	18	61	524
Sheet metal. Forming hollow balls, &c., from	J. Burkhardt	480,708	Aug. 16	1547	335	60	903
Sheet-metal joints. Machine for locking	L. L. Sagendorph	468,465	Feb. 9	903	231	58	709
Sheet-metal lock-joint	L. L. Sagendorph	468,464	Feb. 9	907	230	58	709
Sheet metal. Machine for edge-curling	W. J. Gordon and E. D. Gilbert	482,962	Sept. 20	1701	{429 430}	60	1693
Sheet metal. Machine for profiling	G. A. Ohl	428,576	Dec. 27	2212	548	61	1811
Sheet-metal package	E. Allred	476,353	June 7	197	47	59	1474
Sheet-metal pipe	T. C. Belding	470,739	Mar. 15	1710	441	58	1448
Sheet-metal pipe	G. W. Knapp	466,955	Jan. 12	1054	267	58	209
Sheet-metal pipe. Machine for making asphalted	J. P. Culver	472,984	Apr. 19	1499	382	59	312
Sheet-metal pipe. Screw-beaded	A. M. Southard	467,999	Feb. 2	141	34	58	351
Sheet-metal pipes. Machine for making	H. D. Rice	484,112	Oct. 11	873	222	61	193
Sheet-metal plate. Compound	W. B. Hollingshead	488,499	Dec. 20	2085	518	61	1771
Sheet-metal plate for tinning and its manufacture	E. Norton	488,151	Dec. 13	1515	380	61	1641
Sheet metal. Press for drawing through and forming up	W. Burton	486,065	Nov. 8	1401	371	61	875
Sheet metal. Scaling	J. W. Britton	479,780	Aug. 2	10	3	60	584
Sheet-metal-shearing machine	F. A. Walsh	468,586	Feb. 9	1067	272	58	741
Sheet-metal-shearing machines. Pattern-table for	C. A. and L. K. Williams	488,344	Dec. 20	1839	{459 460}	61	1720
Sheet-metal-stamping press	J. G. Hodgson	487,271	Dec. 6	50	16	61	1331
Sheet-metal trimmer and cutter	P. Rohan	476,075	May 31	3489	{879 880}	59	1371
Sheet-metal vessel	G. A. Waeber and A. Kleinfeldt	466,993	Jan. 12	1114	281	58	220
Sheet-metal vessel	G. A. Waeber and A. Kleinfeldt	466,994	Jan. 12	1115	282	58	220
Sheet-metal vessel	F. A. Walsh	468,587	Feb. 9	1068	273	58	741
Sheet-metal vessel	F. A. Walsh	485,851	Nov. 8	1051	280	61	804
Sheet-metal vessels. Apparatus for beading and curling	G. I. Holdship	487,529	Dec. 6	487	{127 128}	61	1417
Sheet-metal vessels. Attaching spouts and lips to	G. W. Knapp	487,032	Nov. 29	2992	770	61	1238
Sheet-metal vessels. Die for manufacturing	F. W. Judd	469,741	Mar. 1	116	31	58	1122
Sheet-metal vessels. Mechanism for forming and sizing cylindrical	C. D. Kubach	466,692	Jan. 5	599	156	58	116
Sheet-metal vessels. Method of and machine for treating the margins of	C. M. Brown and E. P. Holden	479,181	July 19	1722	432	60	362
Sheet-metal ware. Enameling	H. Claus	466,325	Jan. 5	27	.....	58	8
Sheet or band metal. Making	O. J. Winlund and A. L. Larson	471,298	Mar. 22	2571	653	58	1625
Sheets from a pile. Method of and means for feeding	L. C. Crowell	486,089	Nov. 15	1455	384	61	903
Shelf. Adjustable store	C. Baum	472,469	Apr. 5	720	183	59	136
Shelf-box	W. W. Winchester	466,479	Jan. 5	271	68	58	52
Shelf-bracket	H. L. Bradley	485,857	Nov. 8	1061	282	61	806
Shelf-bracket	T. Corseaden	476,520	June 7	447	106	59	1525
Shelf-bracket	T. Corseaden	483,834	Oct. 4	470	117	61	97
Shelf-bracket	F. L. Ellis	476,994	June 14	1191	289	59	1688
Shelf-bracket	E. F. Landis	466,608	Jan. 5	480	123	58	92
Shelf. Corner bracket	J. D. Legg	483,069	Sept. 20	1864	472	60	1723
Shelf. Folding	H. Korell	475,323	May 24	2282	587	59	1124
Shelf. Hauging window	W. A. Thompson	482,502	Sept. 13	979	237	60	1540
Shelf. Portable	S. Mosbacher	471,697	Mar. 29	3154	804	58	1743
Shelf-support	F. Gibbs	472,347	Apr. 5	538	129	59	100
Shelf-support	H. M. Hart	471,481	Mar. 22	2847	725	58	1678
Shelving. Adjustable	C. B. Godfrey	478,509	July 5	687	167	60	136
Shelving. Adjustable book	G. Stikeman	475,627	May 24	2773	702	59	1217
Shelving. Store	H. C. Malzen	469,422	Feb. 23	2509	608	58	1013
Shelving. Store	J. P. Walton	469,289	Feb. 23	2165	{555 556}	58	973
Shell	T. G. Bennett	472,732	Apr. 12	1184	303	59	237
Shell for high explosives	J. G. Justin	467,334	Jan. 19	1683	430	58	336
Shell for high explosives	E. Lefever and J. A. Brenner	476,395	June 7	265	63	59	1489
Shell or other projectile	J. E. Bott and G. H. Cammell	472,748	Apr. 12	1138	292	59	228
Sheller:							
See Corn-sheller.							
Shim and railway-rail joint. Metal	W. F. Gould	487,832	Dec. 13	976	246	61	1533
Shingle-basket	L. Thorsen	474,800	May 10	1469	373	59	932
Shingle-edging machine	H. E. Kingsley	471,180	Mar. 22	2394	610	58	1591
Shingle-gage	J. W. Bacon	478,306	July 5	387	93	60	78
Shingle-gage. Adjustable	J. B. Sykes	485,436	Nov. 1	441	118	61	662
Shingle-machine	W. J. Perkins	469,976	Mar. 1	504	{125 126}	58	1196
Shingle. Metallic	H. H. Bohlen	471,938	Mar. 29	3525	900	58	1814
Shingle. Metallic	D. D. Lupton	484,211	Oct. 11	1036	263	61	225
Shingle-planing machine	E. H. N. Clarkson	474,544	May 10	1062	{271 272}	59	852

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Shingle-sawing machine	S. English	470,996	Mar. 15	2111	{ 542 543 }	58	1525
Shingle scoring and marking machine	J. T. Rush	481,198	Aug. 23	2332	574	60	1071
Shingling-bracket	E. K. Beckwith	472,633	Apr. 12	966	250	59	197
Shingling-gage	C. Avery	472,846	Apr. 12	1268	325	59	253
Ship	R. P. Garsed	472,991	Apr. 19	1511	386	59	314
Ship conveyance. Overland	W. R. Kinipple	481,405	Aug. 23	2688	660	60	1135
Ships. Ash-ejector for	H. See	482,759	Sept. 20	1387	344	60	1632
Ships' bottoms. Apparatus for cleaning	J. J. McCutchan	487,198	Nov. 29	3253	832	61	1289
Ships' cables. Device for cutting	J. Squires and C. Petrie	488,847	Dec. 27	2636	653	61	1895
Ships. Construction of	A. P. Bliven	484,888	Oct. 25	2145	550	61	472
Ship's log	R. T. Hall	473,252	Apr. 19	1905	480	59	386
Ship's log	J. S. Negus	481,241	Aug. 23	2407	594	60	1085
Ship's log or apparatus for indicating and recording the speed of vessels.	J. E. Gombault and E. C. Sonnet	477,530	June 21	2075	516	59	1875
Ships' magazines. Device for flooding	W. Tait	482,282	Sept. 6	590	{ 140 141 }	60	1450
Ship's ventilator	T. Utley	484,348	Oct. 11	1260	{ 321 322 }	61	269
Shipping-can. Reinforced	F. Westerbeck	485,119	Oct. 25	2502	643	61	544
Shipping-can. Self-sealing	D. A. Lisk and T. D. Brown	471,871	Mar. 29	3433	876	58	1796
Shipping case or box	E. T. Kepner	473,702	Apr. 26	2706	681	59	563
Shipping-flask for anhydrous ammonia	T. J. Goldschmid	479,592	July 26	2396	597	60	507
Shipping-package	C. L. King	469,744	Mar. 1	120	32	58	1123
Shirt	L. Auer	487,000	Nov. 29	2946	750	61	1229
Shirt	C. H. Brown	478,082	July 5	12	3	60	5
Shirt	E. Culver and C. A. Hascall	485,490	Nov. 1	518	137	61	677
Shirt	T. J. Flagg	466,335	Jan. 5	42	11	58	11
Shirt	J. Gillner	471,683	Mar. 29	3134	799	58	1739
Shirt	J. B. Johnson	477,124	June 14	1395	339	59	1729
Shirt	A. Meyere	481,504	Aug. 23	2847	699	60	1167
Shirt and chest protector	R. P. Woodward	476,503	June 7	422	98	59	1519
Shirt-bosom	A. Rothe	484,243	Oct. 11	1092	277	61	236
Shock-controlling device	P. H. Irgens	478,434	July 5	575	139	60	112
Shoe	R. M. Agee, E. Lane, and W. E. Agee	468,319	Feb. 9	647	161	58	650
Shoe	E. C. Anderson	475,013	May 17	193	483	59	1030
Shoe	W. M. Clafin and K. L. Ames	487,250	Dec. 6	19	6	61	1325
Shoe	A. Eppler, Jr.	487,011	Nov. 29	2963	{ 763 764 }	61	1232
Shoe	G. P. Herndon	485,543	Nov. 1	598	159	61	695
Shoe	G. P. Herndon and J. P. Hollingsworth	467,006	Jan. 12	1129	286	58	223
Shoe	E. McDonald	482,456	Sept. 13	901	219	60	1524
Shoe	E. G. Miles	472,711	Apr. 12	1086	278	59	218
Shoe	H. Newcomb	482,134	Sept. 6	340	81	60	1402
Shoe-clasp	P. Clifford	469,935	Mar. 1	429	107	58	1183
Shoe-clasp	G. Manggang	474,914	May 17	1616	420	59	982
Shoe-counters. Waxing or waterproofing	G. W. Hill	474,013	May 3	205	48	59	677
Shoe-cover	J. Favets	484,705	Oct. 18	1822	404	61	393
Shoe-fastener	J. H. Hamill and P. J. Johnson	484,313	Oct. 11	1208	307	61	258
Shoe-fastener	A. Meyer	470,584	Mar. 8	1477	384	58	1392
Shoe-fastening	A. L. Dorr	470,183	Mar. 8	829	204	58	1269
Shoe-fastening	A. D. Field	483,144	Sept. 27	1980	501	60	1762
Shoe-fastening	S. M. Hamilton	469,299	Feb. 23	2180	559	58	976
Shoe-fastening	C. A. Harvey	468,988	Feb. 16	1711	436	58	878
Shoe-fastening	C. A. Harvey	474,043	May 3	256	62	59	687
Shoe-fastening	J. H. Pontler	480,133	Aug. 2	599	152	60	696
Shoe-fastening	H. S. Pullman	481,638	Aug. 30	3062	748	60	1224
Shoe-fastening	N. P. Sjöberg	471,304	Mar. 22	2580	655	58	1627
Shoe-fastening	E. E. Stacy	479,995	Aug. 2	367	91	60	651
Shoe-fastening	G. W. Watson	484,381	Oct. 11	1309	335	61	279
Shoe float or rasp	A. D. and H. E. Goodell	472,259	Apr. 5	397	103	59	74
Shoe-holder	E. Leger	483,808	Oct. 4	429	106	61	89
Shoe-holder	E. Leger	483,963	Oct. 4	662	166	61	137
Shoe-horn	D. Cady	481,253	Aug. 23	2443	602	60	1092
Shoe-horn	N. A. Dickinson	470,109	Mar. 1	697	171	58	1235
Shoe-horn	C. E. Vail	487,860	Dec. 13	1029	257	61	1543
Shoe-horn	E. E. Wolf	466,643	Jan. 5	526	137	58	102
Shoemaker's tool	F. W. Danielson	488,728	Dec. 27	2448	608	61	1857
Shoe-nail	F. F. Raymond, 2d	476,307	June 7	120	29	59	1462
Shoe-nailing machine	E. D. Childs	479,784	Aug. 2	15	4, 5	60	585
Shoe-shank stiffeners. Making	J. Lowe	470,763	Mar. 15	1745	450	58	1454
Shoe-slugging machine	S. M. Cutter	487,404	Dec. 6	285	74	61	1377
Shoe-slugs. Making	F. F. Raymond, 2d	467,522	Jan. 26	1934	503	58	401
Shoe-soles. Machine for grooving	G. Bryant	483,319	Sept. 27	2292	576	60	1821
Shoe-treeing machine	G. W. Copeland and J. E. Crisp	472,108	Apr. 5	152	41, 42	59	29
Shoe-upper	J. C. Daggett	471,299	Aug. 23	2524	620	60	1105
Shoe-upper	W. T. Martin	469,259	Feb. 23	2107	542	58	963
Shoe-upper protector	S. W. Wales	486,171	Nov. 15	1590	421	61	930
Shoe. Ventilated	L. R. Eastman	485,180	Nov. 1	40	13	61	580
Shoe. Ventilated	W. M. Helbach	479,805	Aug. 2	47	11	60	591
Shoe. Waterproof	E. Roche	473,289	Sept. 27	2249	566	60	1813
Shoes, &c. Fastening for	W. F. Donohoe	466,738	Jan. 5	686	176	58	131
Shoes from squeaking. Preventing	J. C. Gallagher	471,355	Mar. 22	2658	674	58	1642
Shoes, gloves, &c., and lace therefor. Fastening for	P. Koppenhöfer	479,218	July 19	1778	446	60	373
Shoes. Manufacturing turned	R. J. McNally	473,851	Apr. 26	2932	738	59	607
Shopping-bag. Lady's	H. C. Milligan	481,116	Aug. 16	2185	541	60	1029
Shoetgun. Magazine	W. H. Ostrander	469,900	Mar. 1	374	94	58	1173
Shoulder-brace	G. W. Clark	471,267	Mar. 22	2527	642	58	1616
Shoulder-brace	C. R. Harris	467,251	Jan. 19	1553	395	58	312
Shoulder-brace	H. E. and A. M. Matthews	468,425	Feb. 9	800	203	58	691
Shoulder-brace	W. J. Teufel	482,768	Sept. 20	1406	347	60	1635
Shoulder-brace	J. Town	472,086	Apr. 5	112	30	59	23
Shoulder-knot	J. R. Farrell	487,698	Dec. 6	745	190	61	1468

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Shovel:							
See Cultivator-shovel. Steam-shovel.							
Plow-shovel.							
Shovel	T. F. Hammer	467,971	Feb. 2	91	23	58	542
Shovel	J. Kubitzki	487,534	Dec. 6	495	129	61	1418
Shovel	P. Poulson	481,972	Sept. 6	76	20	60	1349
Shovel	H. Reynolds	467,831	Jan. 26	2474	628	58	494
Shovel scraper attachment	R. J. Edwards	475,208	May 17	2112	534	59	1072
Shovels. Making	W. E. Keeler	488,503	Dec. 20	2092	519	61	1772
Show-box	C. Dietz	470,885	Mar. 15	1941	496	58	1492
Show-case	J. C. Loughry	478,619	July 12	853	209	60	184
Show-case corner	J. Hoffman	474,015	May 3	208	48, 49	59	678
Show-case lock	E. E. Heath	470,673	Mar. 15	1613	419	58	1428
Show-fixture	E. Friedlich	488,757	Dec. 27	2489	61	61	1865
Show-frame. Revolving	H. C. Brock and J. Hunter	466,767	Jan. 12	738	191 192	58	151
Show-stand	F. M. Morrow	485,109	Oct. 25	2490	639	61	542
Show-windows. Adjustable stand for	C. H. Gruenhagen	486,981	Nov. 29	2917	753	61	1224
Shutter-bower	H. V. Demarest	469,834	Mar. 1	270	70	58	1153
Shutter-bower	A. Iske	468,941	Feb. 16	1614	408	58	859
Shutter-bower	H. Reichwein	480,136	Aug. 2	604	153	60	697
Shutter-fastener	B. Bernstein	475,921	May 31	3255	821	59	1322
Shutter-fastener	J. Cabus	476,978	June 14	1169	283	59	1683
Shutter-fastener	G. H. Glad	481,111	Aug. 16	2179	539 540	60	1028
Shutter-fastener	E. W. Hagee	482,245	Sept. 6	528	126	60	1437
Shutter-fastener	J. Handwerker	469,446	Feb. 23	2404	616	58	1020
Shutter-fastener	F. Mesker	488,478	Dec. 20	2052	510	61	1764
Shutter-fastener	W. W. Russell and J. Walt	472,551	Apr. 12	649	217	59	175
Shutter-fastener	H. J. Saxton	473,888	Apr. 26	3000	577	59	619
Shutter-fastener	M. F. Ten Eyck	477,973	June 28	2789	699	59	2031
Shutter-fastener	C. L. Walters	482,111	Sept. 6	307	72	60	1395
Shutter-fastener	G. C. Weeks	473,648	Apr. 26	2623	661	59	547
Shutter. Fire-protecting	W. H. Brodie	480,394	Aug. 9	1042	262	60	791
Shutter-opener	A. H. Hull	484,098	Oct. 11	857	217 218	61	190
Shutter-opener	A. H. Hull	486,108	Nov. 15	1493	393	61	910
Shutter stand. Window	A. D. Webster	482,771	Sept. 20	1409	348	60	1635
Shutter-worker	J. N. Farnham	485,811	Nov. 8	990	266	61	792
Shutter-worker	S. M. Fisher	476,044	May 31	3437	868	59	1360
Shutter-worker	J. A. Hadley	484,734	Oct. 18	1869	475 476	61	402
Shutter-worker	C. Hottes	487,071	Nov. 29	3050	782	61	1250
Shutter-worker	A. H. Hull	474,831	May 17	1528	390	59	957
Shutter-worker	V. Kraske and T. Naerup, Jr.	471,128	Mar. 22	2312	594	58	1576
Shutter-worker	D. Levy	470,349	Mar. 8	1125	288	58	1323
Shutter-worker	C. F. Nickerson and L. M. Fleet	484,972	Oct. 25	2278	588	61	498
Shutter-worker	J. S. Patien	482,562	Sept. 13	1081	262	60	1560
Shutter-worker	E. H. Price	479,155	July 19	1677	419	60	354
Shutter-worker	N. Saltmarsh	481,705	Aug. 30	3169	774	60	1245
Shutter-worker	G. Zimmerman	488,492	Dec. 20	2073	515	61	1768
Sickle-head and pitman	N. O. Starks	469,605	Feb. 23	2645	679	58	1067
Sickle. Rotary	J. E. Wright	468,859	Feb. 16	1488	379	58	835
Side-delivery rake	M. Beck	468,382	Feb. 9	744	185 186	58	677
Side-stick and quoin	A. A. Bogen and R. Nix	466,650	Jan. 5	536	139	58	104
Sidewalk-hole guard	E. H. Roberts	472,661	Apr. 12	999	259	59	203
Siding-holder	J. J. Finnand	476,257	June 7	44	10	59	1446
Sieve	W. L. Armstrong	478,976	July 19	1399	347	60	303
Sieve. Adjustable	J. O. Brian	469,488	Feb. 23	2474	635	58	1033
Sieve-surface	O. Schnelle	483,170	Sept. 27	2032	514	60	1773
Sifter	J. Charlesworth	482,545	Sept. 13	1055	256	60	1555
Sifter and sorter. Centrifugal grain	F. Berg	468,865	Feb. 16	1495	381	58	836
Sifter. Ash	C. F. Abbott	487,009	Nov. 29	2961	763	61	1232
Sifter. Ash	J. G. Bast	477,589	June 21	2165	537	59	1892
Sifter. Ash	J. Eckes and A. W. Creue	474,083	May 3	321	76	59	699
Sifter. Ash	L. Pellican	487,350	Dec. 6	183	50	61	1357
Sifter. Coal	E. W. Humphreys	471,177	Mar. 22	2890	610	58	1590
Sifter. Flour	S. Grossmann	467,594	Jan. 26	2110	535	58	424
Sifter. Flour	I. M. Ingram	482,576	Sept. 13	1099	266	60	1563
Sifter. Flour	L. Scruggs	484,980	Oct. 25	2296	593	61	501
Sifter. Hand	J. R. Storie	482,511	Sept. 13	990	240	60	1543
Sifters. Wire agitator for flour	J. H. Bigelow	466,576	Nov. 22	2212	580	61	1066
Sifting and mixing machine	W. Gardner	466,751	Jan. 5	703	180	58	134
Sifting and sorting flour or meal. Machine for	W. Faist and J. Fux	484,306	Oct. 11	1198	305	61	256
Sifting and sorting meal and flour. Apparatus for	C. Hagenmacher. (Reissue)	11,252	June 28	2958	739 740 741 742 743 744	59	2063
Sifting apparatus	H. Seck	469,601	Feb. 23	2640	677 678	58	1066
Sight. Adjustable	H. P. Griswold	472,069	Apr. 12	1015	262 263	59	205
Sight-feed lubricator	W. S. Ashton	471,934	Mar. 29	3521	899	58	1813
Sign	A. L. Bruufield	484,174	Oct. 11	979	251	61	214
Sign	W. R. Garner	468,766	Feb. 9	1338	338	58	796
Sign	F. P. Howard	477,417	June 21	1890	465	59	1837
Sign	J. Lindner	473,883	Apr. 26	2984	752 753	59	616
Sign and price-current. Combined	J. V. Reed	485,229	Nov. 1	115	35	61	597
Sign-board. Interchangeable	I. Emmer	480,255	Aug. 9	809	208	60	748
Sign bracket and frame. Combined	F. E. Schoenberg	488,092	Dec. 13	1416	352	61	1621

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sign. Electric-lamp	E. W. Clay	486,324	Nov. 15	1825	481	61	978
Sign having ornamental letters or designs in relief formed of a composite material and making the same.	E. E. M. Mandigo	480,371	Aug. 9	1003	252	60	785
Sign. Illuminating.	L. J. Webster	468,185	Feb. 2	425	105	58	607
Sign. Lamp-post	C. F. Kuechler	479,006	July 19	1446	359	60	311
Sign-letter	J. E. Barrett	468,720	Feb. 9	1269	323	58	782
Sign or guide board	A. D. Cable	487,603	Dec. 6	589	151	61	1438
Sign. Street.	M. Hofheimer	484,097	Oct. 11	856	217	61	190
Sign. Street.	M. Hofheimer	472,050	Apr. 5	61	16	59	14
Sign. Street.	E. J. Shaw	477,873	June 28	2645	661	59	2002
Sign-writing	S. V. Allen	469,033	Feb. 16	1782	454	58	892
Signs. Apparatus for displaying.	D. L. MacDonald	487,394	Dec. 6	253	69	61	1371
Signal:							
See Car-signal.	Railway-signal.						
Dumb-waiter signal.	Railway and draw-bridge signal.						
Electric signal.	Railway-switch signal.						
Engine-signal.	Railway time-signal.						
Fog-signal.	Semaphore-signal.						
Gong-signal.	Switch-signal.						
Multiple signal.	Switch or station signal.						
Multiple-switch-board signal.	Torpedo-signal.						
Nautical signal.	Train-signal.						
Waiter-signal.							
Signal	J. T. Hambay	472,499	Apr. 5	773	196	59	147
Signal and stand	G. T. Brown	483,420	Sept. 27	2434	612	60	1849
Signal and switch interlocking apparatus	S. T. Dutton	488,805	Dec. 27	2567	637	61	1881
Signal apparatus. Combined police and fire-alarm	L. B. Firman	470,667	Mar. 15	1606	417	58	1427
Signal apparatus. Individual alarm	P. Seiler	479,308	July 19	1900	477	60	399
Signal-box. District	C. E. Scribner	488,579	Dec. 27	2217	549	61	1812
Signal-box. Electrical	T. F. Gaynor	466,604	Jan. 5	471	121	58	91
Signal box. Successive non-interference	W. E. Decrow	486,702	Nov. 22	2424	632	61	1109
Signal-boxes. Device for preventing accidental closing of electric circuits in	W. H. James	484,206	Oct. 11	1029	262	61	223
Signal-compensator	S. H. Stupakoff	486,303	Nov. 15	1794	471	61	972
Signal-compensator	J. J. Turner	479,230	July 19	1795	450	60	376
Signal-compensator	J. J. Turner	479,380	July 19	2040	509	60	425
Signal-light	H. Cochran	479,164	July 19	1690	423	60	357
Signal-repeater	T. H. Patenall	488,285	Dec. 20	1739	438	61	1701
Signal-rocket for vessels	T. W. Hand and W. Teale	480,012	Aug. 2	396	98	60	657
Signal-sounding device. Coin	C. W. Holbrook	481,903	Aug. 30	3506	859	60	1310
Signal-timing apparatus	H. A. Chase	481,613	Aug. 30	3027	740	60	1217
Signal-transmitting system	H. A. Chase	471,534	Mar. 29	2914	742	58	1700
Signal-wires. Compensator for.	S. W. Babcock	481,922	Sept. 6	3	1	60	1335
Signals. Apparatus for setting torpedo	C. A. Weller	470,729	Mar. 15	1695	437	58	1444
Signals. Compensator for	J. J. Turner	470,148	Mar. 1	748	186	58	1244
Signals. Device for setting semaphore	B. Marion	488,825	Dec. 27	2593	643	61	1886
Signaling apparatus	W. B. Chalmers	469,961	Mar. 1	478	118	58	1191
Signaling apparatus	B. J. Noyes	474,852	May 17	1558	397	59	962
Signaling apparatus	B. J. Noyes	474,853	May 17	1560	397	59	963
Signaling apparatus. Electric	W. L. Denio	478,789	July 12	1114	275	60	236
Signaling apparatus. Electric	M. Martin	487,676	Dec. 6	709	180	61	1461
Signaling apparatus. Electric	W. C. Moore	475,334	May 24	2303	592	59	1128
Signaling apparatus. Electric	A. J. Wilson	479,928	Aug. 2	236	59	60	628
Signaling apparatus. Electrical	P. B. Delany	467,651	Jan. 26	2189	556	58	439
Signaling apparatus. Electrical hose	W. Fowler	470,752	Mar. 15	1730	446	58	1451
Signaling apparatus. Electrical hose	W. Fowler	486,807	Nov. 22	2587	674	61	1142
Signaling apparatus. Police and fire-alarm	L. B. Firman	470,666	Mar. 15	1603	417	58	1426
Signaling apparatus. Semaphore	N. J. Smith	470,310	Mar. 8	1057	268	58	1312
Signaling apparatus. Switch for electric	L. Sellner	470,793	Mar. 15	1791	461	58	1462
Signaling apparatus. Train	J. M. Henry and R. B. Wilson	482,126	Sept. 6	331	79	60	1400
Signaling apparatus. Train	H. R. Mason	483,256	Sept. 27	2196	552	60	1804
Signaling apparatus. Train	H. R. Mason	483,257	Sept. 27	2199	553	60	1804
Signaling device	R. T. Bowne	479,396	July 26	2076	521	60	446
Signaling device. Automatic heat	W. G. Day	470,478	Mar. 8	1335	347	58	1362
Signaling device. Electric	J. J. Ross	486,569	Nov. 22	2200	579	61	1065
Signaling device. Train	J. Lynch	470,065	Mar. 1	630	156	58	1221
Signaling system	H. A. Chase	472,983	Apr. 19	1489	381	59	310
Signaling system	H. A. Chase	474,945	May 17	1697	432	59	992
Signaling-system indicator. Electrical	C. F. Gillette	478,324	July 5	412	99	60	83
Signature-press	C. Seybold	471,303	Mar. 22	2577	654	58	1626
Silicates and hydrochloric acid. Process of and apparatus for making	W. Walker	474,539	May 10	1054	270	59	850
Silk, &c. Machine for dressing	G. F. Priestley	468,507	Feb. 9	941	240	58	716
Silk-manufacturing machinery	L. Dimock	483,284	Sept. 27	2238	562	60	1811
Silk or other fibers. Apparatus for degumming	W. H. Whiteley	483,335	Sept. 27	2314	561	60	1825
Silver ores. Smelting complex	C. James	483,962	Oct. 4	660	118	61	137
Silver sulphides. Refining	W. G. Waring	475,907	May 31	3235	818	59	1318
Sink and rack	W. H. Mesick	477,137	June 14	1417	345	59	1733
Sink and washtub. Combined	F. H. Hawkins	475,941	May 31	3288	830	59	1329
Sink connection	F. Goss	472,045	Apr. 5	54	13	59	13
Sinker	D. W. Settle	484,254	Oct. 11	1109	280	61	210
Siphon	J. Hilditch	478,108	July 5	46	13	60	11
Siphon	H. Wheeler	474,889	May 17	1614	412	59	975
Siphon. Elevating	E. Etève and J. Lemichel	479,411	July 26	2099	526	60	450

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Siphon. Intermittent	R. Field	485,759	Nov. 8	926	248	61	779
Siphon-module	H. L. Decker	468,596	Feb. 9	1079	276	58	744
Sirup-gage	J. E. Jacobs	478,330	July 5	421	102	60	84
Sitz-bath	A. B. Jamison	485,943	Nov. 8	1202	318	61	835
Sizing compound.	A. Steinhäuser	469,954	Mar. 1	467		58	1189
Sizing-machines. Spreading-brush for	D. Babcock	469,292	Feb. 23	2170	557	58	974
Skate	T. W. Bryant. (Reissne)	11,217	Jan. 19	1914	489	58	331
Skate	T. W. Bryant	475,926	May 31	3263	823	59	1324
Skate	Y. Henderson	486,872	Nov. 29	2707	706	61	1182
Skate	C. Hirschmann	475,241	May 17	2165	550	59	1082
Skate	T. H. McQuown	467,047	Jan. 12	1206	304	58	237
Skate	W. Nielson	480,610	Aug. 9	1376	342	60	857
Skate	R. R. Norton and H. Hall	486,120	Nov. 15	1513	401	61	914
Skate	J. Warner	480,051	Aug. 2	472	121	60	672
Skate	U. Wierda	475,650	May 24	2504	710	59	1223
Skate. Roller	T. W. Bryant	475,927	May 31	3264	823	59	1334
Skate. Roller	J. Carrie	482,721	Sept. 20	1321	323	60	1619
Skate-sharpener	C. Holland	484,201	Oct. 11	1016	259	61	221
Skate-sharpener	J. Young	471,164	Mar. 22	2368	605	58	1586
Skates. Ankle-support for	L. W. Kenney	477,550	June 21	2106	523	59	1881
Skains or hanks. Machine for forming	G., J. G., and M. O. Rehfuß	468,628	Feb. 9	1127	287	58	753
Skelp-tang	J. Simpson	485,893	Nov. 8	1125	298	61	819
Skewer or needle for closing fowls, &c.	E. Musso	482,969	Sept. 20	1713	432	60	1696
Skewer-pointing machine	J. H. and H. L. Berst	483,205	Sept. 27	2089	530	60	1784
Skid for loading and handling logs	D. Evans, E. H. Percy, and B. Perry	475,011	May 17	1811	459	59	1612
Skins, &c. Apparatus for scouring and washing	T. Burns	478,499	July 5	667	163	60	132
Skins. Machine for plucking hairs from	F. J. Murphy	487,349	Dec. 6	179	50	61	1356
Skins, &c. Machine for treating	O. Potelune	479,460	July 26	2191	549	60	470
Skirt	C. Colgan	477,333	June 28	2577	645	59	1989
Skirt-distending device	G. H. Morgan	467,133	Jan. 19	1448	369	58	291
Skirt-elevator	J. Asten	478,076	July 5	1	1	60	3
Skirt-supporter	G. V. Smith	480,523	Aug. 9	1239	311	60	830
Skiving-machine	H. Masterson	488,212	Dec. 20	1623	405	61	1679
Skiving-machine	J. R. Scott	467,441	Jan. 19	1839	470	58	366
Skiving-machine	J. R. Scott	470,015	Mar. 1	555	137	58	1206
Skiving-machine	J. R. Scott	470,016	Mar. 1	557	138	58	1207
Skiving machine. Counter	M. C. Bowman, A. F. Rose, and C. B. Morse	483,509	Sept. 27	2553	640	60	1872
Skylight	B. F. Parrott	470,896	Mar. 15	1953	500	58	1494
Skylight. Water-tight	A. Danzer	472,438	Apr. 5	670	172	59	125
Slabs, &c. Apparatus for making	A. McLean	478,757	July 12	1054	259	60	225
Slag-separator	J. F. Keiper	484,659	Oct. 18	1764	448	61	381
Slate attachment	M. Wyman	488,411	Dec. 20	1948	487	61	1742
Slate-cleaner	A. Thurber	473,033	Apr. 19	1576	401	59	326
Slate. Double	S. Marks	473,404	Apr. 19	2210	555	59	446
Slate for the blind	E. Shreshley	471,653	Mar. 29	3081	783	58	1729
Slate-frame	H. E. C. Daniels	487,554	Dec. 6	523	135	61	1424
Slate-frame	H. S. Semmel	471,902	Mar. 29	3472	887	58	1804
Slate-muffler	R. Kohler	485,802	Nov. 8	980	263	61	790
Slate-muffler	E. L. Krams	473,120	Apr. 19	1720	435	59	350
Slate. School	J. H. De Neut	487,178	Nov. 29	3222	825	61	1284
Slate-shaving machine	H. and E. Kurtz	484,802	Oct. 25	2002	514	61	444
Slating compound	J. B. Coles	485,455	Nov. 1	471		61	668
Slatted structure for floors, stairs, &c.	N. R. Smith	488,371	Dec. 20	1883	471	61	1729
Sled	W. G. Bouse	469,227	Feb. 23	2066	531	58	955
Sled	H. C. Gammeter	484,632	Oct. 18	1708	433	61	369
Sled and roller-coaster. Combined	F. W. Horstmannshoff	471,639	Mar. 29	3062	779	58	1726
Sled. Bob	R. Douglass	477,743	June 28	2426	606	59	1962
Sled. Bob	S. F. Sparr	481,643	Aug. 30	3069	749	60	1226
Sled-brake	P. T. Denio	481,420	Aug. 23	2812	691	60	1160
Sled-brake	C. C. Skinner	470,263	Mar. 8	944	234	58	1291
Sled-brake	J. Wennberg	482,029	Sept. 6	177	42	60	1369
Sled. Logging	P. Moe	469,332	Feb. 23	2227	571	58	986
Sled roller attachment	T. Chittick	487,990	Dec. 13	1242	309	61	1584
Sled-runner	T. G. Mandt	470,248	Mar. 8	925	229	58	1288
Sled-shoe	R. H. Jordan	488,266	Dec. 20	1709	430	61	1695
Sled-starter	N. E. Brown	473,905	May 3	11	3	59	639
Sleeve and cuff holder	L. H. Taylor	475,905	May 31	3231	817	59	1318
Sleeve-holder	A. Harvey	467,412	Jan. 19	1794	457	58	357
Sleeve-holder	W. Jones	488,522	Dec. 20	2129	527	61	1778
Sleevs. Device for operating sliding	J. Walker	474,428	May 10	881	229	59	818
Sleigh	J. A. Chapman	486,368	Nov. 15	1897	502	61	992
Sleigh	O. A. Normann	467,626	Jan. 26	2469	627	58	493
Sleigh	A. F. Pine	479,154	July 19	1677	419	60	354
Sleigh	H. Umphrey and J. Weekes	487,501	Dec. 6	444	114	61	1409
Sleigh-brake	D. Collard	483,429	Sept. 27	2444	615	60	1851
Sleigh-runner	B. D. Kested	470,576	Mar. 8	1467	382	58	1390
Sleigh-runner. Detachable	C. G. Warner	480,302	Aug. 9	894	227	60	765
Sleigh. Self loading and dumping	L. Hinkelman	477,365	June 21	1814	443	59	1822
Slicer. Fruit or vegetable	S. M. Jones	484,155	Oct. 11	949	243	61	208
Slicing-machine	T. Coldwell	470,987	Mar. 15	2093	536	58	1522
Slide-gage	G. Bauer	474,111	May 3	357	85	59	706
Sliding gate	W. Annspangh	488,105	Dec. 13	1436	360	61	1625
Sliding gate	E. Fischer	476,375	June 7	236	57	59	1482
Sliding gate	J. A. Newton	485,212	Nov. 1	88	27	61	590
Sliding gate	J. R. Payne	488,481	Dec. 20	2056	511	61	1764
Sliding gate	V. Thompson	469,286	Feb. 23	2162	554	58	972

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-G.	Vol.	Page.
Sliding gate.....	D. Walker.....	480,155	Aug. 2	630	159	60	703
Sliding gate.....	M. L. Walters.....	480,755	Aug. 16	1610	404	60	918
Sliding gate.....	A. Wilkison.....	469,843	Mar. 1	284	74	58	1156
Sliding gate.....	A. Wilkinson.....	486,803	Nov. 22	2581	673	61	1141
Sliding gate. Double suspended.....	P. E. Jensen.....	483,614	Oct. 4	146	36	61	31
Slip-holder.....	S. J. Kelso.....	477,942	June 28	2751	6-9	59	202 1/2
Slipper.....	J. D. Chantler.....	483,346	Sept. 27	2149	544	60	1795
Sliver-can.....	J. A. Sutcliffe.....	469,337	Feb. 23	2233	573	58	987
Slotting-machine.....	E. L. Bowers and J. E. Titus.....	469,323	Feb. 23	2212	567 568 603 604	58	983
Slotting-machine.....	L. H. Colburn.....	477,737	June 28	2414	568	59	1960
Sludge. Treating.....	H. A. Frasch.....	488,628	Dec. 27	2293	568	61	1826
Sluice-box. Mining.....	C. J. Kent.....	477,373	June 21	1824	446	59	1824
Small-arms. Firing-pin lock for.....	J. D. Irvine.....	471,122	Mar. 22	2304	591	58	1575
Small-arms. Front sight in.....	E. O. C. Ord.....	472,069	Apr. 5	89	24	59	19
Smelting and saving fumes from complex ores.....	O. H. Pieber.....	469,269	Feb. 23	2128	58	967	
Smelting cast-iron borings, turnings, and shavings. Apparatus for.....	J. Hansen.....	473,741	Apr. 26	2768	695	59	574
Smelting-furnace.....	J. S. Oliver.....	480,699	Aug. 9	1528	379 380 417 418	60	886
Smelting-furnace.....	A. Piat.....	467,310	Jan. 19	1642	636	59	328
Smelting-furnace. Copper.....	B. Richards.....	475,609	May 24	2744	696	59	1211
Smelting-furnace. Reverberatory.....	H. Mathey.....	481,703	Aug. 30	3165	773	60	1244
Smelting-furnace. Zinc-ore.....	S. C. Edgar.....	476,789	June 14	851	210	59	1620
Smelting-furnaces. Discharge-trough for.....	A. J. Schumacher.....	470,511	Mar. 8	1380	360	58	1372
Smelting or reducing plant.....	J. Rourke.....	484,942	Oct. 25	2238	576 577	61	490
Smelting ores containing zinc.....	H. A. Hunnicke.....	487,444	Dec. 6	360	94	61	1392
Smoke and spark arrester and conductor.....	I. J. Hartford.....	469,969	Mar. 1	495	122	58	1194
Smoke and spark arrester and consumer.....	E. J. Hadlock.....	483,055	Sept. 20	1846	469	60	1724
Smoke arrester and conductor.....	F. C. Lechner.....	487,949	Dec. 13	1169	292	61	1570
Smoke-bleacher.....	D. S. and P. J. June.....	488,408	Feb. 9	788	195	58	686
Smoke-burner.....	T. Lustig.....	478,447	July 5	594	144	60	117
Smoke-consumer.....	D. C. Adams.....	467,745	Jan. 26	2348	595	58	469
Smoke-consumer.....	W. H. Burden.....	472,961	Apr. 19	1487	380	59	310
Smoke-consumer.....	T. Gunning.....	482,124	Sept. 6	329	78	60	1399
Smoke-consumer.....	E. J. Hadlock.....	471,757	Mar. 29	3254	829	58	1761
Smoke-consumer.....	J. L. Hornig.....	486,781	Nov. 22	2546	665	61	1133
Smoke-consumer.....	J. N. Merrill.....	469,212	Feb. 16	2043	522	58	942
Smoke-consumer.....	R. and R. Rogerson.....	471,774	Mar. 29	3285	838	58	1767
Smoke-consumer.....	J. Sargent.....	481,719	Aug. 30	3201	792	60	1251
Smoke-consumer and fuel-saver.....	G. McDowell.....	469,264	Feb. 23	2118	544 545	58	965
Smoke-consuming device.....	E. Knizer.....	486,582	Nov. 22	2225	584	61	1069
Smoke-consuming furnace.....	E. Cartwright.....	478,401	July 5	528	129	60	104
Smoke-consuming furnace.....	W. Conlson.....	475,205	May 17	2107	532	59	1071
Smoke-consuming furnace.....	G. L. Cross.....	487,823	Dec. 13	960	243	61	1530
Smoke-consuming furnace.....	B. Müller.....	470,501	Mar. 8	1366	356	58	1368
Smoke-consuming furnace.....	W. Oehlstrom.....	483,237	Sept. 27	2139	542	60	1793
Smoke-consuming furnace.....	G. S. Riley.....	477,780	June 28	2483	621	59	1972
Smoke-consuming furnace.....	R. L. Walker.....	479,100	July 19	1591	398	60	338
Smoke-consuming furnace. Automatic.....	M. J. Lynn.....	475,876	May 31	3181	807	59	1309
Smoke consuming or preventing furnace.....	J. A. Baldwin.....	470,171	Mar. 8	800	199 200	58	1263
Smoke-conveyer.....	G. E. Bell.....	472,650	Apr. 12	986	255	59	200
Smoke-escape.....	G. L. Barrett.....	485,523	Nov. 1	561	150	61	667
Smoke-excluding hood.....	C. Herlick.....	478,429	July 5	568	137	60	111
Smoke-funnel.....	H. W. Goodridge and C. Jonsson.....	477,209	June 21	1547	360	59	1773
Smoke-houses. Apparatus for conveying meat through.....	J. Müller.....	474,606	May 10	1158	294 295	59	871
Smoke-preventer.....	C. Smith.....	480,630	Aug. 9	1416	353	60	865
Smoke-purifier.....	C. Fink.....	486,247	Nov. 15	1706	450	61	953
Smoke. Purifying.....	A. Raymond.....	467,264	Jan. 19	1574	400 401	58	316
Smoke stack and conductor.....	J. W. Duncan and T. B. Quinby.....	485,535	Nov. 1	581	156	61	692
Smoke-stack spark and cinder attachment.....	B. W. Sweet.....	478,296	July 5	369	90	60	74
Smoothing-cylinder. Electrically-heated.....	W. Mitchell.....	468,426	Feb. 9	810	203	58	691
Smoothing-iron. Electrically-heated.....	W. Mitchell.....	469,732	Mar. 1	201	52	58	1140
Snap-hook.....	S. Brown.....	487,980	Dec. 13	1208	302	61	1578
Snap-hook.....	H. N. Bull, D. Dickey, and H. F. Hutton.....	470,980	Mar. 15	2084	533	58	1520
Snap-hook.....	J. W. Collins.....	472,962	Apr. 12	1447	369	59	289
Snap-hook.....	E. Covert.....	467,399	Jan. 19	1775	453	58	353
Snap-hook.....	J. L. Cox.....	482,302	Sept. 6	624	149	60	1457
Snap-hook.....	A. Filkins.....	473,173	Apr. 19	1820	459	59	369
Snap-hook.....	F. J. Herrick.....	485,037	Oct. 25	2390	614	61	520
Snap-hook.....	E. L. Howe.....	473,315	Apr. 19	2048	514	59	415
Snap-hook.....	W. R. Smeal.....	479,026	July 19	1479	368	60	317
Snap-hook.....	J. T. Smith.....	472,718	Apr. 12	1095	281	59	220
Snap-hook.....	J. A. Traut.....	480,792	Aug. 16	1667	417	60	929
Snap-hook.....	F. White.....	475,971	May 31	3336	841	59	1338
Snap-switch.....	F. D. Gould.....	480,722	Aug. 16	1564	390 391	60	907
Snap-switch.....	J. Hutchinson.....	480,948	Aug. 16	1905	476	60	977
Snap-switch. Double.....	R. Lundell.....	486,215	Nov. 15	1651	436 437	61	941
Snap-switch. Reciprocating.....	J. Gibbs.....	471,993	Mar. 29	3598	919	58	1828
Snatch-block.....	A. C. French.....	481,020	Aug. 16	2020	505	60	998
Snatch-block.....	G. Harvey.....	487,734	Dec. 13	815	208	61	1500
Snatch-block.....	A. Uren.....	471,755	Mar. 29	3253	829	58	1760
Sniping-machine.....	N. J. White.....	485,401	Nov. 1	392	106	61	653
Snow and ice melting machine.....	R. Steel.....	472,831	Apr. 12	1249	320	59	249

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Snow-guard	L. T. Houghton and A. A. Barker	472,296	Apr. 5	452	116	59	85
Snow-plow	A. B. Black	482,720	Sept. 20	1320	322	60	1618
Snow-plow	P. H. Craddock	486,694	Nov. 22	2406	628	61	1106
Snow-plow	I. F. Carrey	466,328	Jan. 5	29	7	58	9
Snow-plow	W. Y. Fisher	469,937	Mar. 1	432	108	58	1184
Snow-plow	J. Kolb	476,800	June 14	874	215	59	1624
Snow-plow	G. Nichols	476,063	May 31	3472	876	59	1367
Snow-plow	J. W. Russell	470,951	Mar. 15	2037	521	58	1510
Snow-plow and scraper. Automatic	B. F. Denham	469,682	Mar. 1	18	7	58	1102
Snow-shoe	C. O. Stone	476,572	June 7	519	122	59	1540
Snow-shoe for vehicle-wheels	J. Stenger and N. Münster	486,988	Nov. 29	2927	755	61	1236
Soap	H. J. and G. F. Ecker	480,840	Aug. 16	1739	.....	60	943
Soap	J. Gray and A. Simmons	481,860	Aug. 30	3436	.....	60	1297
Soap	J. Niese	485,113	Oct. 25	2494	.....	61	543
Soap	A. W. Rehnström	476,557	June 7	494	.....	59	1535
Soap-boiling apparatus	J. W. Martin	475,784	May 31	3017	765	59	1276
Soap-bubble pipe	W. S. Fickett	486,967	Nov. 29	2894	747	61	1219
Soap cake	N. Jewett	488,393	Dec. 20	1915	479	61	1735
Soap-cake holder	M. Oefinger	487,094	Nov. 29	3092	794	61	1259
Soap compound	J. Scharf	486,267	Nov. 15	1743	.....	61	961
Soap fixture. Toilet	G. A. Schmidt	472,315	Apr. 5	482	125	59	91
Soap-holder	W. S. Fickett	468,868	Feb. 16	1498	381	58	836
Soap-holder	C. S. Higgins	476,014	May 31	3395	856	59	1350
Soap-holder	C. S. Higgins	486,599	Nov. 22	2254	589 590	61	1074
Soap-holder	J. Richardson	467,436	Jan. 19	1834	468	58	365
Soap. Manufacture of	A. W. Rehnström	476,556	June 7	493	.....	59	1535
Soap. Manufacturing	W. A. Grant	471,668	Mar. 29	3106	790	58	1734
Soap-press	C. Hoff	473,505	Apr. 26	2375	602	59	499
Soap-press. Automatic	O. W. Band	467,818	Dec. 13	955	241	61	1528
Soap receptacle and grater	W. E. Fish	470,186	Mar. 8	834	205	58	1270
Soap server. Toilet	H. B. Potter	485,653	Nov. 8	757	200	61	744
Soap with whey. Manufacture of	A. W. Rehnström	476,555	June 7	492	.....	59	1535
Soap-wrapping machine	E. D. Mellen	467,040	Jan. 12	1187	300 301	58	233
Socket-wrench	B. H. Dunlap	473,617	Apr. 26	2575	648 649	59	538
Sod-cutter	G. F. Wagner	485,441	Nov. 1	447	120	61	663
Sod-slicing machine	T. Bentley	471,231	Mar. 22	2472	628	58	1606
Sod-trimming machine	W. Pullar	467,058	Nov. 29	3032	778	61	1246
Soda-ash. Apparatus for reclaiming	L. D. Armstrong	480,702	Aug. 16	1538	363	60	901
Soda distributor. Caustic	W. S. Fickett	487,729	Dec. 13	804	205	61	1497
Soda-fountain	J. Ramsey	475,890	May 31	3212	813	59	1314
Soda-fountain	A. Schier	477,463	June 21	1966	488	59	1852
Soda-fountain	O. Zwiatusch	476,589	June 7	542	129 130	59	1544
Soda. Treating bisulphate of	E. J. Barbier	484,546	Oct. 18	1577	400	61	343
Soda-water apparatus	W. H. Collins	484,889	Oct. 25	2146	551	61	473
Soda-water apparatus	J. Ramsey and R. Carleton	486,548	Nov. 22	2161	571	61	1058
Soda-water apparatus. Acid-feeder for	J. Ormerod	484,604	Oct. 18	1658	421	61	360
Soda-water. Method of and apparatus for charging	J. H. Vinton	485,244	Nov. 1	135	41	61	601
Sodium bicarbonate. Apparatus for making	G. Bell	470,635	Mar. 8	1553	404 405	58	1407
Sodium bicarbonate. Apparatus for washing	K. J. Sundstrom	488,702	Dec. 27	2412	598	61	1849
Sofa	W. Flamm	488,332	Dec. 20	1816	454 455	61	1716
Sofa and bed. Combined	C. C. Lockstaedt	485,637	Nov. 8	738	194	61	740
Sofa and bed. Combined	D. L. Oulton	468,930	Feb. 16	1600	405	58	856
Solar camera	J. F. Wiest	474,708	May 10	1320	336 337	59	903
Solar or other bath	W. H. Whiteley	478,385	July 5	504	122	60	100
Solder for aluminium	J. W. Richards	478,238	July 5	283	.....	60	57
Soldering apparatus	C. L. Wagandt	467,694	Jan. 26	2259	574	58	452
Soldering apparatus	C. L. Wagandt	477,090	June 14	1351	328	59	1721
Soldering cans. Process of and machine for	C. H. Emery	473,216	Apr. 19	1888	476 477 478	59	382
Soldering clamp. Can	R. Clark	480,559	Aug. 9	1294	324	60	841
Soldering device. Blowpipe	F. von Krempelhuber and J. von Schmaedel	485,766	Nov. 8	938	251	61	781
Soldering. Electric	E. E. Ries	485,017	Oct. 25	2361	607 608	61	514
Soldering. Electric	E. Thomson	480,392	Aug. 9	1038	261	60	791
Soldering-iron	W. S. and M. C. Cook	466,520	Jan. 5	340	85	58	66
Soldering-iron. Electrical	C. L. Coffin	488,871	Dec. 27	2670	661	61	1902
Soldering-machine	F. G. Slommer	466,580	Jan. 5	435	111	58	84
Soldering machine. Can	G. E. Lockwood. (Reissue)	11,297	Dec. 27	2844	700 701 702	61	1940
Soldering machine. Can	D. M. Monroe	483,234	Sept. 27	2133	540 541	60	1792
Soldering machine. Can	W. P. Quentell	471,360	Mar. 22	2665	676 677	58	1643
Soldering machine. Can	W. P. Quentell	479,174	July 19	1710	428 429	60	360
Soldering metal for aluminium	A. Räder	476,896	June 14	1031	.....	59	1656
Soldering metallic vessels. Apparatus for	W. J. Phelps	468,896	Feb. 16	1538	391	58	844
Soldering. Process of and machine for	C. M. Brown	485,906	Nov. 8	1143	303	61	822
Soldering. Process of and machine for	C. M. Brown	485,907	Nov. 8	1146	304	61	823
Soldering-tool	E. L. Barber	485,161	Nov. 1	4	2	61	573
Soldering-tool. Electric	J. J. Ritter	469,949	Mar. 1	457	114	58	1188
Soldering-tool. Electrically-heated	C. L. Coffin	488,872	Dec. 27	2671	661	61	1903
Sole	G. A. Cowles	476,448	June 7	344	78	59	1504
Sole	G. H. Crocker	485,459	Nov. 1	475	126	61	669

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Sole.....	F. Ephraim.....	473,304	Apr. 19	2030	510	59	412
Sole.....	G. F. Hall.....	472,214	Apr. 5	327	85	59	62
Sole.....	H. W. Merrill.....	481,909	Aug. 30	3523	862	60	1314
Sole.....	L. S. Plouts and L. D. Ball.....	483,580	Oct. 4	100	25	61	22
Sole.....	T. W. Trimby.....	476,499	June 7	418	97	59	1519
Sole.....	H. Wooding.....	481,682	Aug. 30	3132	764	60	1238
Sole-edge-burnishing machine.....	G. A. Knox.....	480,021	Aug. 2	420	{ 105 106 107 }	60	661
Sole-edge-laying machine.....	E. C. Woodard.....	478,299	July 5	378	91	60	76
Sole-fitting and channeling machine.....	W. H. Paige.....	474,608	May 10	1161	{ 295 296 }	59	871
Sole-inking tool.....	W. W. Atwood and W. C. Orcutt.....	475,377	May 24	2375	608	59	1140
Sole-machine.....	M. V. Bresnahan and J. J. Heys.....	479,053	July 19	1518	378	60	325
Sole-machine.....	F. A. Bugbeo.....	480,317	Aug. 9	920	{ 232 233 }	60	769
Sole or heel plate.....	G. J. Davison.....	481,478	Aug. 23	2810	691	60	1160
Sole-pressing machine.....	W. E. Forster.....	478,420	July 5	556	135	60	109
Sole-staining machine.....	F. L. Richardson.....	483,944	Oct. 4	624	158	61	129
Sole-trimming machine.....	E. C. Moody.....	471,394	Mar. 22	2716	692	58	1653
Sole-trimming machine.....	J. H. Reed.....	469,720	Mar. 1	79	22	58	1114
Sole-trimming machine.....	J. H. Reed.....	475,608	May 24	2743	695	59	1211
Sole-trimming machine.....	S. Ross.....	472,399	Apr. 5	615	{ 156 157 }	59	115
Sole-trimming machine.....	J. R. Scott.....	483,393	Sept. 27	2398	603	60	1841
Sole-trimming machine.....	J. R. Scott.....	488,841	Dec. 27	2627	651	61	1893
Solenoid and its electrical connections.....	H. H. Hosford.....	473,929	May 3	69	13	59	649
Solution of myrrh-resin and making the same.....	A. Flüge.....	479,935	Aug. 2	251		60	630
Soot-collector.....	J. E. Thomas.....	467,527	Jan. 26	1990	505	58	402
Soot-removing compound.....	W. T. Phegley.....	477,333	June 21	1759		59	1812
Sounding-board. Vocal.....	C. C. Carroll.....	475,928	May 31	3265	823	59	1324
Sounds. Apparatus for reproducing.....	L. Rosenthal and S. Frank.....	474,410	May 10	852	223	59	813
Sower. Seed.....	R. J. Strong.....	486,388	Nov. 15	1926	{ 510 511 }	61	998
Sowing-machine.....	E. G. Thorén.....	483,623	Oct. 4	160	39	61	33
Spade.....	P. Poulson.....	479,661	July 26	2500	623	60	527
Spade and pick.....	J. N. M. Shimer.....	474,697	May 10	1307	334	59	900
Spark-arrester.....	J. W. Curran.....	477,995	June 28	2826	707	59	2039
Spark-arrester.....	J. F. Landreth.....	479,283	July 19	1873	469	60	393
Spark-arrester.....	C. G. Luthman.....	477,058	June 14	1293	314	59	1709
Spark-arrester.....	L. C. Mabie.....	473,847	Apr. 26	2923	736	59	605
Spark-arrester.....	J. L. Owen.....	477,954	June 28	2766	692	59	2026
Spark-arrester.....	J. A. Paullin.....	473,235	Apr. 19	1924	484	59	390
Spark-arrester.....	F. B. Pope.....	478,359	July 5	470	114	60	93
Spark-arrester.....	G. B. Prochaska.....	469,271	Feb. 23	2130	547	58	967
Spark-arrester.....	J. W. Ramsey.....	467,051	Jan. 12	1213	306	58	238
Spark-arrester.....	H. C. Smith.....	478,207	July 5	215	54	60	44
Spark-arrester.....	E. W. Smith and C. Sax.....	480,390	Aug. 9	1034	259	60	790
Spark-arrester.....	D. B. Strouse and W. Griffin.....	476,176	May 31	3662	926	59	1404
Spark-arrester.....	J. Thornton.....	485,901	Nov. 8	1135	301	61	821
Spark-arrester.....	A. and R. Wildman.....	469,530	Feb. 23	2537	652	58	1045
Spark-arrester and draft-regulator.....	J. E. Zimmerman.....	488,864	Dec. 27	2660	659	61	1900
Spark-arrester and draft-regulator.....	W. M. Letts.....	475,579	May 24	2699	684	59	1201
Spark-extinguisher and smoke-consumer.....	D. Anderson and J. Naylor.....	472,568	Apr. 12	871	224	59	180
Spatula.....	C. W. Fox.....	479,937	Aug. 2	252	62	60	631
Speaking-tube.....	J. B. Carson.....	466,652	Jan. 5	540	140	58	104
Speaking-tube.....	H. A. Cutmore.....	484,516	Oct. 18	1531	{ 388 389 }	61	333
Speaking-tube.....	C. L. Peirce.....	486,681	Nov. 22	2385	623	61	1102
Speaking-tube.....	C. L. Peirce.....	486,682	Nov. 22	2387	624	61	1102
Speaking-tube.....	W. Perpente.....	485,979	Nov. 8	1262	333	61	848
Speaking-tube.....	L. Strouse.....	484,982	Oct. 25	2297	593	61	501
Speaking-tube exchange.....	L. Strouse.....	478,380	July 5	498	121	60	92
Spear. Casing.....	J. Carruthers.....	479,933	Aug. 2	249	61	60	630
Specific gravity. Apparatus for treating finely divided or powdered substances of different degrees of.....	O. B. Peck.....	468,689	Feb. 9	1222	311	58	773
Specific gravity. Treating finely divided or powdered substances of different degrees of.....	O. B. Peck.....	468,688	Feb. 9	1221	{ 310 311 }	58	772
Spectacle and eyeglass lenses. Machine for grinding.....	E. B. Temple and J. W. Meigs.....	475,068	May 17	1896	481	59	1029
Spectacle-case fastening.....	F. W. Steadley.....	467,386	Jan. 19	1754	448	58	349
Spectacle-eye-shield.....	A. D. Warren.....	466,896	Jan. 12	964	246	58	193
Spectacle-lens.....	G. W. and J. W. Meigs.....	474,024	May 3	222	54	59	681
Spectacles.....	M. W. Davis.....	481,552	Aug. 30	2934	720	60	1200
Spectacles.....	G. W. Meigs.....	468,885	Feb. 16	1522	388	58	841
Spectacles.....	G. W. Meigs.....	468,886	Feb. 16	1525	389	58	841
Spectacles.....	D. T. Methven.....	470,006	Mar. 1	544	135	58	1204
Spectacles.....	J. F. Sumner.....	484,725	Oct. 18	1853	471	61	399
Speculum.....	W. E. Clough.....	475,975	May 31	3342	843	59	1339
Speculum.....	J. Sparenburg.....	469,351	Feb. 23	2253	578	58	991
Speech or other sounds. Apparatus for recording.....	W. Bruening.....	486,394	Nov. 15	1936	513	61	1000
Speech or other sounds. Apparatus for recording.....	W. Bruening.....	486,608	Nov. 22	2270	592	61	1077
Speed and direction indicator. Automatic marine.....	H. B. Williams.....	486,008	Nov. 8	1314	{ 349 350 }	61	858
Speed-changing mechanism.....	W. A. Wright.....	475,735	May 24	2938	746	59	1246
Speed-controller.....	G. M. Atherton.....	472,598	Apr. 12	909	233	59	187
Speed-governor attachment.....	W. B. and H. F. Warner.....	479,040	July 19	1501	373	60	321
Speed-in motor mechanism. Apparatus for maintaining constant.....	J. W. Gibboney.....	474,008	May 3	194	46	59	675
Speed-indicator.....	W. H. Abbott.....	487,702	Dec. 13	753	{ 193 194 }	61	1487
Speed-indicator.....	F. L. Johnston and W. C. Fletcher.....	487,275	Dec. 6	58	18, 19	61	1333
Speed-indicator.....	I. N. Lewis.....	480,107	Aug. 2	550	139	60	687
Speed-indicator.....	L. T. Weiss.....	486,651	Nov. 22	2341	612	61	1092
Speed-measure.....	O. Knapp.....	483,246	Oct. 4	486	121	61	100

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Speed-recorder and odometer.....	O. J. Fuchs.....	484,152	Oct. 11	940	{ 241 242 }	61	206
Speed-regulator.....	R. J. Hoffman.....	479,355	Apr. 5	545	141	59	102
Speed-regulator. Electric.....	J. W. Gibboney.....	474,447	May 10	912	235	59	824
Speeder-frames. Means for driving bobbins in.....	S. Scholfield.....	488,681	Dec. 27	2383	590	61	1844
Speiss. Treating.....	P. Flury.....	486,330	Nov. 15	1837	.....	61	980
Sphere. Armillary.....	J. S. Slater.....	482,278	Sept. 6	582	139	60	1448
Spice-receptacle and flour-bin. Combined.....	M. F. Brown.....	466,394	Jan. 5	128	36	58	27
Spigot for refrigerators, &c.....	N. Engquist.....	486,705	Nov. 22	2431	633	61	1110
Spike.....	E. A. Streeter and B. W. Nichols.....	487,587	Dec. 6	567	145	61	1431
Spike.....	J. W. Todd.....	471,658	Mar. 29	3089	786	58	1731
Spike-cylinder and spike-apron clearer.....	A. H. Morton.....	475,246	May 17	2170	552	59	1083
Spike-locking device.....	C. S. von Ilanor.....	485,939	Nov. 8	1198	316	61	834
Spinal brace.....	C. G. Gumpel.....	479,326	July 19	1931	483	60	404
Spindle: See Spinning and twist- ing machine spin- dle. Spinning-machinery spin- dle.							
Spindle.....	A. A. Brigham.....	484,698	Oct. 18	1815	461	61	392
Spindle.....	J. Longinus.....	482,259	Sept. 6	551	131	60	1442
Spindle.....	W. G. Morrison.....	486,231	Nov. 15	1676	443	61	947
Spindle and flier.....	J. Balduer.....	480,163	Aug. 2	646	164	60	705
Spindle-bearing.....	W. B. Douglas.....	473,214	Apr. 19	1885	475	59	382
Spindle-bearing for jacks and mules.....	T. L. Butler.....	468,939	Feb. 16	1611	408	58	858
Spindle-driving device.....	W. G. Morrison.....	479,896	Aug. 2	184	45	60	618
Spindle ends. Machine for cutting.....	J. A. Williams.....	482,934	Sept. 20	1650	416	60	1624
Spindle-lubricator.....	R. B. Parker.....	472,269	Apr. 5	410	105	59	77
Spindle stand. Picker.....	J. T. Byrne and W. J. Lafferty.....	475,484	May 24	2549	649	59	1172
Spindle-step.....	E. J. Carroll.....	488,688	Dec. 27	2394	593	61	1846
Spindle-support.....	W. F. Drapor.....	484,356	Oct. 11	1971	324	61	271
Spindle-support.....	H. F. Woodmaney.....	480,985	Aug. 16	1272	493	60	969
Spindles. Means for driving.....	H. Greenwood.....	478,280	July 5	349	84	60	70
Spinning and twisting frames. Holder for rings in.....	J. H. Bennett.....	480,227	Aug. 2	758	192	60	726
Spinning and twisting machine spindle.....	H. F. Woodmaney.....	480,984	Aug. 16	1971	493	60	988
Spinning and twisting machines. Traverse-motion } for	R. Dawes.....	481,787	Aug. 30	3319	{ 810 811 }	66	1275
Spinning frames. Traveler for ring.....	S. S. Fowler.....	478,256	July 5	315	76	60	63
Spinning-frames. Yarn-separator for.....	A. D. Chandler.....	476,731	June 7	754	186	59	1587
Spinning-machine.....	L. D. Croes, E. Rodenbach, Mer- gaert, and J. Lapin.....	482,003	Sept. 6	129	31, 32	60	1360
Spinning-machine.....	W. S. Hunter and W. H. Avis.....	481,278	Aug. 23	2485	612	60	1099
Spinning-machine.....	D. Munro and W. H. Avis.....	475,138	May 17	2004	507	59	1050
Spinning-machine drawing-rolls.....	F. H. Richards.....	474,030	May 3	230	55	59	682
Spinning-machine separator.....	C. A. Taft.....	486,798	Nov. 22	2574	671	61	1139
Spinning-machine. Spindle-bearing.....	J. E. Tynan.....	467,649	Jan. 26	2186	556	58	438
Spinning-machine top roll.....	J. F. Strange.....	484,760	Oct. 18	1917	489	61	413
Spinning-machine yarn-separator.....	C. A. Taft.....	483,136	Dec. 13	1482	373	61	1635
Spinning machines. Spindle-support for silk.....	R. Atherton.....	468,634	Feb. 9	1134	289	58	754
Spinning machinery.....	J. F. Foss.....	472,477	Apr. 5	733	187	59	139
Spinning machinery. Knot-preventer for silk.....	E. Oldfield and P. Flynn.....	487,334	Dec. 6	156	45	61	1351
Spinning-machinery spindle.....	E. F. Krafft.....	482,091	Sept. 6	276	67	60	1390
Spinning-mule.....	P. N. Dexter, Jr.....	483,906	Oct. 4	576	{ 144 145 }	61	119
Spinning-mule.....	J. Ratcliffe, J. Hilton, and E. Mellor.....	476,308	June 7	120	29	59	1462
Spinning mule. Cotton.....	C. A. Dam.....	478,738	July 12	1031	253	60	220
Spinning mule. Cotton.....	C. A. Dam.....	483,301	Sept. 27	2265	570	60	1816
Spinning-mule doffing attachment.....	G. D. Secor.....	475,808	May 31	3063	777	59	1286
Spinning-mule. Self-acting.....	J. Stark.....	486,945	Nov. 29	2866	740	61	1214
Spinning-mules. Friction-regulator for reversing } motion of	W. Ashness.....	469,414	Feb. 23	2356	{ 604 605 }	58	1011
Spinning-mules. Mechanism for controlling the fric- tion-clutch in the head-stock of	J. Bond.....	467,532	Jan. 26	2002	507	58	405
Spinning-ring.....	J. Booth.....	483,297	Sept. 27	2260	569	60	1815
Spinning ring and traveler.....	C. H. Chapman.....	473,824	Apr. 26	2883	723	59	597
Spinning-rings, &c. Composition of matter for.....	R. A. Johnson and R. Brewster.....	474,253	May 3	564	139	59	747
Spinning-spindle attachment.....	L. W. Huyck.....	471,976	Mar. 29	3576	913	58	1824
Spinning-spindle support.....	J. Blair.....	482,860	Sept. 20	1529	380	60	1661
Spinning-spindle support.....	H. F. Woodmaney.....	475,994	May 31	3369	849	59	1344
Spinning-spindle support.....	H. F. Woodmaney.....	476,587	June 7	539	129	59	1544
Spinning-wheel.....	H. Lotz.....	467,654	Jan. 26	2193	557	58	440
Spirits or other liquors. Apparatus for maturing.....	J. McKinless.....	471,707	Mar. 29	3167	{ 807 808 }	58	1746
Spirometer.....	H. G. Cady.....	482,336	Sept. 13	699	167	60	1486
Spirometer.....	S. P. Lacey.....	471,389	Mar. 29	2709	691	58	1652
Spirometer. Coin-controlled.....	O. D. Orvis.....	481,965	Sept. 6	63	16, 17	60	1347
Spittoon.....	J. Malloy.....	466,354	Jan. 5	68	17, 18	58	15
Spittoon.....	C. Thurman.....	468,904	Feb. 16	1553	395	58	847
Spittoon. Combustible pocket.....	J. Koehler.....	478,873	July 12	1232	306	60	259
Spittoon for railway-cars.....	E. L. Harris.....	483,918	Oct. 4	595	151	61	123
Spittoon lifter and cleaner. Combined.....	A. Fuller.....	475,275	May 17	2213	566	59	1093
Split.....	P. F. Hanley.....	471,252	Mar. 22	2502	614	58	1612
Split wheel.....	C. M. Conradson.....	482,864	Sept. 20	1537	382	60	1662
Split wheel.....	J. J. Scholfield.....	470,953	Mar. 15	2040	522	58	1511
Spoke extractor.....	W. F. Bowe.....	481,342	Aug. 23	2589	636	60	1117
Spoke-heading machine.....	T. Hill.....	470,566	Mar. 8	1452	377	58	1326
Spoke. Metal.....	T. J. Thorp.....	467,602	Jan. 26	2121	538	58	426
Spokeshave.....	E. D. White.....	483,294	Sept. 27	2255	567	60	1814
Spoke-socket.....	A. C. Bushee.....	488,113	Dec. 13	1450	365	61	1628
Spoke-socket.....	S. D. Forbes.....	466,990	Jan. 12	1110	281	58	220
Spoke-socket.....	J. B. Righter.....	471,024	Mar. 15	2150	552	58	1532
Spoke-socket protecting-plate.....	E. Weinmann and F. Lindhorst.....	486,995	Nov. 29	2940	758	61	1228
Spoke-tenon cutter.....	A. Bruner.....	481,469	Aug. 23	2795	687	60	1156
Spoke. Vehicle-wheel.....	A. Bedford.....	477,290	June 21	1692	415	59	1799
Spoke. Wagon.....	F. T. Myuard.....	487,289	Dec. 6	80	24	61	1337

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Sponge-cup for school-desks	J. S. McClung	477,953	June 28	2764	692	59	2026
Sponge-dredger	W. G. Denham	476,920	June 14	1072	258	59	1664
Sponge-holder for washing negatives, &c.	C. H. Buchwalter	468,447	Feb. 9	839	212	58	697
Spool	C. Back	487,704	Dec. 13	759	195	61	1488
Spool-blanks. Method of and machine for forming.	C. A. Broughton	488,421	Dec. 20	1963	490	61	1745
Spool-blocks. Machine for reaming holes in.	R. L. Wiggins	488,643	Dec. 27	2313	573	61	1830
Spool-boring machine	J. M. Parker	483,576	Oct. 4	88	23	61	20
Spool-boring mechanism	J. M. Parker	479,173	July 19	1704	427	60	360
Spool-holder	E. Carpenter	479,554	July 26	2347	585	60	498
Spool-holder	T. Frelinghuysen	486,866	Nov. 29	2701	705	61	1181
Spool-holder	O. J. Israel	477,328	June 21	1753	429	59	1811
Spool-holder	M. G. Kuhn	476,883	June 14	1013	246	59	1652
Spool-holder	A. F. Morgan	485,206	Nov. 1	79	25	61	588
Spool-holder	J. M. Pierre	473,080	Apr. 19	1647	419	59	338
Spool-holder	S. L. Saunders	467,549	Jan. 26	2047	516	58	412
Spool-holder	E. Syllwasschy	484,563	Oct. 18	1599	406	61	348
Spool-holder and thread-cutter. Combined	A. Eichhorn	480,455	Aug. 9	1147	287	60	810
Spool-roughing machine	J. M. Brown	477,832	June 28	2575	644	59	1989
Spooling-machine	J. W. Foster	473,417	Apr. 19	2231	560	59	450
Spooling-machines. Bobbin-holder for	N. H. Easton	470,558	Mar. 8	1444	375	58	1384
Spoon	J. W. Blackwell	468,592	Feb. 9	1075	275	58	742
Spoon	P. C. Goodwin	483,379	Sept. 27	2381	597	60	1838
Spoon	A. F. Jackson	470,676	Mar. 15	1617	419	58	1428
Spoon-blank-swaging die	H. C. Hart	478,860	July 12	1218	302	60	257
Spoon-holder	G. W. Babcock	484,081	Oct. 11	836	212	61	186
Spoon-holding attachment	J. Staren	485,510	Nov. 1	546	145	61	684
Sporting-trap	P. R. Jones	472,709	Apr. 12	1083	278	59	217
Sporting-trap	J. A. Melius	488,827	Dec. 27	2595	644	61	1887
Sporting-trap	R. S. Pease	480,130	Aug. 2	591	150	60	695
Spout and bucket-cover. Sap-	H. R. Milks	469,791	Mar. 1	200	52	58	1140
Spout. Cut-off.	E. A. King	469,575	Feb. 23	2607	669	58	1059
Spout for granulated material. Controlling	J. W. Griswold	468,870	Feb. 16	1500	382	58	837
Spout. Pouring.	E. R. Deverall	471,961	Mar. 29	3558	909	58	1821
Spout. Sap.	J. W. Currier	469,232	Feb. 23	2074	533	58	956
Spout. Sap.	F. O. Mitchell	472,306	Apr. 5	469	120	59	88
Spout. Sap.	L. R. Tabor	473,270	Apr. 19	1977	496	59	401
Spray-producer	H. Mestern	470,583	Mar. 8	1476	384	58	1394
Spray-rod	W. Wainwright	473,037	Apr. 19	1586	403	59	327
Spraying device	W. J. Ruff	471,141	Mar. 22	2340	599	58	1580
Spraying device for cooling beer, &c.	C. C. Hanford	477,859	June 28	2618	656	59	1997
Spraying-machine.	F. Salisbury	481,718	Aug. 30	3197	781	60	1250
Spring:							
See Bed-spring.	Draft-spring.						
Bicycle-saddle spring.	Semi-elliptic spring.						
Bicycle-seat spring.	Vehicle-spring.						
Car-spring.	Wagon-spring.						
Checkrein-spring.	Watch balance-spring.						
Door-spring.	Watchcase-spring.						
Spring	W. I. Bunker	488,060	Dec. 13	1371	340	61	1612
Spring	G. L. Potter	470,949	Mar. 15	2036	520	58	1510
Spring	G. L. Potter	481,971	Sept. 6	75	20	60	1349
Spring	J. H. Sullivan	475,904	May 31	3231	817	59	1318
Spring and support. Combined spiral	W. S. Foster	486,773	Nov. 22	2538	662	61	1132
Spring bending and forming machine	E. W. Ansted	483,094	Sept. 20	1907	482	60	1736
Spring-bolt	B. Bernstein	475,922	May 31	3256	822	59	1322
Spring-coiling machine	H. D. Millett	468,573	Feb. 9	1049	266	58	738
Spring-coiling machine. Spiral.	J. Vermeulen	481,443	Aug. 23	2750	676	60	1148
Spring-cover	D. M. Somers	467,647	Jan. 26	2183	555	58	438
Spring-crushing machine.	J. H. Müller	486,834	Nov. 22	2639	689	61	1154
Spring for beds, cushions, &c.	E. D. Chipman and E. L. D. Foster	470,472	Mar. 8	1327	345	58	1360
Spring-hook	J. C. Newey	484,336	Oct. 11	1244	317	61	265
Spring-jack switch	C. E. Scribner and E. P. Warner	488,033	Dec. 13	1316	323	61	1600
Spring-motor	C. C. Cordry	468,083	Feb. 2	261	64	58	575
Spring-motor	J. J. Faulkner	488,192	Dec. 20	1581	396	61	1671
Spring-motor	W. C. Johnston	487,745	Dec. 13	835	213	61	1501
Spring-motor	J. F. Lang and J. W. Roper	481,714	Aug. 30	3182	777	60	1248
Spring-motor	C. A. Moore	468,982	Feb. 16	1703	434	58	876
Spring-motor	A. S. Parker	471,888	Mar. 29	3455	882	58	1801
Spring-motor	W. A. Ulrey	477,478	June 21	1988	493	59	1857
Spring-motor	A. A. Wood	470,611	Mar. 8	1520	396	58	1401
Spring-seat	S. G. Scarritt	483,699	Oct. 4	266	66	61	56
Spring-setting machine	J. H. Miller	486,832	Nov. 22	2635	687	61	1153
Springs. Device for securing the ends of torsion.	C. N. Wilcox	467,843	Jan. 26	2199	633	58	498
Springs. Machine for knotting the ends of spiral	P. Fraser	481,396	Aug. 23	2675	656	60	1132
Springs. Machine for knotting the ends of spiral	J. H. Müller	468,465	Feb. 9	868	220	58	702
Springs. Machine for making coil	F. M. Jeffery	469,943	Mar. 1	442	111	58	1185
Springs. Machine for making spiral	P. Fraser	481,395	Aug. 23	2668	654	60	1131
Springs. Method of and apparatus for making leaf.	O. F. Freeman	488,553	Dec. 27	2168	536	61	1801

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Springs. Shackle for coupling	C. E. Dohbins	481,107	Aug. 16	2174	538	60	1026
Sprinkler:							
See Automatic sprinkler. Lawn-sprinkler.							
Hand-sprinkler. Street-sprinkler.							
Sprinkler	C. Doelger and O. Kirsten	486,667	Nov. 22	2365	619	61	1097
Sprinkler	M. Goldman	473,310	Apr. 19	2041	512	59	413
Sprinkler	J. B. Haberle	466,345	Jan. 5	57	14	58	14
Sprinkler	J. B. Haberle	479,506	July 26	2281	570	60	456
Sprinkler	J. R. Steitz	480,047	Aug. 2	467	118	60	671
Sprinkler	J. R. Steitz	480,048	Aug. 2	468	119	60	671
Sprinkler-head and valve therefor	W. H. Miller	475,244	May 17	2168	551	59	1083
Sprinkler-heads. Device for plugging	G. E. Wright	478,181	July 5	174	45	60	37
Sprinkler system	W. C. Shaffer	480,747	Aug. 16	1598	401	60	915
Sprinkler system. Automatic	C. L. Fortier	468,440	Feb. 9	826	208	58	694
Sprinklers. Device for controlling the water-jets of street-	C. M. Collins	476,187	May 31	3679	929	59	1407
Sprinkling apparatus	G. S. Glenn	479,979	Aug. 2	322	79	60	643
Sprinkling device	J. L. Sardy	481,873	Aug. 30	3455	847	60	1300
Sprocket-wheel. Variable-pitch	F. Gleason	484,005	Oct. 11	732	183	61	164
Sprout-puller	G. T. Cull	481,897	Aug. 30	3498	857	60	1308
Square. Adjustable T	R. McChesney	483,499	Sept. 27	2533	637	60	1869
Square and bevel. Combined try-	T. R. Cook	485,456	Nov. 1	471	125	61	668
Square and drawing-board attachment. T	A. T. Page	475,741	May 24	2948	747	59	1248
Square and rule. Dress-maker's	F. Long	470,809	Mar. 15	1825	468	58	1469
Square. Bevel.	G. R. Richardson	471,897	Mar. 29	3467	885	58	1803
Square. Bevel and try	S. C. Downey	475,390	May 24	2399	613	59	1145
Square. Carpenter's	M. P. Paterson	476,683	June 7	682	165	59	1572
Square. Center and key-seating	J. B. Price	477,959	June 28	2771	694	59	2028
Square. Folding	E. De Camp	488,544	Dec. 27	2157	533	61	1738
Square. Folding	E. De Camp	488,545	Dec. 27	2158	533	61	1799
Square. Folding	W. H. Goldsberry	482,900	Sept. 20	1609	403	60	1675
Square. Folding	H. F. Hegemann	488,242	Dec. 20	1670	417	61	1688
Square. Folding	J. C. Sweet	484,261	Oct. 11	1118	283	61	242
Square. Folding framing.	T. S. Morse	473,902	Apr. 12	1349	347	59	270
Square for leveling and aligning shafting	M. F. Oliver	467,016	Jan. 12	1147	291	58	226
Square. Mechanic's	E. Wetterhahn	484,575	Oct. 18	1614	410	61	351
Square. Separable	F. F. Poole	481,637	Aug. 30	3061	747	60	1224
Square. Separable	F. W. Wohlfert	485,402	Nov. 1	394	106	61	653
Square. Separable carpenter's	L. C. Labady	468,665	Feb. 9	1187	302	58	765
Square. T.	R. Godeffroy	467,764	Jan. 26	2373	603	58	474
Square. T.	W. G. Thornton	466,186	Nov. 15	1608	426	61	934
Square. Tailor's measuring.	P. N. Arvidson	483,521	Oct. 4	4	1	61	4
Square. Try.	H. Krogsted and A. Svanson	466,871	Jan. 12	918	235	58	184
Square with adjustable heads	E. L. Deane	472,525	Apr. 12	819	209	59	169
Squaring metallic boxes, frames, &c. Machine for	J. Baum	481,998	Sept. 6	116	29	60	1358
Stable	J. F. Jeffers	476,925	June 14	1080	260	59	1666
Stable. Feed.	D. Haifley	484,791	Oct. 25	1983	506	61	440
Stables. Pavement for	J. Jungbluth	469,044	Feb. 16	1795	459	58	895
Stacker	J. Holman	477,937	June 28	2743	687	59	2022
Stacker. Portable	I. E. Marshall	474,963	May 17	1730	440	59	993
Stage appliance	R. W. Mohr	467,754	Jan. 26	2361	598	58	472
Stage appliance	F. C. Whitney	473,986	May 3	157	37	59	068
Stage. Balanced	M. Richter	478,467	July 5	623	151	60	123
Stage-curtain. Fireproof	H. S. Cockrill	487,470	Dec. 6	398	103	61	1399
Stage. Device for producing scenic effects upon the	F. Fyles	466,750	Jan. 5	701	180	58	133
Stage effect	E. Heaton	473,927	May 3	67	13	59	649
Stage-scenery holder	E. Stanciliff	469,726	Mar. 1	92	25	58	1116
Staging or scaffolding. Adjustable	A. Farland	472,867	Apr. 12	1298	333	59	259
Stair-builder's tool	W. T. Gagnebin	482,350	Sept. 13	730	175	60	1413
Staircase	P. H. Barry	486,319	Nov. 15	1820	480	61	977
Staircase	J. Kiley	475,016	May 17	1821	461	59	1014
Stair-curve	I. J. Palmer	486,940	Nov. 29	2858	739	61	1212
Stair-rod and securer	W. Gates	484,708	Oct. 18	1826	465	61	394
Stair-stringers. Guide for use in gaining	R. Martin	487,889	Dec. 13	1073	269	61	1551
Stairs, &c. Tread for	J. and J. Mason and W. S. Codner	481,702	Aug. 30	3164	773	60	1244
Stairway. Spiral	H. F. A. Borneman and J. Daab	485,449	Nov. 1	461	123	61	666
Stalk-cutter	H. W. Allen	478,676	July 12	933	232	60	200
Stallion-guard	A. H. Gilbert	476,998	June 14	1198	291	59	1689
Stallion-shield	W. H. Palmer and W. H. Daniel	471,567	Mar. 29	2958	754	58	1708
Stallion-shield	C. H. Rahn	487,293	Dec. 6	85	25	61	1338
Stalls clean. Device for keeping	C. S. Kellogg	474,559	May 10	1095	278	59	859
Stamp-affixing machine	W. M. Gray	483,250	Sept. 27	2155	546	60	1797
Stamp-affixing machine	E. C. Palmer	484,448	Oct. 18	1422	362	61	312
Stamp and envelope gum moistener.	W. R. Cole	477,887	June 28	2667	667	59	2006
Stamp and match box	A. Goertz	484,092	Oct. 11	850	216	61	189
Stamp. Canceling and dating	W. G. Moseley	485,472	Nov. 1	497	131	61	673
Stamp-canceling and postmarking machine	M. V. B. Ethridge	467,762	Jan. 26	2369	601	58	474
Stamp-canceling and postmarking machine	M. V. B. Ethridge	467,889	Jan. 26	2573	632	58	512
Stamp-canceling machine	W. R. Landfear	487,626	Dec. 6	626	161	61	1446
Stamp. Coin-actuated	H. W. Rosenbaum and E. Neubert	480,966	Aug. 16	1940	485	60	922
Stamp. Electric embossing.	C. E. Carpenter	477,627	June 21	2242	561	59	1907
Stamp. Electrically-heated hand-	J. B. Venker	484,574	Oct. 18	1613	410	61	351
Stamp. Hand.	H. Baumgarten	479,109	July 19	1751	439	60	367
Stamp. Hand.	T. S. Buck	483,343	Sept. 27	2323	584	60	1827
Stamp. Hand.	J. Buff	476,080	Nov. 15	1429	378	61	899
Stamp. Hand.	L. H. Dolan	474,724	May 10	1347	342	59	908

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Stamp. Hand.....	F. C. Lidke.....	481,362	Aug. 23	2614	643	60	1121
Stamp. Hand.....	A. Siebert.....	469,277	Feb. 23	2142	550	58	969
Stamp holder. Postal.....	B. Pickering.....	480,509	Aug. 9	1221	306	60	826
Stamp-holder. Postmarking.....	H. T. Keith.....	476,049	May 31	3447	870	59	1361
Stamp-holding apparatus.....	J. Hoop.....	470,572	Mar. 8	1458	379	58	1388
Stamp. Marking.....	R. C. Harris, Jr.....	484,534	Oct. 18	1559	397	61	339
Stamp-mill.....	J. M. McFarland.....	467,187	Jan. 19	1452	{ 370 371 }	58	293
Stamp-mill attachment.....	L. R. Talloch.....	473,371	Apr. 19	2150	540	59	434
Stamp-mill guide.....	E. Major.....	469,157	Feb. 16	1912	497	58	925
Stamp-mill guide-holder.....	P. C. Robertson.....	488,453	Dec. 20	2010	502	61	1755
Stamp moistener. Postage.....	F. Goerte.....	486,611	Nov. 22	2277	594	61	1078
Stamp. Numbering hand.....	O. Bartusch.....	473,605	Apr. 26	2557	645	59	535
Stamp or label affixer.....	W. B. Shafer.....	478,764	July 12	1070	266	60	228
Stamp. Perforating.....	B. F. Cummins.....	486,858	Nov. 29	2684	702	61	1178
Stamp. Perforating canceling.....	J. Stenwall.....	486,906	Nov. 29	2798	725	61	1201
Stamp. Perforating, dating, and receipting.....	B. F. Cummins and J. Stenwall, Jr.....	475,440	May 24	2473	631	59	1158
Stamp. Post-office hand.....	E. J. Brooks.....	481,296	Aug. 23	2519	619	60	1104
Stamp. Registering.....	H. W. Rosenbaum and E. Neubert.....	480,965	Aug. 16	1918	485	60	982
Stamp. Registering hand.....	E. J. Brooks.....	487,637	Dec. 6	677	174	61	1455
Stamp. Registry.....	F. A. Lovcraft.....	480,819	Aug. 16	1714	428	60	938
Stamp. Rotary hand.....	G. A. Pickup and W. J. Towry.....	481,969	Sept. 6	72	19	60	1349
Stamp. Rotary marking.....	M. V. B. Ethridge and H. E. Waite.....	469,632	Feb. 23	2676	{ 688 689 }	58	1074
Stamp. Rubber.....	W. R. Dutemple.....	466,398	Jan. 5	136	38	58	28
Stamp-safe.....	H. A. Stevenson.....	469,607	Feb. 23	2646	679	58	1067
Stamp-shoes. Die-holder and die for making.....	J. Wilson, Sr.....	481,087	Aug. 16	2136	522	60	1020
Stamp stand or rack. Hand.....	E. J. Klingenberg.....	475,120	May 17	1981	502	59	1046
Stamp. Steam.....	E. S. Brett.....	478,393	July 5	513	125	60	101
Stamp. Steam.....	C. W. Tremain.....	469,187	Feb. 16	1987	508	58	933
Stamp. Steam.....	C. W. Tremain.....	480,223	Aug. 2	752	190	60	724
Stamp. Steam-power.....	C. A. Marlitt.....	480,332	Aug. 9	940	{ 238 239 }	60	773
Stamp. Time.....	J. Ganss.....	486,458	Nov. 22	2036	{ 538 539 }	61	1033
Stamp. Time.....	S. H. Hoggson.....	483,151	Sept. 27	1992	{ 505 506 }	60	1764
Stamp. Time.....	W. H. Martin.....	485,639	Nov. 8	740	195	61	740
Stamp. Time.....	C. Stahlberg.....	487,433	Dec. 6	336	87, 88	61	1358
Stamp. Time.....	M. Weise.....	473,598	Apr. 26	2547	642	59	533
Stamps and labels. Device for affixing.....	H. Campbell.....	486,430	Nov. 22	1909	530	61	1026
Stamping machine. Postal date and time.....	O. E. Lundstedt.....	472,951	Apr. 12	1425	{ 364 365 }	59	285
Stamping press.....	J. B. Foote.....	487,730	Dec. 13	805	206	61	1498
Stanchion.....	P. Avery.....	470,388	Mar. 8	1192	{ 304 305 }	58	1335
Stanchion. Cattle.....	C. S. Rosier.....	486,353	Nov. 15	1873	493	61	987
Stanchion. Cattle.....	J. Wasson.....	481,987	Sept. 6	99	25	60	1354
See Barrel-stand. Plant-stand.							
Blacking-stand. Railway-switch stand.							
Bobbin-stand. Sad-iron stand.							
Bottle-stand. Show-stand.							
Can-stand. Stamp-stand.							
Display-stand. Switch-stand.							
Exhibition-stand. Tile-stand.							
Flower-stand. Toilet-stand.							
Folding stand. Umbrella-stand.							
Hat or bonnet stand. Undertaker's convertible							
Jumping-stand. stand.							
Medicine-stand. Wash-stand.							
Musical cigar-stand. Work-stand.							
Stand and step-ladder. Combined.....	C. F. Batt.....	486,320	Nov. 15	1820	480	61	977
Stand for beer-glasses, &c.....	E. Weigel.....	482,603	Sept. 13	1137	274	60	1571
Stand for sideboards and the like.....	F. K. Maximilian.....	477,564	June 21	2124	528	59	1885
Stand, rack, &c.....	W. H. Hubbard and A. Goodrich.....	468,502	Feb. 9	935	238	58	715
Stands and brackets for holding or displaying hats, bonnets, &c. Top for.....	J. Rhodes.....	467,313	Jan. 19	1647	419	58	329
Stands. Folding base for.....	S. E. Reutter.....	480,346	Aug. 9	962	243	60	777
Standard.....	L. T. Stanley.....	480,749	Aug. 16	1602	401	60	916
Standard and clamp. Combined.....	R. C. Ellrich.....	475,054	May 17	1875	475	59	1025
Staple-driving implement.....	E. A. Porter.....	481,970	Sept. 6	74	19	60	1349
Staple-driving machine.....	G. Hay.....	477,117	June 14	1386	337	59	1727
Staple-extractor.....	T. M. Hunt.....	475,689	May 24	2861	724	59	1233
Staple forming and driving machine.....	T. L. Knudtson and J. Uhri.....	483,254	Sept. 27	2186	{ 550 551 }	60	1802
Staple holder. Metallic.....	G. L. Pfouts.....	484,608	Oct. 18	1665	422	61	361
Staple-inserting device.....	W. J. Brown.....	488,308	Dec. 20	1773	{ 446 447 }	61	1707
Staple making and driving machine. Wire.....	W. E. Arnold.....	472,516	Apr. 12	799	{ 205 206 }	59	165
Staples. Device for holding metallic.....	W. J. Brown.....	483,374	Sept. 27	2368	593	60	1836
Stapling implement.....	G. Hay.....	482,357	Sept. 13	741	178	60	1495
Stapling implement. Hand.....	E. G. Cohen.....	477,351	June 21	1784	436	59	1817
Stapling-machine attachment.....	H. E. Cunningham.....	481,786	Aug. 30	3318	810	60	1375
Starch and making the same. Perfumed.....	F. C. Norfolk.....	480,669	Aug. 9	1479	60	60	876
Starch. Centrifugal machine for refining.....	G. A. Kerr.....	473,511	Apr. 26	2309	805	59	502
Starch refining and separating machine. Centrifugal.....	G. A. Kerr.....	471,614	Mar. 29	3025	770	58	1719
Starching-machine.....	J. McKay.....	471,619	Mar. 29	3033	{ 772 773 }	58	1721
Starching-machine.....	J. McKay.....	471,720	Mar. 29	3196	{ 815 816 }	58	1750
Starching-machine.....	J. C. Poland.....	485,980	Nov. 8	1263	{ 333 334 }	61	848

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Starching-machine	C. T. Ray	480,344	Aug. 9	958	242	60	776
State-room for cars or ships	C. L. Lockwood	486,049	Nov. 8	1375	{ 365 366	61	870
Station-indicator	R. B. Ayres	467,078	Jan. 26	2229	{ 567 568	58	446
Station-indicator	R. B. Ayres	467,884	Jan. 26	2566	650	58	510
Station-indicator	R. B. Ayres	475,378	May 24	2376	{ 608 609	59	1141
Station-indicator	J. H. Dean	474,001	May 3	183	43	59	674
Station-indicator	R. G. Hourtney	476,537	June 7	468	{ 111 112	59	1530
Station-indicator	W. S. Mallard	471,874	Mar. 29	3436	877	58	1796
Station-indicator	G. Meyer	470,135	Mar. 1	733	182	58	1242
Station-indicator	J. M. Nelson	472,221	Apr. 5	337	87	59	63
Station-indicator. Automatic	W. S. Dillon	486,543	Nov. 22	2155	570	61	1056
Station-indicators. Means for operating	R. B. Ayres	488,415	Dec. 20	1956	489	61	1743
Stationery-box	J. M. Tate	476,576	June 7	524	123	59	1541
Stave-cutting machine. Barrel-	C. W. Rich	485,565	Nov. 1	627	{ 167 168	61	702
Stave-cutting machine. Barrel-	C. W. Rich	485,566	Nov. 1	630	{ 168 169	61	702
Stave-jointing machine	J. Pleukharp	477,450	June 21	1944	{ 481 482	59	1847
Stave-jointing machine	W. J. Wright	488,914	Dec. 27	2742	676	61	1917
Stave-machine	E. C. Soule	466,630	Jan. 5	508	131	58	98
Stave trimming and jointing machine	W. J. Wright	475,227	May 17	2135	{ 511 512	59	1077
Stave trimming or jointing machine	C. W. Rich	484,460	Oct. 18	1438	367	61	316
Staves for casks and barrels. Machine for prepar- ing and jointing	S. Wright	469,459	Feb. 23	2422	{ 620 621	58	1024
Stay. Dress-	I. Bray	469,442	Feb. 23	2397	614	58	1019
Stay. Dress-	C. Burger	470,660	Mar. 15	1590	414	58	1424
Stay. Dress-	C. D. MacKay	473,161	Apr. 19	1787	{ 450 451	59	364
Stay. Dress-	H. J. Weldon	469,619	Feb. 23	2662	684	58	1071
Stay. Garment-	H. W. Geer	471,607	Mar. 29	3017	768	58	1718
Stays. Machine for covering dress-	G. O. Schneller	488,288	Dec. 20	1743	{ 439 440	61	1702
Stays. Machine for drying garment	F. Crompton	476,232	June 7	38	9	59	1445
Steam and hot air. Apparatus for producing mix- tures of	E. Field	479,707	July 26	2587	644	60	542
Steam and hot-water boiler	A. Catchpole	466,770	Jan. 12	742	113	58	151
Steam, &c. Apparatus for recording and register- ing quantities of	F. Seiler	481,287	Aug. 23	2504	{ 615 616	60	1102
Steam apparatus. Safety-vent for	W. C. Baker	473,722	Apr. 26	2733	688	59	568
Steam-boiler	G. L. Allen	478,777	July 12	934	232	60	200
Steam-boiler	F. H. Bailey	486,017	Nov. 8	1328	{ 352 353	61	181
Steam-boiler	J. Baird	476,181	May 31	3670	928	59	1405
Steam-boiler	T. C. Best	474,517	May 10	1018	262	59	844
Steam-boiler	A. L. Bladholm	475,288	May 24	2233	575	59	1113
Steam-boiler	T. R. Butman	469,124	Feb. 16	1896	485	58	915
Steam boiler	C. Carroll	469,038	Feb. 16	1787	456	58	893
Steam-boiler	E. P. Clapp	474,039	May 3	245	59	59	685
Steam-boiler	M. L. Clinton	488,689	Dec. 27	2396	{ 593 594	61	1846
Steam-boiler	H. F. Cook	478,690	July 12	950	236	60	204
Steam-boiler	O. Crosby	482,787	Sept. 20	1432	355	60	1640
Steam-boiler	N. T. De Golyer	487,696	Dec. 6	743	190	61	1467
Steam-boiler	A. M. Dimmick	475,850	May 31	3145	{ 797 798	59	1301
Steam-boiler	D. Donahue	479,252	July 19	1831	459	60	384
Steam-boiler	E. F. Edgar	478,320	July 5	407	98	60	82
Steam-boiler	J. Gamgee	466,780	Jan. 12	765	{ 198 199	58	155
Steam-boiler	W. M. Hamilton	484,736	Oct. 18	1871	476	61	402
Steam-boiler	J. D. Hinings	483,805	Oct. 4	424	105	61	88
Steam-boiler	D. King	472,731	Apr. 12	1109	285	59	222
Steam-boiler	G. Lentz	481,796	Aug. 30	3334	{ 813 814 815	60	1277
Steam-boiler	J. MacCormack	476,053	May 31	3454	{ 871 872	59	1363
Steam-boiler	W. J. McAleenan	475,409	May 24	2424	619	59	1149
Steam-boiler	E. J. Moore	486,731	Nov. 22	2462	643	61	1117
Steam-boiler	E. J. Moore	487,075	Nov. 29	3057	{ 784 785	61	1251
Steam-boiler	O. D. Orvis	471,135	Mar. 22	2320	596	58	1578
Steam-boiler	M. H. Plunkett	482,384	Sept. 13	788	{ 189 190	60	1504
Steam-boiler	J. Pollock	469,270	Feb. 23	2129	547	58	967
Steam-boiler	J. Pollock	482,459	Sept. 13	904	219	60	1524
Steam-boiler	J. W. Putnam	487,641	Dec. 6	652	168	61	1451
Steam-boiler	E. Reynolds	485,299	Nov. 1	216	61	61	616
Steam-boiler	L. H. Roseburry	484,463	Oct. 18	1445	368	61	317
Steam-boiler	M. Scovel	479,023	July 19	1473	{ 366 367	60	316
Steam-boiler	E. G. Shortt	470,631	Mar. 8	1546	403	58	1406
Steam-boiler	I. C. Smith	468,367	Feb. 9	722	{ 178 179	58	673
Steam-boiler	F. T. Stevens	480,880	Aug. 16	1798	450	60	956
Steam-boiler	A. Stirling	479,678	July 26	2535	631	60	533
Steam-boiler	J. J. Tonkin	469,267	Feb. 23	2163	555	58	972

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Steam-boiler	J. J. Tonkin	474,785	May 10	1441	{ 365 366	59	927
Steam-boiler	H. Wojan	477,880	June 28	2656	604	59	2004
Steam-boiler and boiler-furnace	S. Runser	482,197	Sept. 6	452	109	60	1424
Steam-boiler and furnace	R. Müller	483,260	Sept. 27	2206	554	60	1805
Steam boiler and generating appliance	E. Horton and F. E. Fitch	474,795	May 10	1462	{ 371 372	59	931
Steam-boiler attachment	J. O'Brien and C. K. Pickles	477,145	June 14	1426	{ 347 348	59	1735
Steam-boiler attachment	C. K. Pickles	477,151	June 14	1436	351	59	1737
Steam-boiler attachment	C. K. Pickles and J. O'Brien	477,152	June 14	1437	351	59	1737
Steam-boiler. Bituminous-rock-disintegrating	A. Haskins, A. R. Schulenburg, and C. T. Chadwick	475,278	May 17	2218	569	59	1094
Steam-boiler. Cross water-tube	F. R. McMillan	475,947	May 31	3298	832	59	1331
Steam-boiler. Low-pressure	H. Abel	475,479	May 24	2540	647	59	1171
Steam-boiler. Sectional	W. M. Mackay	476,804	June 14	878	{ 216 217	59	1625
Steam-boiler. Sectional	C. T. McLellan	485,556	Nov. 1	613	164	61	698
Steam-boiler. Sectional	A. Mercer	467,704	Jan. 26	2278	578	58	456
Steam-boiler. Sectional	D. S. Richardson	487,774	Dec. 13	880	{ 223 224	61	1513
Steam-boiler. Sectional	W. Scott	468,831	Feb. 16	1440	{ 366 367	58	826
Steam-boiler. Sectional	G. P. Steel	478,208	July 5	216	54	60	44
Steam-boiler. Tubular	E. Petersen	475,150	May 17	2021	510	59	1054
Steam-boiler. Upright tubular	T. S. La France	487,124	Nov. 29	3142	805	61	1268
Steam-coupling and automatic parting and cut-off device	F. Balbian	483,987	Oct. 11	704	177	61	159
Steam-engine	S. Baader	487,025	Nov. 29	2084	768	61	1236
Steam-engine	W. Beaty	466,318	Jan. 5	4	2	58	4
Steam-engine	M. A. Beck	483,127	Sept. 27	1955	496	60	1757
Steam-engine	J. S. Byers	466,454	Jan. 5	234	60	58	45
Steam-engine	H. J. Conant	470,664	Mar. 15	1595	415	58	1425
Steam-engine	W. B. Coulter	467,333	Jan. 19	1680	430	58	336
Steam-engine	L. Durant and A. Lencauchez	485,614	Nov. 8	702	185	61	732
Steam-engine	E. Flaherty	467,501	Jan. 26	1935	494	58	393
Steam-engine	W. E. Good	482,038	Sept. 6	187	45	60	1372
Steam-engine	E. W. Harden and M. R. Conway	469,563	Feb. 23	2591	{ 663 664	58	1056
Steam-engine	J. C. Henderson and F. A. Phelps, Jr.	480,946	Aug. 16	1900	{ 475 476	60	976
Steam-engine	J. D. Jackson	482,089	Sept. 6	273	66	60	1389
Steam-engine	J. N. Kemmerer	473,844	Apr. 26	2018	{ 733 734	59	604
Steam-engine	C. D. Mosher	486,883	Nov. 29	2722	710	61	1185
Steam-engine	F. P. Ogilvie	474,456	May 10	931	239	59	826
Steam-engine	W. A. Pitt	471,504	Mar. 29	3342	851	58	1177
Steam-engine	J. M. Powell	466,799	Jan. 12	795	205	58	161
Steam-engine	J. W. Powers	483,014	Sept. 20	1791	452	60	1712
Steam-engine	J. W. Sargent	485,432	Nov. 1	433	116	61	661
Steam-engine	T. Scheffler	480,213	Aug. 2	735	{ 185 186	60	721
Steam-engine	G. S. Strong	477,234	June 21	1598	{ 391 392	59	1781
Steam-engine	C. W. Tremain	467,458	Jan. 19	1862	475	58	371
Steam-engine	C. W. Tremain and S. Johnson	480,153	Aug. 2	627	159	60	702
Steam-engine	M. Ulrich	484,069	Oct. 11	818	207	61	182
Steam-engine	H. Unzicker	475,365	May 24	2356	{ 603 604	59	1137
Steam-engine. Compound	R. Berg	482,116	Sept. 6	315	74, 75	60	1397
Steam-engine. Compound	J. Hunt	477,006	June 14	1209	293	59	1691
Steam-engine. Compound	W. H. Ohmen	474,757	May 10	1393	352	59	917
Steam-engine connection	A. H. McMaster	485,557	Nov. 1	615	164	61	699
Steam-engine. Direct-acting	J. A. Groshon	474,775	May 10	1422	362	59	923
Steam-engine. Divided-cylinder	T. Thatcher	477,027	June 14	1239	{ 300 301	59	1698
Steam-engine. Multiple-expansion	E. C. Urry and G. A. Farini	466,855	Jan. 12	886	227	58	178
Steam-engine. Oscillating	F. Oliver	467,766	Jan. 26	2375	{ 603 604	58	474
Steam-generator	W. N. Barrett	471,333	Mar. 22	2616	664	58	1634
Steam-generator	W. S. Bransom	466,651	Jan. 5	538	140	58	104
Steam-generator	P. A. Châtenet	487,551	Dec. 6	518	134	61	1423
Steam-generator	J. Cunningham	476,611	June 7	580	{ 138 139	59	1552
Steam-generator	T. Fearon	486,098	Nov. 15	1477	{ 389 390	61	908
Steam-generator	H. C. Fish	480,365	Aug. 9	991	250	60	783
Steam-generator	P. Fitzgibbons and H. K. Eason	485,183	Nov. 1	45	14	61	581
Steam-generator	H. Goering	480,719	Aug. 16	1561	389	60	907
Steam-generator	W. C. Higgins	468,423	Feb. 9	806	{ 201 202	58	690
Steam-generator	W. C. Higgins	486,467	Nov. 22	2051	{ 543 544	61	1035
Steam-generator	J. H. Hoadley	474,385	May 10	809	211	59	804
Steam-generator	F. E. Hosmer	484,716	Oct. 18	1838	467	61	396
Steam-generator	O. Jones and H. P. Ashley	488,970	Dec. 27	2830	698	61	1937
Steam-generator	M. Levi	466,695	Jan. 5	604	157	58	117
Steam-generator	E. A. Magee	479,009	July 19	1452	{ 360 361	60	312
Steam-generator	T. McBride and E. Fisher	487,195	Nov. 29	3247	{ 830 831	61	1288
Steam-generator	A. F. Mead	468,884	Feb. 16	1521	388	58	841
Steam-generator	J. F. Morrison and J. Gripp	485,291	Nov. 1	205	58	61	614

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Steam-generator	C. D. Mosher	472,309	Apr. 5	474	192	59	89
Steam-generator	W. J. Ranton	484,339	Oct. 11	1247	318	61	266
Steam-generator	F. C. Ronkey	467,835	Jan. 26	2482	630	58	495
Steam-generator	G. W. Sloane	481,069	Aug. 16	2113	536	60	1015
Steam-generator	W. D. Smith	487,300	Dec. 6	95	28, 29	61	1346
Steam-generator	T. L. Sturtevant	473,979	May 3	147	35	59	666
Steam-generator	T. L. and T. J. Sturtevant	480,417	Aug. 9	1078	270	60	797
Steam-generator	T. L. and T. J. Sturtevant	487,792	Dec. 13	918	232	61	1521
Steam-generator	J. W. Van Dyke	474,508	May 10	1000	257	59	840
Steam-generator	G. Vassar, Jr	487,382	Dec. 6	233	63	61	1367
Steam-generator. Magazine	H. Hyde	470,195	Mar. 8	849	209	58	1273
Steam-generator or evaporator	G. W. Baird	484,946	Oct. 25	2242	578	61	491
Steam-generator. Porcupine	J. H. Hoadley	474,386	May 10	811	212	59	804
Steam-generator. Self-purifying superheating	B. F. Field	488,519	Dec. 20	2124	525 526	61	1777
Steam-generators. Furnace or setting for	C. O. Arey	473,053	Apr. 19	1607	409	59	331
Steam-heater	R. M. Cox and R. Clark	473,251	Apr. 19	1945	459	59	394
Steam-heater	T. Fearon	484,787	Oct. 25	1976	504	61	438
Steam-heater	J. A. Flajole	486,862	Nov. 29	2696	704	61	1180
Steam-joint. Concentric	J. B. Morgan	485,586	Nov. 1	676	179	61	713
Steam-loop. Combined	W. Burnham	474,440	May 10	898	233 234	59	892
Steam-loop system	W. Burnham	474,439	May 10	895	232 233	59	821
Steam. Means for superheating	A. Bratoluboff	487,317	Dec. 6	133	39	61	1347
Steam-motor	E. A. Edwards	485,536	Nov. 1	584	156 157	61	692
Steam or hot-water generator	D. A. Dickinson	473,109	Apr. 19	1705	432	59	348
Steam-power. Generation of	C. C. Peck	479,454	July 26	2179	545	60	467
Steam-separator	D. Cochrane	483,992	Oct. 11	709	178	61	160
Steam-separator	C. D. Mosher	472,308	Apr. 5	472	121	59	89
Steam-separator	C. D. Mosher	472,310	Apr. 5	476	122 123	59	89
Steam-separator	W. O. Webber	486,144	Nov. 15	1553	411	61	923
Steam. Separator for purifying	D. Cochrane	474,160	May 3	423	101	59	720
Steam-shovel	J. Nichol	476,808	June 14	882	218	59	1628
Steam-supply. Apparatus for controlling and indi- cating	C. E. Emery	473,733	Apr. 26	2749	692 693	59	571
Steam to motors. Apparatus for controlling the sup- ply of	W. Tully	469,611	Feb. 23	2652	381	58	1069
Steam-transmitter	D. B. Baker and M. Laffaw	486,019	Nov. 8	1330	353	61	862
Steam-trap	W. C. Baker	481,098	Aug. 16	2158	537	60	1024
Steam-trap	C. F. Brigham	467,634	Jan. 26	2161	549	58	434
Steam-trap	R. W. Clark	466,324	Jan. 5	26	6	58	8
Steam-trap	R. M. Dixon	477,855	June 28	2613	654 655	59	1995
Steam-trap	E. E. Gold	472,116	Apr. 5	168	46	59	32
Steam-trap	J. McKellar	481,507	Aug. 23	2849	700	60	1168
Steam-trap	N. Nilson	483,119	Sept. 20	1942	491	60	1744
Steam-trap	E. Renner and J. Hofbauer	471,397	Mar. 22	2719	693	58	1654
Steam-trap	C. Taylor	481,601	Aug. 30	3011	736	60	1214
Steam-trap	B. E. Van Auken	478,037	June 28	2895	723	59	2051
Steamer	A. A. Besemer	488,515	Dec. 20	2107	523	61	1775
Steamer	V. F. Fagg	481,940	Sept. 6	32	7	60	1340
Steamer. Cooking	J. H. Howard	468,952	Feb. 16	1640	418	58	863
Steamer. Food	T. Cascaden, Jr	476,247	June 7	24	5	59	1444
Steamer, lawn, or invalid chair	D. Parks	481,119	Aug. 16	2191	542	60	1030
Steamer. Wheat	F. A. Evans	476,138	May 31	3595	908 909	59	1391
Steaming apparatus. Grain	H. S. Jewell	484,099	Oct. 11	858	218	61	190
Steaming clams, oysters, &c. Apparatus for	J. H. Starin	475,353	May 24	2340	600	59	1134
Steaming or tempering grain. Device for	R. L. Rodman	482,590	Sept. 13	1119	270	60	1568
Steel articles. Hardening	W. H. Wright	470,277	Mar. 8	980	242	58	1299
Steel. Hardening	G. F. Simonds	466,442	Jan. 5	215	55	58	41
Steel-hardening apparatus	G. F. Simonds	466,441	Jan. 5	213	55	58	41
Steel. Manufacturing	T. S. Blair, Jr	467,147	Jan. 19	1396	356 357	58	282
Steel. Manufacturing	H. C. S. Dyer	466,927	Jan. 12	1010		58	201
Steel rails and bars. Apparatus for cooling	J. W. Cloud	468,788	Feb. 16	1380	348 349	58	814
Steel plates, &c. Apparatus for shaping, hardening, and tempering	J. B. Armstrong	488,301	Dec. 20	1760	444	61	1705
Steel-tempering compound	H. E. Hopkins	488,433	Dec. 20	1979		61	1748
Steel tires or rings. Means for cooling	J. W. Cloud	468,789	Feb. 16	1382	349 350	58	814
Steering apparatus	C. H. Richardson	471,570	Mar. 29	2963	755	58	1708
Steering apparatus	J. D. Williamson, Jr	472,324	Apr. 5	495	129	59	93
Steering apparatus. Ship's	W. C. Williamson	486,007	Nov. 8	1312	349	61	858
Steering apparatus. Steam	B. W. Fellows	476,620	June 7	596	142 143	59	1555
Steering-gear. Auxiliary	H. L. Weitzel	488,746	Dec. 27	2474	615	61	1862
Steering-gear. Electric	E. H. Mumford	479,828	Aug. 2	85	21, 22	60	598
Steering-gear for vessels	R. J. Victor	471,202	Mar. 22	2428	618	58	1598
Steering-gear. Steam	G. A. Brondor	487,401	Dec. 6	281	72, 73	61	1376
Steering-gear. Steam	L. M. Sanders	471,142	Mar. 22	2342	599	58	1581
Steering mechanism. Boat	J. Savage	475,420	May 24	2447	624	59	1153
Steering vessels. Apparatus for	P. Watts	468,377	Feb. 9	736	183	58	676
Stench-trap	W. H. Mesick	474,342	May 3	737	192	59	779
Stencil-producing apparatus	H. F. Standing	475,165	May 17	2043	515	59	1058
Stencils. Apparatus for making	E. de Zuccato	478,301	July 5	3-0	92	60	76
Stencils. Method of and apparatus for producing	J. L. Young	478,675	July 12	930	231	60	200
Stencils. Producing	W. H. Bell	485,602	Nov. 8	689	181	61	730
Stenciling machine. Sign	G. H. Tietjen	477,474	June 21	1982	492	59	1856
Stenciling material. Duplicating	W. G. Fuerth	467,890	Jan. 26	2577		58	512
Step for shelves	J. J. Farner	487,117	Nov. 29	8128	802	61	1266

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & C.	Vol.	Page.
Stop. Movable	F. Forster	482,573	Sept. 13	1094	266	60	1563
Stereopticons, magic lanterns, &c. Attachment for	H. W. Force	482,238	Sept. 6	513	122	60	1435
Stereoscope. Coin-controlled	J. Ringen	485,567	Nov. 1	635	169	61	703
Stereotype and electrotype plates to their bases. De- vice for mounting and locking interchangeable	D. Reid	471,432	Mar. 22	2775	708	53	1664
Stereotype-box	C. S. Partridge	466,366	Jan. 5	87	24	58	19
Stereotype-forms. Machine for trimming segmental cylindrical	J. J. Clause	471,601	Mar. 29	3011	766	53	1716
Stereotype-plate and base	J. R. Cummings	472,474	Apr. 5	730	186	59	138
Stereotype-plate and base	J. R. Cummings	483,544	Oct. 4	43	11	61	11
Stereotype-plate and holder	M. Bennitt	484,082	Oct. 11	837	212	61	186
Stereotype-plate and holder	A. Thomson	486,240	Nov. 15	1691	448	61	950
Stereotype-plates. Clamp for securing	W. Filmer	486,160	Nov. 15	1577	417	61	927
Stereotype-plates. Composition for	W. A. Force	483,716	Oct. 4	287	61	60	
Stereotypes, &c. Block for	H. Fietsch, Jr.	477,591	June 21	2167	537	59	1893
Stew-pan	C. Turner	477,974	June 28	2789	699	59	2032
Still	J. C. Ditttrich and F. M. Grumbacher	487,027	Nov. 29	2927	769	61	1236
Still and process	P. Rodas	476,073	May 31	3426	878 879	59	1370
Still. Water	J. Petterson and L. H. Liebeck	478,458	July 5	606	148	60	120
Still	H. C. Swau	469,102	Feb. 16	1871	478	58	910
Still. Adjustable walking	J. L. Pope	486,891	Nov. 29	2752	715	61	1191
Still. Walking	W. J. Mecke	469,641	Feb. 23	2688	692	58	1076
Stippling implement	J. B. Pabl and J. B. Gaudelas	477,603	June 21	2182	541	59	1896
Stirring-machine	W. H. Crawford	470,407	Mar. 8	1221	312	58	1340
Stirrup	L. Anderson	475,374	May 24	2372	607	59	1140
Stirrup	R. H. Dacus	482,996	Sept. 20	1757	443	60	1705
Stirrup	A. J. de Lotbinière	475,127	May 17	1989	504	59	1047
Stirrup	A. Mayer	473,075	Apr. 19	1640	417	59	337
Stirrup	E. A. Peacock	478,633	July 12	871	214	60	188
Stirrup	G. E. Tucker	470,770	Mar. 15	1761	453	58	1457
Stirrup. Saddle	J. H. Lewis	469,153	Feb. 16	1937	496	58	923
Stirrup-strap connection	J. G. Bailey	474,715	May 10	1333	339	59	905
Stitching and barring machine. Buttonhole	C. A. Dahl	463,008	Feb. 16	1750	445 446	58	885
Stitching-horse	H. Doering	474,041	May 3	254	62	59	686
Stitching-horse	A. M. Sanders	476,898	June 14	1032	250	59	1656
Stitching with staples. Machine for	R. Brunet	481,747	Aug. 30	3252	792	60	1261
Stock-case. Sectional	O. H. L. Wernicke	487,400	Dec. 6	381	99	61	1396
Stock-fountain. Automatic	C. I. Burt	474,986	May 17	1775	449	59	1005
Stock guard. Horned	L. L. Tackitt	486,743	Nov. 22	2483	647	61	1122
Stocking	W. Esty. (Reissue)	11,222	Feb. 2	645	160	58	649
Stocking	H. J. Griswold	472,873	Apr. 12	1307	336	59	261
Stocking	H. C. McClurg	482,095	Sept. 6	280	68	60	1391
Stocking	L. M. Preston	472,815	Apr. 12	1228	315	59	245
Stocking	E. Terry and W. Hayter	488,487	Dec. 20	2066	513	61	1766
Stocking and making same	R. W. Scott	473,787	Apr. 26	2830	711	59	587
Stocking and producing the same	R. Hunt	466,417	Jan. 5	169	45, 46	58	33
Stocking-ribs. Device for transferring	F. Lasher	478,613	July 12	845	208	60	183
Stocking. Right and left	W. C. Lewis	474,391	May 10	818	214	59	806
Stocking-stretcher	L. G. Ericson	474,954	May 17	1714	436	59	995
Stocking-supporter	G. Spencer	468,369	Feb. 9	725	179	58	674
Stocking-supporter	D. H. Warner	468,074	Feb. 2	250	61	58	573
Stocking-supporters. Forming	T. R. Hyde, Jr., and J. Lines	469,476	Feb. 23	2453	628	58	1029
Stockings and making the same. Hem for	J. H. Place	466,371	Jan. 5	98	28	58	22
Stockings. Assortment of	W. H. Howard	478,751	July 12	1046	257	60	223
Stockings. Knitted	L. N. D. Williams	485,073	Oct. 25	2438	627	61	530
Stockings. Making	J. A. Burleigh	475,263	May 17	2192	559	59	1088
Stoker. Mechanical	J. Hodgkinson	467,008	Jan. 12	1133	287 288	52	223
Stoker. Mechanical	R. H. Williamson	476,848	June 14	953	232	59	1640
Stoker. Revolving	N. W. Pratt	485,223	Nov. 1	103	31, 32	61	594
Stoker. Revolving	N. W. Pratt	485,224	Nov. 1	106	32, 33	61	595
Stone and ore crushing machine	E. H. Booth	480,761	Aug. 16	1618	406 407	60	920
Stone. Artificial	J. H. Kleb	476,542	June 7	475	113	59	1531
Stone. Artificial	A. Sladoslawek	488,682	Dec. 27	23-4	61	1844	
Stone. Blasting	G. M. Githens	479,500	July 26	2268	508	60	483
Stone block. Artificial	G. M. Graham	474,539	May 3	733	191	59	778
Stone breaking or crushing machine	R. D. Gates	488,759	Dec. 27	2493	620	61	1866
Stone-channeling machine	W. H. Bryant	471,265	Mar. 22	2524	641	58	1616
Stone-channeling machine	W. H. Bryant	486,847	Nov. 29	2668	698	61	1174
Stone. Composition of matter for artificial	J. E. Keseling and C. Fuchs, Jr.	482,367	Sept. 13	755	60	1493	
Stone, &c. Composition of matter for cleaning brown	H. J. and G. F. Ecker	483,143	Sept. 27	1980	60	1762	
Stone. Composition of matter for the manufacture of artificial	J. E. Keseling and C. Fuchs, Jr.	480,591	Aug. 9	1346	60	851	
Stone. Composition of matter for the manufacture of artificial	J. E. Keseling and C. Fuchs, Jr.	481,279	Aug. 23	2488	60	1100	
Stone-crusher	G. Lowry	475,330	May 24	2297	590 591	59	1126
Stone-crusher	E. Villeroy	469,238	Feb. 23	2164	555	58	973
Stone-crusher elevator	I. P. Cribb	480,490	Aug. 9	1193	300	60	820
Stone-crusher pitman	T. A. Blake	477,400	June 21	1866	459	59	1833
Stone cutting and dressing machine	A. McDonald	473,850	Apr. 26	2930	738	59	606
Stone cutting and dressing machine	J. Rawle	482,098	Sept. 6	284	69	60	1392
Stone cutting and dressing machine	J. Rawle	482,099	Sept. 6	288	69	60	1392
Stone cutting and dressing tool	G. Lachapelle and C. E. Devine	470,788	Mar. 15	1784	459	58	1461
Stone-cutting machine	L. Prince	469,091	Feb. 16	1858	475	58	907
Stone-dressing apparatus	A. Dittmer	467,305	Jan. 19	1634	416	58	327
Stone-lifter	E. T. Viett	474,885	May 17	1610	411	59	974
Stone. Manufacture of artificial	L. Enricht	486,443	Nov. 22	2018	61	1030	
Stone. Manufacture of artificial	L. Enricht	486,445	Nov. 22	2020	61	1030	
Stone. Manufacture of artificial	L. Enricht	486,446	Nov. 22	2021	61	1030	
Stone. Manufacture of artificial	L. Enricht	486,447	Nov. 22	2022	61	1030	
Stone. Manufacture of artificial	L. Enricht	486,448	Nov. 22	2023	61	1030	

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dis.	Vol.	Page.
Stone. Manufacture of artificial	L. Enricht	486,449	Nov. 22	2024	.....	61	1030
Stone. Manufacture of artificial	W. Reissig	477,847	June 28	2600	.....	59	1994
Stone-molding machine	W. H. Evans	478,226	July 5	256	62, 63	60	52
Stone or body. Spectrum-colored	J. Jacobson	484,934	Oct. 25	2228	574	61	488
Stone or ore crushing machine	E. H. Booth	473,725	Apr. 26	2737	629	59	568
Stone paving-block. Artificial	F. Haines	481,352	Aug. 23	2602	639	60	1119
Stone paving-block. Artificial	F. Haines	481,353	Aug. 23	2604	640	60	1120
Stone paving-block. Artificial	F. Haines	481,354	Aug. 23	2605	640	60	1120
Stone slabs. Machine for molding	W. H. Evans	478,227	July 5	257	63, 64	60	52
Stone surfaces. Hand implement for tooling	W. F. Nicholson	477,693	June 28	2350	587	59	1947
Stone-working machine	E. H. Kavanagh and E. E. Winkley	467,937	Feb. 2	54	12, 13	58	535
Stones. Manufacturing artificial	C. George	470,333	Mar. 8	1098	.....	58	1319
Stones. Producing inlaid work on	R. Rausch	486,590	Nov. 22	2237	.....	61	1072
Stoning-knife	F. H. Disbrow	469,550	Feb. 23	2574	659	58	1052
Stool	P. H. Fuhrmann	482,553	Sept. 13	1070	260	60	1558
Stool	H. Nesson	469,358	Feb. 23	2265	581	58	994
Stool. Adjustable piano	A. R. Milner	471,184	Mar. 22	2400	612	58	1592
Stool and coal-receptacle. Combined	F. Bornemann	482,912	Sept. 20	1625	407	60	1678
Stool cano. Camp	C. T. Golding	474,240	May 3	546	134	59	743
Stool. Double piano	J. J. Hering	486,405	Nov. 15	1935	519	61	1004
Stool. Folding	F. Benoit	486,075	Nov. 15	1422	375	61	897
Stool. Folding	A. Smith	487,200	Nov. 29	3256	833	61	1290
Stool. Folding	W. H. Van Gilder	473,534	Apr. 26	2427	{ 614 615 }	59	508
Stool. Folding camp	L. D. Mason	476,805	June 14	884	217	59	1627
Stool for tables, counters, &c	J. Jackson	484,719	Oct. 18	1844	469	61	397
Stool. Heating	H. I. Gorum	467,606	Jan. 26	2127	540	58	427
Stool. Milk	M. N. Sevier	487,099	Nov. 29	3101	796	61	1261
Stool. Milk	R. W. Shaw	486,944	Nov. 29	2865	740	61	1213
Stool. Piano	A. H. and P. A. Lindberg	486,916	Feb. 16	1575	{ 399 400 }	58	852
Stool. Piano	G. E. March and H. A. Wolff	470,066	Mar. 1	633	157	58	1222
Stop-box	C. G. Ette	477,323	June 21	2064	514	59	1873
Stop-motion device	R. Whitaker	471,044	Mar. 15	2175	560	58	1537
Stop-motion for textile machinery. Electric	S. L. Foster	479,358	July 19	2003	501	60	418
Stopper							
See Bottle-stopper.	Flue-stopper.						
Can-stopper.	Inkstand-stopper.						
Can or vessel stop- per.	Leak-stopper.						
	Screw-stopper.						
Stopper-extractor	R. Puccini	480,414	Aug. 9	1072	268	60	797
Storage and delivery fixture. Portable	M. Herzberg and S. T. Whitaker	468,516	Feb. 9	960	244	58	720
Storage-battery	C. P. Eliesou	469,129	Feb. 16	1902	487	58	917
Storage-battery	P. Kennedy and C. J. Diss	482,043	Sept. 6	196	47	60	1374
Storage-battery	P. Kennedy and C. J. Diss	482,044	Sept. 6	199	47	60	1374
Storage-battery	E. R. Knowles	482,979	Sept. 20	1726	{ 436 437 }	60	1699
Storage-battery	E. R. Knowles	483,562	Oct. 4	68	17	61	16
Storage-battery	E. R. Knowles	483,563	Oct. 4	70	17	61	16
Storage-battery	E. P. Usher	480,883	Aug. 16	1802	450	60	956
Storage-battery	E. P. Usher	480,885	Aug. 16	1804	451	60	957
Storage-battery	G. A. Washburn	488,233	Dec. 20	1658	414	61	1685
Storage-rooms. Construction of	W. Griesser	482,889	Sept. 20	1588	399	60	1671
Store-fixture	J. E. Sperry	466,938	Jan. 12	1026	261	58	204
Store-service apparatus	T. E. Barrow	484,547	Oct. 18	1578	{ 400 401 }	61	343
Store-service apparatus	T. E. Barrow	484,548	Oct. 18	1580	401	61	344
Store-service apparatus	W. R. Cole	466,887	Jan. 12	952	243	58	190
Store-service apparatus	J. T. Cowley	474,040	May 3	247	{ 59 60 61 }	59	685
Store-service apparatus	J. J. Crist	481,346	Aug. 23	2594	{ 637 638 }	60	1118
Store-service apparatus	A. J. Gillespie	469,014	Feb. 16	1759	448	58	887
Store-service apparatus	J. H. Goodfellow	479,502	July 26	2270	569	60	484
Store-service apparatus	J. H. Goodfellow	479,503	July 26	2275	569	60	485
Store-service apparatus	J. H. Goodfellow	479,504	July 26	2277	{ 569 570 }	60	485
Store-service apparatus	J. H. Goodfellow	479,505	July 26	2279	570	60	485
Store-service apparatus	R. Gornall	483,610	Oct. 4	139	35	61	29
Store-service apparatus	L. H. Leber	468,980	Feb. 16	1697	433	58	875
Store-service apparatus	C. W. McCormick	482,646	Sept. 13	1195	{ 289 290 }	60	1581
Store-service apparatus	R. B. Wilson	478,038	June 28	2898	724	59	2051
Store-service apparatus. Electric	M. W. Hassan	470,428	Mar. 8	1258	322	58	1348
Stove	I. De Haven	481,226	Aug. 23	2386	588	60	1081
Stove	J. W. Elliott	469,466	Feb. 23	2434	421	58	1026
Stove	J. Fischer and E. Preiser	479,210	July 19	1766	443	60	370
Stove	C. H. Freckore and C. E. Welch	472,755	Apr. 12	1148	294	59	329
Stove	O. Nilson	484,230	Oct. 11	1069	271	61	232
Stove	F. O. Ruehle and A. G. Schmidt	484,113	Oct. 11	874	222	61	193
Stove	J. Schroeffel and F. L. Voegtly	487,541	Dec. 6	504	131	61	1420
Stove	M. Seibold	488,965	Dec. 27	2352	582	61	1838
Stove	U. Sipos	467,759	Jan. 26	2366	600	58	473
Stove	J. A. Suppiger	486,910	Nov. 29	2810	728	61	1303
Stove	D. M. Thomas	486,946	Nov. 29	2867	740	61	1314
Stove	K. Verzinger	469,380	Feb. 23	2302	592	58	1001
Stove	L. P. Zimmerling	486,948	Nov. 29	2869	741	61	1214
Stove and burner for hydrocarbon oils	H. W. Libbey	467,608	Jan. 26	2130	541	58	428
Stove and draft-regulator therefor. Heating	F. H. Riepe, Jr., and C. E. Hilgeman	481,870	Aug. 30	3450	846	60	1300
Stove and furnace. Combined	C. Brandt	482,466	Sept. 13	911	222	60	1526
Stove and grate. Combined	E. Scanlan	474,191	May 3	474	114	59	730
Stove ash-box	L. Kahn and R. Christ	478,334	July 5	425	104	60	85
Stove attachment	W. Price	480,828	Aug. 16	1727	431	60	941
Stove-base. Auxiliary	J. D. Rasey	480,212	Aug. 2	734	185	60	723

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Stove board or platform.....	J. J. Sweeney	469,875	Mar. 1	338	87	58	1167
Stove broiler attachment.....	T. P. Dunne	480,076	Aug. 2	508	129	60	679
Stove burner. Oil.....	E. M. Wright.....	469,510	Feb. 23	2506	642	58	1039
Stove. Combined cooking and hot-water-heating....	M. A. Wilcox.....	482,772	Sept. 20	1410	{ 348 349 }	60	1635
Stove. Cook.....	W. L. McDowell.....	478,807	July 12	1146	{ 283 284 }	80	243
Stove. Cooking.....	E. C. Frost.....	472,533	Apr. 12	828	211	59	171
Stove. Cooking.....	J. S. Harkins.....	469,739	Mar. 1	112	30	54	1121
Stove. Cooking.....	J. Marcee.....	485,049	Oct. 25	2406	619	61	523
Stove. Cooking, heating, and illuminating lamp.....	J. F. Myers.....	481,768	Aug. 30	3291	801	60	1269
Stove. Culinary and heating oil.....	V. E. Randall.....	481,511	Aug. 23	2854	701	60	1169
Stove-door knob.....	J. W. Heaphy, Jr.....	474,471	May 10	946	244	59	830
Stove drum and chimney. Oil.....	J. M. Stokoe.....	474,782	May 10	1436	364	59	926
Stove-fireback.....	J. Hatfield.....	488,199	Dec. 20	1592	393	61	1673
Stove-fine cleaner.....	T. B. Mothershed.....	479,447	July 26	2165	541	60	465
Stove for bricks, &c. Drying.....	A. Schaaf.....	483,018	Sept. 20	1797	453	60	1713
Stove for burning hydrocarbon oil and its vapors....	H. Ruppel.....	471,399	Mar. 22	2724	{ 694 695 }	58	1655
Stove for heating ovens for japanning, enameling, and glazing.	T. M. Lincoln.....	482,485	Sept. 13	944	230	60	1532
Stove for heating purposes. Oil.....	B. F. Goodrich. (Reissue).....	11,225	Feb. 23	2744	705	58	1089
Stove. Gas.....	P. W. Bean.....	473,283	Apr. 19	2004	504	59	406
Stove. Gas.....	J. B. Michener.....	482,094	Sept. 6	279	68	60	1390
Stove. Gas.....	J. L. Sharp.....	472,144	Apr. 5	211	56	59	39
Stove. Gas.....	E. C. Warren.....	485,852	Nov. 8	1052	281	61	804
Stove. Gas cooking.....	G. A. Bischoff.....	471,208	Mar. 22	2436	620	58	1599
Stove. Gas heating.....	E. Raud.....	483,086	Sept. 20	1893	479	60	1733
Stove. Gas heating.....	M. G. Wilder.....	486,205	Nov. 15	1633	{ 432 433 }	61	938
Stove-grate.....	C. L. Beers.....	483,295	Sept. 27	2257	568	60	1814
Stove-grate.....	D. Chamberlain.....	474,367	May 10	787	205	59	800
Stove-grate.....	F. W. Collins.....	475,298	May 24	2248	579	59	1116
Stove-grate.....	E. D. Nellis.....	478,042	June 23	2904	725	59	2052
Stove-grate.....	W. D. Southard.....	486,797	Nov. 22	2573	671	61	1139
Stove-grate or lining.....	W. Miller.....	466,504	Jan. 5	316	79	58	60
Stove-grates. Fuel-saving attachment for.....	A. Stocker.....	479,536	July 26	2318	579	60	491
Stove. Heating and gas-generating.....	F. Jarrett and L. Peyton.....	474,742	May 10	1374	348	59	913
Stove. Hot-blast.....	G. W. McClure.....	469,826	Mar. 1	259	66, 67	58	1151
Stove-jack.....	D. B. Whitehill.....	468,713	Feb. 9	1261	321	58	781
Stove. Lamp.....	B. F. Brown.....	480,395	Aug. 9	1043	262	60	792
Stove. Lamp.....	C. S. Upton.....	472,594	Apr. 12	905	232	59	186
Stove. Lamp.....	S. L. Walker.....	483,591	Oct. 4	115	28	61	24
Stove-leg fastening.....	L. E. Covert and C. W. McCutchen.....	487,255	Dec. 6	26	7	61	1326
Stove-lid.....	R. T. Burchell.....	466,999	Jan. 12	1122	284	58	221
Stove. Magazine.....	J. T. Austin.....	474,769	May 10	1412	359	59	921
Stove-mat.....	W. J. Turpin.....	483,880	Oct. 4	533	134	61	110
Stove. Oil.....	D. Bakley.....	480,544	Aug. 9	1275	320	60	837
Stove. Oil.....	M. G. Benedict.....	486,063	Nov. 8	1398	370	61	874
Stove. Oil.....	M. G. Benedict.....	486,422	Nov. 22	1987	527	61	1023
Stove. Oil.....	I. Block and J. Goldstein.....	467,850	Jan. 26	2510	635	58	500
Stove. Oil.....	C. H. Boeck.....	475,262	May 17	2191	558	50	1028
Stove. Oil.....	W. M. Bowman and E. F. Shaw.....	482,539	Sept. 13	1042	252	60	1552
Stove. Oil.....	G. W. Cope.....	485,838	Nov. 8	1029	277	61	800
Stove. Oil.....	G. Gardner.....	485,539	Nov. 1	592	158	61	694
Stove. Oil.....	J. Goldstein.....	485,378	Nov. 1	354	95	61	645
Stove. Oil.....	R. Z. Liddle.....	484,030	Oct. 11	767	194	61	172
Stove. Oil.....	C. K. Stinson.....	488,957	Dec. 27	2811	{ 692 693 }	61	1932
Stove. Oil.....	S. D. Strong.....	474,874	May 17	1591	405	59	969
Stove. Oil.....	W. H. Wilder.....	486,311	Nov. 15	1810	477	61	975
Stove. Oil.....	A. F. Zimmerling.....	476,352	June 7	196	47	59	1474
Stove. Oil-burning.....	G. R. Stillman and F. Markoe.....	470,084	Mar. 1	662	163	58	1227
Stove or heater.....	A. C. Barler.....	475,029	May 17	1837	466	59	1017
Stove or range.....	G. A. Fisher.....	474,729	May 10	1353	343	59	909
Stove or range. Cooking.....	F. Marquart.....	477,216	June 21	1566	385	59	1776
Stove or range doors. Spring counterbalance for.....	M. N. Lovell and B. A. Walker.....	467,541	Jan. 26	2025	513	58	409
Stove or range. Gas-burning cooking.....	C. F. Adams.....	472,842	Apr. 12	1264	324	59	252
Stove or range grate.....	W. M. Shores.....	468,958	Feb. 16	1649	{ 420 421 }	58	865
Stove or warm-air furnace.....	W. H. Turner.....	483,187	Sept. 27	2061	{ 520 521 }	60	1778
Stove-oven.....	P. Hoogerzeil.....	467,292	Jan. 19	1616	412	58	323
Stovepipe.....	G. G. Calderwood.....	483,207	Sept. 27	2092	530	60	1785
Stovepipe.....	T. S. Evans.....	481,856	Aug. 30	3431	842	60	1296
Stovepipe and collar fastener.....	J. J. Travis.....	468,629	Feb. 9	1129	287	58	753
Stovepipe attachment.....	H. N. Pearson.....	475,149	May 17	2020	510	59	1054
Stovepipe-collar and fastener.....	A. D. and C. J. Grubb.....	483,441	Sept. 27	2461	619	60	1854
Stovepipe-collar and fastening device therefor.....	A. W. Foster.....	470,327	Mar. 8	1089	278	58	1317
Stovepipe-coupling.....	F. P. Hart.....	481,026	Aug. 16	2028	506	60	1000
Stovepipe-drying-rack.....	L. M. Dowler.....	480,658	Aug. 9	1461	363	60	873
Stovepipe-fastener.....	J. R. McGoron.....	482,808	Sept. 20	1453	361	60	1645
Stovepipe-fastener.....	C. Rusch.....	479,844	Aug. 2	103	26	60	602
Stovepipe-fastening.....	J. H. Johnston.....	478,965	July 12	1378	339	60	286
Stovepipe-holding device.....	C. F. Spencer.....	479,313	July 19	1917	479	60	400
Stovepipe-shelf.....	E. A. Loebis.....	488,247	Dec. 20	1678	419	61	1689
Stovepipe-support. Adjustable.....	A. Petterson.....	476,815	June 14	900	231	59	1630
Stovepipe-thimble.....	W. Bales.....	484,694	Oct. 18	1811	460	61	391
Stovepipe-thimble.....	F. A. Peters.....	476,300	June 7	111	26, 27	59	1460
Stovepipes. Elbow for facilitating the cleaning of.....	O. G. Cranston.....	480,173	Aug. 2	661	168	60	708
Stovepipes. Evaporator attachment for.....	H. W. Libbey.....	472,060	Apr. 5	74	20	59	16
Stovepipes. Fastening or locking device for.....	J. L. Anthony.....	473,052	Apr. 19	1606	409	59	331
Stove plate. Vapor.....	F. J. Little.....	483,932	Oct. 4	610	154	61	126
Stove. Portable.....	F. T. Schneider.....	478,820	July 12	1173	290	60	248
Stove. Regenerative hot-blast.....	G. W. McClure and C. Amsler.....	469,820	Mar. 1	251	64	58	1150

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.-g.	Vol.	Page.
Stove. Reservoir cooking.	J. White	475,100	May 17	1949	494	59	1039
Stove screen and fender.	J. Adrianson	485,363	Nov. 1	334	88	61	641
Stove. Steam-cooking.	W. S. James	472,730	Apr. 12	1107	285	59	222
Stove. Tile.	R. Meyer	480,603	Aug. 9	1367	339	60	854
Stove. Vapor.	R. Flick	483,051	Sept. 20	1840	468	60	1723
Stove. Vapor.	C. M. Hollingsworth	470,756	Mar. 15	1736	447	58	1452
Stove. Vapor.	C. M. Hollingsworth	471,289	Mar. 22	2555	649	58	1622
Stove. Vapor.	H. Ruppel	480,281	Aug. 9	856	218 219	60	758
Stove. Vapor.	L. Stockstrom	479,315	July 19	1919	479 480	60	401
Stoves and furnaces. Means for securing glass plates in windows of	L. C. Ballentine	478,904	July 12	1279	317	60	268
Stoves. Ash and coal guard for Franklin	P. Brecher	473,057	Apr. 19	1612	411	59	332
Stoves. Ash-box for.	L. Kahn and R. Christ	472,577	Apr. 12	881	227	59	162
Stoves. Bake-oven for gasoline.	J. B. Logan	470,624	Mar. 8	1537	400	58	1404
Stoves. Device for filling coal into regulation	F. C. Nehse	475,885	May 31	3208	811	59	1313
Stoves. Fireback for.	J. Hatfield and J. M. Bennett	471,547	Mar. 29	2934	747	58	1703
Stoves, furnaces, boilers, &c. Natural-gas burner for heating	M. J. O'Reilly	468,155	Feb. 2	374	92	58	597
Stoves. Gas attachment for cooking.	R. Bigley	478,558	July 12	770	188	60	168
Stoves. Gas-burner for.	D. P. Stirk and J. Summers	473,410	Apr. 19	2219	557	59	448
Stoves, grates, &c. Gas-burner for.	H. E. Earle	469,881	Mar. 1	344	88	58	1168
Stoves. Heat-regulator for cooking.	V. M. Cone	470,546	Mar. 8	1429	372	58	1381
Stoves. Odor-removing device for cooking.	C. T. Tolliver and P. Ruffin	486,550	Nov. 22	2164	571	61	1058
Stoves or heaters. Non-conducting lining for.	C. F. Walther	472,414	Apr. 5	635	162	59	119
Stoves or heaters. Oil-burner attachment for.	G. R. Moore	472,268	Apr. 5	410	105	59	77
Stoves or ranges. Grate for cook-	A. S. Newby	474,502	May 10	991	255	59	839
Stoves or ranges. Oven-door for cooking	F. V. Knauss	483,117	Sept. 20	1939	491	60	1743
Stoves. Oven for oil, gas, or gasoline.	H. F. Bartlett	478,211	July 5	219	55	60	45
Stoves. Separable water-back or heater for	C. W. Purple	474,459	May 10	934	240	59	827
Stoves. Supplemental top for gas.	A. Dreyfous	474,497	May 10	986	254	59	838
Stoves. Valve for hot-blast.	J. Kennedy	478,610	July 12	842	207	60	182
Stoves. Wick-tube for oil.	R. Z. Liddle	480,268	Aug. 9	840	214	60	755
Strainer.	J. Baird	467,604	Jan. 26	2124	539	58	427
Strainer.	M. B. Reynolds	484,459	Oct. 18	1437	367	61	316
Strainer.	W. W. True and E. C. Blanchard	468,032	Feb. 2	191	47	58	561
Strainer for mixed drinks.	W. Wright	484,276	Oct. 11	1150	293	61	247
Strainer for tea or coffee pots	F. B. Hays and C. E. Tefft	471,116	Mar. 22	2296	569	58	1573
Strainer. Lid.	H. S. Diack	481,166	Aug. 23	2289	564	60	1062
Strainer. Milk.	W. L. Fleming	477,796	June 28	2511	630	59	1977
Strainer. Rotary	C. Wandel	472,089	Apr. 5	115	31	59	23
Strainer. Syrup.	O. Brandt and F. Hoffmann	470,315	Mar. 8	1062	270	58	1313
Strainer. Tea.	F. J. Willis	477,726	June 28	2397	599	59	1956
Strainer. Tea or coffee	H. Hennig	473,626	Apr. 26	2503	652	59	541
Strainer. Tea or coffee	N. F. Whipple	470,026	Mar. 1	572	142	58	1209
Strake-weld pipe.	J. C. Bayles	470,738	Mar. 15	1710	441	58	1448
Strap:							
See Box-strap.	Satchel-strap.						
Hitching-strap.	Shawl-strap.						
Loom picker-strap.							
Strap-fastener.	J. B. Corser	473,297	Apr. 19	2021	507	59	410
Straw and ensilage cutter.	C. A. Pettet	480,508	Aug. 9	1221	305	60	826
Strawberry-vine cutter	W. H. Starks	479,996	Aug. 2	368	91	60	651
Straw-binder	G. Elrick	470,665	Mar. 15	1598	415 416 417	58	1425
Straw-binder	T. Urdahl	467,507	Jan. 26	1951	497 498 499	58	396
Straw-burner	G. A. Byor	482,862	Sept. 20	1532	381 382	60	1602
Straw-carrier attachment	J. McQuillan	474,181	May 3	456	110	59	726
Straw-cutter	H. D. Babcock	473,492	Apr. 26	2355	597	59	496
Straw-cutter	J. Raatz	482,413	Sept. 13	828	198 199	60	1511
Straw-elevator	J. Buchanan	467,476	Jan. 19	1895	484 485	58	377
Straw or feed cutter	H. M. Smith	477,339	June 21	1766	432 433	59	1814
Straw pressing and binding machine.	F. M. Hackett	477,538	June 21	2085	519	59	1877
Straw-stacker.	J. R. Cooper	482,080	Sept. 6	258	62, 63	60	1386
Straw-stacker.	C. E. Gaumer	483,213	Sept. 27	2098	532 533	60	1736
Straw-stacker.	J. Grube	474,010	May 3	199	47	59	676
Straw-stacker.	M. Heineke	484,427	Oct. 18	1386	354	61	305
Straw-stacker.	L. D. Wells	482,513	Sept. 13	992	240	60	1543
Straw-stacker attachment	S. G. Scholz. (Reissue).	11,281	Nov. 1	681	180	61	714
Straw-stacking machine.	A. Lammeclee	486,346	Nov. 15	1864	491	61	985
Streams. Device for regulating the flow of.	C. Boeckh	473,205	Apr. 19	1873	472	59	379
Street-cleaning machine.	R. W. Furnas	484,191	Oct. 11	999	255	61	218
Street-cleaning machine.	R. W. Furnas	484,192	Oct. 11	1001	256	61	218
Street-cleaning machine.	J. F. Stokes	472,646	Apr. 12	983	254	59	200
Street-crossing.	G. W. Doolittle	488,117	Dec. 13	1455	367	61	1629
Street-crossing. Arched	A. M. Hewlett	466,905	Jan. 12	978	249	58	195
Street or station indicator.	W. A. Turner	486,514	Nov. 22	2116	559	61	1049
Street-sprinkler.	A. W. Becker and E. Henry	487,508	Dec. 6	451	117	61	1411
Street-sprinkler.	J. B. Raberle	467,503	Jan. 26	1938	495	58	394
Street-sprinkler.	J. Ruprecht	467,303	Jan. 19	1632	415	58	326
Street-sprinkler.	H. T. Walshe and M. Sallenger	487,804	Dec. 13	937	237	61	1525
Street-sprinkler.	E. T. Westerfield.	474,465	May 10	939	242	59	828
Street-sprinkling machine	F. and L. Winkler	477,481	June 21	1993	495	59	1858
Street-sweeper	J. Damm	472,437	Apr. 5	669	171	59	125
Street-sweeper	P. B. Donahoe	469,551	Feb. 23	2575	660	58	1052
Street-sweeper	J. Jones and A. Gillies	471,642	Mar. 29	3066	780	58	1726

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Street-sweeper	M. S. Kjellström	472,366	Apr. 5	561	145	59	105
Street-sweeper	C. H. La Due	487,754	Dec. 13	849	216	61	1507
Street-sweeper	J. Newlove	469,030	Feb. 16	1777	453	58	892
Street-sweeper	H. F. Palmer	481,054	Aug. 16	2075	517 518	60	1009
Street-sweeper	J. C. Slawson	468,458	Feb. 9	855	216 217	58	700
Street-sweeper	A. B. Vandemark	483,702	Oct. 4	270	67	61	57
Street-sweeping machine	M. V. B. Ethridge	485,577	Nov. 1	650	173	61	707
Street-sweeping machine	J. Mackey	467,555	Jan. 26	2057	519 520	59	414
Street-sweeping machine	C. Z. O'Neill	473,163	Apr. 19	1789	451	59	364
Street-sweeping machine	S. H. Rathburn	482,196	Sept. 6	451	109	60	1423
Street-sweeping machine	A. Voelkle	482,663	Sept. 13	1218	297	60	1586
Street-sweeping machine	E. Wallace	485,727	Nov. 8	887	238	61	771
Striking and strength tester. Coin-controlled	F. W. Kremer	487,033	Nov. 29	2994	771	61	1238
Striking-bag. Gymnastic	H. Senger	475,252	May 17	2178	554	59	1085
Stringed instrument	A. Gass	474,120	May 3	365	87, 88	59	707
Stringed instrument	E. McNichol	468,114	Feb. 2	310	75	58	584
Stringed instruments. Capodastro for	A. L. Gassett	470,560	Mar. 8	1445	376	58	1385
Stringed instruments. Pick for	H. G. A. Smith	479,672	July 26	2522	628	60	531
Stripping-machine holder and turner	H. J. Gosling	488,653	Dec. 27	2335	577	61	1634
Structural blank	E. C. Smith	481,207	Aug. 23	2349	578 579	60	1074
Structure. Circular-roofed	C. Cunningham, Jr.	481,347	Aug. 23	2597	638	60	1118
Stub-holder	C. W. Martin	470,690	Mar. 15	1634	424	58	1432
Stubble shaver and cultivator	S. Dickerson	474,336	May 3	728	190	59	777
Stud or button	M. Breisch	476,362	June 7	215	53	59	1478
Stud. Shirt	M. B. Oppenheimer	473,336	Apr. 19	2092	526	59	423
Studs, &c. Machine for closing the edges of	F. Mossberg	478,517	July 5	700	170	60	139
Stuffing-box	F. Bauer	470,971	Mar. 15	2070	530	58	1517
Stuffing-box	C. K. Longenecker	481,406	Aug. 23	2689	660	60	1135
Stump-extractor	P. Hansen	481,944	Sept. 6	36	8, 9	60	1341
Stump-extractor	T. and A. Pinard	466,833	Jan. 12	845	217	58	171
Stump-extractor	G. W. Smeal	485,508	Nov. 1	544	145	61	683
Stump-extractor. Hydraulic	A. Taylor	470,086	Mar. 1	664	164	58	1228
Stump or rock extractor	O. S. Dietrich	479,974	Aug. 2	315	77	60	642
Stump-puller	A. C. French	486,248	Nov. 15	1703	450 451	61	953
Stump-puller	A. C. French	488,001	Dec. 13	1255	313	61	1587
Stump-puller	A. Hopkins	468,344	Feb. 9	691	171	58	667
Stump-puller	J. Milne	475,333	May 24	2302	591	59	1127
Stump-puller	W. B. Morris	471,878	Mar. 29	3444	878	58	1798
Submarine boat	J. F. Auer	470,535	Mar. 8	1412	369	54	1378
Submarine boats. Attachment for seeing from	I. A. Abbot	467,291	Jan. 19	1614	412	58	323
Submarine grapple	W. D. Walsh and J. A. Dowling	480,640	Aug. 9	1430	356	60	268
Submarine mine	G. F. Elliott	467,793	Jan. 26	2415	614	58	482
Submarine shell	G. F. Elliott	467,792	Jan. 26	2411	614	58	482
Submerged pipe	M. G. Schinke	486,986	Nov. 29	2925	751	61	1226
Subsoil attachment	J. M. Hurley and J. R. Westing	475,042	May 17	1854	470	59	1021
Substructure	S. A. Oliver	487,582	Dec. 6	553	143	61	1432
Sucker-rod coupling. Antifriction	W. L. Black	467,494	Jan. 26	1928	492	58	392
Sucker-rod socket	L. R. Hitchcock	471,975	Mar. 29	3575	912	58	1824
Sugar and salt. Utilizing heat in the manufacture of	S. M. Lillie	466,983	Nov. 29	2920	...	61	1225
Sugar. Apparatus for cooling hot liquid	H. Heide	470,823	Mar. 15	1855	475	58	1475
Sugar. Cleaning and washing raw	M. Weinrich	474,585	May 10	1129	288	59	865
Sugar. Device for cooling and graining maple	J. W. Currier	469,058	Feb. 16	1815	464	58	899
Sugar-gage for vacuum-pans	E. H. Duhme	484,145	Oct. 11	929	239	61	204
Sugar in loaf form. Apparatus for refining	C. Steffen	466,632	Jan. 5	510	131 132	58	98
Sugar. Manufacturing	E. C. Barthelemy	487,439	Dec. 6	351	...	61	1391
Sugar-mill feed-chute	J. Fisher	482,085	Sept. 6	267	64	60	1388
Sugar. Refining raw	F. O. Matthiessen	477,670	June 28	2316	...	59	1939
Sugar solutions. Apparatus for clarifying	E. W. Deming	470,250	July 19	1820	458	60	383
Sugar solutions. Process of and apparatus for evaporating	J. A. Morrell	476,891	June 14	1024	248	59	1654
Sugar-washing apparatus	R. P. Johnson	482,179	Sept. 6	426	101	60	1418
Sulky	J. B. Armstrong	482,114	Sept. 6	312	74	60	1396
Sulky	E. S. Frazier	481,556	Aug. 30	2940	722	60	1202
Sulky	E. A. Oliver	474,684	May 10	1288	329	59	896
Sulky	J. V. Upington	471,916	Mar. 29	3493	893	58	1809
Sulky	W. J. Wayne	475,991	May 31	3365	848	59	1344
Sulky	I. Wood	488,236	Dec. 20	1662	415	61	1686
Sulky-bodies. Device for adjusting the pitch of	J. Hessong	475,218	May 17	2124	537	59	1075
Sulky. Training	P. H. Bald	487,343	Dec. 6	169	47	61	1354
Sulphur. Apparatus for extracting	L. Labois	485,634	Nov. 8	734	191 192 193	61	739
Sulphur, carbonate of soda, and iron oxide. Recovering	G. Lunge and J. Dewar	480,109	Aug. 2	553	...	60	688
Sunshade. Vehicle	L. V. Luce	483,933	Oct. 4	611	155	61	126
Support for moving bodies	W. J. Lane	477,556	June 21	2112	525	59	1882
Support for moving bodies	W. J. Lane	477,557	June 21	2113	525	59	1882
Support for moving bodies	W. J. Lane	477,558	June 21	2114	525	59	1882
Supporter:							
See Ankle-supporter. Plant or tree supporter.							
Box-supporter. Railway-rail supporter.							
Curtain-supporter. Shade-supporter.							
Garment-supporter. Skirt-supporter.							
Hat-supporter. Stocking-supporter.							
Hose-supporter. Trousers-supporter.							
Invalid-supporter. Umbrella-supporter.							
Last-supporter.							
Supporting fixtures. Device for	J. T. Robb	480,744	Aug. 16	1595	400	60	915
Supporting-frame. Sectional	J. Ormerod	487,765	Dec. 13	866	220	61	1510

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Surf-boat. Safety	W. C. Soule	478,650	July 12	894	221	60	193
Surface-gage	J. Carr	467,732	Jan. 26	2326	590	58	465
Surface-gage	J. Carr	468,093	Feb. 2	274	67	58	577
Surface-gage	A. Mauser	476,806	June 14	885	217	59	1627
Surface-gage	C. Neri	480,959	Aug. 16	1928	482	60	980
Surface-gage	J. B. Price	477,960	June 28	2772	694	59	2028
Surgeon's chair	J. H. Doyle	467,479	Jan. 19	1901	486	58	379
Surgical and gynecological table	J. E. Chamberlin	476,516	June 7	442	104	59	1524
Surgical antiseptic thread-holder	N. White	485,674	Nov. 8	800	213	61	753
Surgical apparatus	S. M. Sapp	486,198	Nov. 15	1625	430	61	937
(Surgical.) Apparatus for stretching the vertebral column	C. Schmid	474,486	May 10	969	250	59	834
Surgical appliance	J. A. Vance	480,911	Aug. 16	1850	460	60	966
Surgical bandages. Sterilizer for	J. M. Van Heusen	488,725	Dec. 27	2444	607	61	1856
Surgical chair	F. E. Case	483,900	Oct. 4	559	141	61	116
Surgical chair	C. N. Leonard	472,372	Apr. 5	569	147	59	107
Surgical instrument	S. V. Bates	480,165	Aug. 2	649	164	60	706
Surgical instrument	P. Henger	474,130	May 3	381	91	59	712
Surgical instrument	A. McShane	467,188	Jan. 19	1455	371	58	293
Surgical-instrument case	D. Kennedy, Jr.	468,224	Feb. 2	473	117	58	617
Surgical instrument. Electrical	S. R. Bradley	472,968	Apr. 12	1454	371	59	290
Surgical instruments, &c. Sterilizer for	E. Boeckmann	484,927	Oct. 25	2216	571	61	486
Surgical knife	O. A. Hoeller	476,272	June 7	65	14	59	1450
Surgical needle and holder	F. Eissner	472,258	Apr. 5	396	102	59	74
Surgical pump	W. C. Carroll	473,546	Apr. 26	2442	618	59	512
Surgical pump	C. H. Truax	487,136	Nov. 29	3154	808	61	1271
Surgical splint	E. Densmore	485,178	Nov. 1	37	12	61	580
Surgical table	B. H. Daggett	488,649	Dec. 27	2325	575	61	1833
Surgical table	C. N. Leonard, R. B. Roberts, and W. D. Allison	473,122	Apr. 19	1722	436	59	351
Surveying-instrument	H. E. Grabau	472,451	Apr. 5	693	177	59	131
Surveyors' instruments. Tripod-head for	G. Hannes	470,802	Mar. 15	1813	466	58	1467
Suspended rack	J. J. Newberry	479,523	July 26	2301	575	60	490
Suspender attachment	B. O. Foster	472,040	Apr. 5	43	9	59	10
Suspender cast-off	G. E. Adams	487,690	Dec. 6	736	188	61	1466
Suspender-clasp	J. N. Faust	474,060	May 3	287	69	59	692
Suspender-clasp	C. R. Harris	473,458	Apr. 26	2309	583	59	487
Suspender-end	C. C. Krouse, H. E. Myers, and C. L. Girard	478,337	July 5	428	104	60	86
Suspender-end	A. M. Ziegler	487,041	Nov. 29	3005	774	61	1240
Suspender-end attachment	J. Lees, Jr.	481,360	Aug. 23	2612	642	60	1121
Suspender-end clasp	C. C. Krouse, H. E. Myers, and C. L. Girard	478,339	July 5	430	105	60	86
Suspenders	E. Davis	485,123	Oct. 25	2509	644	61	545
Suspenders	C. Dunham	468,561	Feb. 9	1035	263	58	715
Suspenders	J. P. Galvin	478,958	July 12	1362	336	60	284
Suspenders	E. Gutmann	482,963	Sept. 20	1702	430	60	1694
Suspenders	C. R. Harris	467,410	Jan. 19	1792	456	58	356
Suspenders	H. A. Hempel	484,095	Oct. 11	855	217	61	189
Suspenders	J. Katzenberg	478,335	July 5	426	104	60	85
Suspenders	C. C. Krouse, H. E. Myers, and C. L. Girard	478,338	July 5	429	105	60	86
Suspenders	C. C. Krouse, H. E. Myers, and C. L. Girard	487,149	Nov. 29	3179	814	61	1276
Suspenders	E. F. Moore	487,758	Dec. 13	857	218	61	1508
Suspenders	P. Ortmann	488,529	Dec. 20	2139	529	61	1779
Suspenders	M. Rosenstock	474,530	May 10	1040	266	59	847
Suspenders, garters, &c. Clasp and hook for	P. Bailly	471,392	Mar. 22	2615	663	58	1634
Suspending device	J. I. Johnson	483,615	Oct. 4	148	36	61	31
Suspension-catch. Detachable	B. Pickering	475,516	May 24	2602	601	59	1183
Suspension device	G. W. Baldwin	481,157	Aug. 23	2275	561	60	1059
Suspension-hook	G. A. Moss	484,335	Oct. 11	1243	316	61	265
Swaging-machine	J. Berry	480,228	Aug. 2	759	192	60	726
Swaging-machine	S. O. Biguey	475,077	May 17	1907	484	59	1031
Swaging-machine	W. H. Dayton	474,548	May 10	1071	275	59	854
Swaging-machine	C. H. Yarrington	483,091	Sept. 20	1901	480	60	1735
Swarm-catcher	B. Taylor	476,762	June 7	799	197	59	1597
Sweeping-machine	C. Bruso	480,231	Aug. 2	763	193	60	726
Sweeping-machine	E. O. Pease	478,942	July 12	1336	332	60	279
Swimmers' use. Leg attachment for	P. Curran	476,040	May 31	3432	867	59	1359
Swimming apparatus	E. R. Mellet	468,989	Feb. 16	1713	436	58	879
Swimming attachment	E. P., Jr., and W. N. Cafferty	476,000	May 31	3376	851	59	1346
Swimming equipment	P. Curran	476,039	May 31	3431	867	59	1358
Swimming or diving suit	A. Weil	476,341	June 7	179	43	59	1171
Swing	C. C. and I. Z. Alexander	482,217	Sept. 6	485	116	60	1430
Swing	I. Z. Alexander and A. B. Martindale	487,141	Nov. 29	3166	811	61	1273
Swing	W. O. Bunker	487,246	Dec. 6	15	5	61	1324
Swing	M. Cuson	488,602	Dec. 27	2253	559	61	1819
Swing	N. B. Gregory	477,858	June 28	2617	656	59	1996
Swing	J. H. Nicholson	479,524	July 26	2302	575	60	490
Swing	G. W. Smith	473,168	Apr. 19	1800	454	59	366
Swing	O. Strickland	471,700	Mar. 29	3159	805	58	1744
Swing	J. B. Sweetland	481,439	Aug. 23	2745	675	60	1147
Swinging bracket. Adjustable	N. R. Streeter	482,207	Sept. 6	469	112	60	1427
Swinging chair	J. E. Berst	466,997	Jan. 12	1120	284	58	221
Swinging gate	M. Anderson	482,218	Sept. 6	487	116	60	1430

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Swinging gate	C. M. Clary	484,847	Oct. 25	2081	535	61	450
Swinging gate	B. Huckey	468,769	Feb. 9	1341	339	58	797
Swinging gate	A. E. Lycan	476,399	June 7	274	64	59	1491
Swinging gate	A. Ross	472,716	Apr. 12	1092	280	59	219
Swinging gate	W. Snow	467,443	Jan. 19	1842	281	58	367
Swinging gate	A. Tarris	474,489	May 10	972	471	59	835
Swinging gate	A. W. Taylor	486,799	Nov. 22	2576	671	61	1140
Swinging gate	J. D. White	479,905	Aug. 2	194	672	60	620
Switch:							
See Automatic switch. Electrolytic switch.							
Car-switch. Lamp-socket switch.							
Circuit-switch. Railway-switch.							
Cut-out switch. Refrigerator-switch.							
Derailing-switch. Safety-switch.							
Electric switch. Snap-switch.							
Electric snap-switch. Spring-jack switch.							
Electric-socket switch. Telephone-switch.							
Electrical switch. Track-switch.							
Electrically-operated switch. Tramway-switch.							
Electrical switch. Trolley-switch.							
Electrically-operated switch. Wire switch.							
Switch	I. Cook	485,786	Nov. 8	960	257	61	786
Switch and frog	E. Samuel, V. Angerer, and C. A. Psilander	488,405	Dec. 20	1932	424	61	1739
Switch and signal apparatus	J. G. Schreuder	479,225	July 19	1787	448	60	374
Switch and signal apparatus	J. G. L. Schreuder	479,666	July 26	2514	625	60	530
Switch and signal mechanism	J. W. Thomas, Jr.	488,853	Dec. 27	2646	655	61	1897
Switch and signal mechanism. Interlocking	G. H. Pfeil	472,393	Apr. 5	608	154	59	114
Switch and signal operating apparatus	G. H. Pfeil	470,916	Mar. 15	1983	506	58	1500
Switch and signal operating apparatus	G. H. Pfeil	472,464	Apr. 5	711	181	59	135
Switch and signal operating mechanism. Locking device for	T. H. Patenall	474,528	May 10	1036	266	59	847
Switch and signal rods. Deflection-stand for	H. Williams	479,906	Aug. 2	195	48, 49	60	620
Switch and switch-box	S. Bergmann	472,027	Apr. 5	12	3	59	5
Switch and switch-box. Combined	A. L. Rohrer	468,474	Feb. 9	885	224	58	705
Switch-clip	A. W. Wright	484,622	Oct. 18	1691	429	61	366
Switch-lock	J. Judge	470,056	Mar. 1	619	154	58	1219
Switch-lock. Automatic	S. Grove	475,740	May 24	2947	747	59	1248
Switch mechanism	T. S. Mitchell	475,087	May 17	1936	490	59	1036
Switch-operating device	B. Bartelmes	485,446	Nov. 1	458	122	61	666
Switch-operating device	G. Schumacher	484,250	Oct. 11	1102	279	61	238
Switch-operating device	J. D. Stone	487,457	Dec. 6	378	98	61	1395
Switch or station signal	J. A. Erwin	469,130	Feb. 16	1903	487	58	917
Switch-rail-adjusting attachment	A. A. Strom	487,458	Dec. 6	379	99	61	1396
Switch-rail rods or braces. Straightener for	P. McCann	487,958	Dec. 13	1181	294	61	1572
Switch-shifter	J. Gilstrap and M. L. Brown	483,053	Sept. 20	1844	668	60	1724
Switch-signal	W. R. Thomas	466,968	Jan. 12	1070	271	58	212
Switch-signal. Torpedo	F. C. Leimbirt, E. J. Stont, and B. C. Springsteen	471,980	Mar. 29	3581	914	58	1825
Switch-stand	J. Christiansen	488,182	Dec. 20	1569	393	61	1669
Switch-stand	G. Cook	485,908	Nov. 8	1148	304	61	824
Switch-stand	V. J. Goetz	479,268	July 19	1852	464	60	388
Switch-stand	G. E. Hudgins	488,204	Dec. 20	1606	401	61	1676
Switch-stand	S. Jobe	482,870	Sept. 20	1550	387	60	1665
Switch-stand	F. W. Snow	466,379	Jan. 5	112	32	58	24
Switch-stand	F. W. Snow	480,676	Aug. 9	1487	370	60	878
Syringe	J. A. Flexner	478,583	July 12	804	198	60	175
Syringe	A. W. Hitt	468,620	Feb. 9	1117	284	58	751
Syringe	A. T. Holt	468,877	Feb. 16	1512	386	58	839
Syringe	C. E. Longden	470,430	Mar. 8	1262	323	58	1349
Syringe	H. J. Maris	470,811	Mar. 15	1830	470	58	1470
Syringe	G. F. Miles	478,703	July 12	965	239	60	207
Syringe	V. C. Vantwoud	466,587	Jan. 5	441	113	58	85
Syringe	T. B. Wilcox	475,909	May 31	3239	818	59	1319
Syringe and air-cushion. Combined fountain-syringe and speculum. Combined	J. P. Schan	480,785	Aug. 16	1658	414	60	927
Syringe and syringe-box	A. E. Magoris	471,647	Mar. 29	3074	781	58	1728
Syringe-case	L. R. Meyer	476,402	June 7	278	65	59	1492
Syringe. Duplex	A. B. Botstford	478,081	July 5	12	3	60	5
Syringe. Hypodermic	F. S. Ketchum	485,698	Nov. 8	832	224	61	760
Syringe suppository	S. R. Slater	486,057	Nov. 8	1392	369	61	873
Syringe-tube sinker	R. Abundi, T. Ellis, Jr., and J. T. Sackett	467,599	Jan. 26	2118	538	58	426
Syringe. Urethral	A. C. Eggers	475,495	May 24	2568	654	59	1176
Syringe. Vaginal	E. P. Roche	488,089	Dec. 13	1413	351	61	1621
Syringe. Vaginal	J. D. Kirkwood	478,872	July 12	1231	305	60	959
Syringe. Vaginal	W. H. Knap	468,151	Feb. 2	368	91	58	596
Syringe. Vaginal	T. H. Maddux	485,107	Oct. 25	2487	639	61	541
Syringe. Vaginal	J. H. Morrison	478,202	July 5	209	52	60	43
Syringe. Vaginal	F. Reutter	471,514	Mar. 22	2886	734	58	1686
Syringe. Vaginal	W. B. Spencer	474,506	May 10	996	257	59	840
Syringe. Filling	L. S. Riggs	477,961	June 28	2774	695	59	2028
Syringes. Medicament-receptacle for hypodermic	W. C. Durkee	468,001	Feb. 2	143	34	58	551

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Table:							
See Billiard-table. Invalid and center table.							
Caterer's tray table. Physician's table.							
Coin-table. Planing-machine table.							
Combination-table. Pool-table.							
Concentrating-table. Sewing or embroidery table.							
Desk tool-table. Surgical and gynecological table.							
Drawing-table. Thrashing-machine table.							
Extension-table. Turn-table.							
Folding table. Wall-table.							
Gluing-table.							
Ironing-table.							
Table.....	M. Dexter.....	471,077	Mar. 15	2231	572	58	1548
Table.....	C. E. Good and C. S. Whipple.....	473,151	Apr. 19	1770	447	59	361
Table.....	D. A. Hall.....	469,997	Mar. 1	535	133	58	1202
Table.....	J. R. Jordan.....	484,965	Oct. 25	2270	525	61	497
Table.....	A. F. Kinzler.....	477,424	June 21	1897	467	59	1839
Table.....	J. H. Martin.....	471,676	Mar. 29	3122	795	58	1737
Table and chair. Combined	G. Hunzinger.....	475,505	May 24	2586	658	59	1179
Table and embroidery-frame	M. Schmirk.....	478,591	July 12	1260	312	60	264
Table attachment for bedsteads	C. C. Elston.....	484,187	Oct. 11	994	254	61	217
Table-leaf support	E. G. Phillips.....	484,723	Oct. 18	1850	470	61	398
Table-leg fastener	J. W. Thompson and R. Golling.....	486,305	Nov. 15	1796	472	61	972
Table-leg fastening	L. Welker.....	480,536	Aug. 9	1262	317	60	835
Table or stool top or chair-bottom	W. W. Sinclair.....	472,911	Apr. 12	1366	350	59	274
Table, prie-dieu, and confessional. Combined	H. Lavigne.....	476,394	June 7	294	63	59	1489
Table slide. Extension	B. Batrd and T. O. Johnson.....	485,521	Nov. 1	558	149	61	686
Table slide. Extension	E. Fleukharp.....	474,186	May 3	464	113	59	728
Tables. Electric device for vibrating	W. L. Imlay.....	486,715	Nov. 22	2440	636	61	1112
Tablet-displaying device	E. G. Baker.....	476,182	May 31	3672	928	59	1405
Tablet for use in letter-writing	W. M. Viser.....	477,087	June 14	1348	328	59	1720
Tablet. Memorandum	G. H. Seymour.....	481,429	Aug. 23	2728	671	60	1143
Tablet. Writing	F. Bentel.....	481,686	Aug. 30	3138	765	60	1239
Tablet. Writing	F. D. Cady.....	484,406	Oct. 18	1352	345	61	299
Tablet. Writing	C. D. Crane.....	479,632	July 26	2458	612	60	519
Tack-driving machine	G. W. Copeland.....	475,488	May 24	2554	650	59	1173
Tack-driving machine	E. Patten.....	483,747	Oct. 4	337	85	61	70
Tack-driving mechanism	F. Chase.....	483,375	Sept. 27	2369	594	60	1836
Tack or nail driver	C. B. Godfrey.....	473,873	Apr. 26	2970	749	59	613
Tack-puller	N. B. Keys.....	468,564	Feb. 9	1033	264	58	736
Tack-pulling machine	O. Paquette and I. La Chapelle.....	473,708	Apr. 26	2714	6-3	59	564
Tack. Thumb	C. R. Albrecht.....	477,587	June 21	2161	536	59	1892
Tacking implement. Hand	N. Lombard.....	481,653	Aug. 30	3086	753	60	1229
Tacking-machine	J. P. Smith and F. M. Stevens.....	467,665	Jan. 26	2209	562	58	443
Tacking-machine	E. Woodward.....	468,379	Feb. 9	738	183	58	676
Tackle-block	H. V. Hartz.....	470,240	Mar. 8	915	226	58	1286
Tackle-block	R. B. Meeker.....	485,504	Nov. 1	538	142	61	682
Tackle-block	F. X. Rousseau.....	476,078	May 31	3492	880	59	1372
Tag	T. C. Barnum.....	478,185	July 5	180	47	60	38
Tag	F. C. Glave.....	476,259	June 7	46	10	59	1447
Tag-fastener	O. E. Abbey.....	481,382	Aug. 23	2651	650	60	1128
Tag for cloth-boards	J. V. Moore.....	478,938	July 12	1332	331	60	279
Tag-holder	J. W. Barton and W. J. McNabb.....	467,848	Jan. 26	2507	635	58	499
Tag-holder	C. Speck, Jr.....	484,682	Oct. 18	1795	456	61	387
Tag-holder	I. J. True.....	483,314	Sept. 27	2283	573	60	1819
Tag-making machine	A. C. North.....	484,973	Oct. 25	2220	588	61	499
Tag. Marking	S. Dancyger.....	486,208	Nov. 15	1640	434	61	939
Tag-package	A. R. Tiffany.....	470,956	Mar. 15	2045	523	58	1511
Tag-wiring machine	A. R. Tiffany.....	470,957	Mar. 15	2046	523	58	1512
Tail-board spring	F. Nickerson, Jr.....	473,774	Apr. 26	2803	705	59	583
Tallow, wax, &c. Apparatus for melting	A. Seifert.....	477,023	June 14	1235	299	59	1697
Tally-sheet	F. W. Barrett.....	466,593	Jan. 5	450	116	58	87
Tally-sheet	A. L. Nichols.....	479,449	July 26	2166	542	60	465
Tamper and shovel. Combined	R. S. Browning, Jr., and B. F. Battersby.....	474,495	May 10	981	253	59	837
Tang-end jaw	H. S. Pfeil.....	472,392	Apr. 5	607	154	59	114
Tank:							
See Fish-tank. Lard-cooling tank.							
Flush-tank. Oil-tank.							
Flushing-tank. Water-closet tank.							
Lamp-filling tank. Weighing oil-tank.							
Tank.....	H. L. Lipman.....	479,602	July 26	2412	601	60	510
Tank-band fastening	F. Bergquist.....	472,723	Apr. 12	1101	283	59	221
Tank connection	J. J. Hogan.....	473,461	Apr. 26	2311	584	59	488
Tank-feeder	M. Burt and J. W. Skilton.....	470,982	Mar. 15	2085	533	58	1520
Tank-feeder	M. Burt and J. W. Skilton.....	482,617	Sept. 13	1160	280	60	1575
Tank-feeder	G. P. Glenn.....	473,571	Apr. 26	2502	632	59	524
Tank-heater	J. T. McGrath.....	472,798	Apr. 12	1205	309	59	241
Tank heater. Stock	C. A. Weed.....	487,806	Dec. 13	941	238	61	1525
Tanks. Electric tell-tale for	C. Renter and G. Bollmann.....	467,774	Jan. 26	2387	606	58	477
Tanks, reservoirs, silos, &c. Construction of	P. A. J. Monier.....	486,535	Nov. 22	2144	566	61	1055
Tannic extracts. Purifying	G. Delvaux.....	483,141	Sept. 27	1978	.....	60	1761
Tanning compound	S. W. Wright.....	473,205	Apr. 26	2857	.....	59	592
Tanning-extracts. Making	W. C. Tiffany.....	480,376	Aug. 9	1011	.....	60	786
Tanning vat. Leather	B. P. Bradford.....	483,734	Oct. 4	313	79	61	66
Tap. Collapsible	W. W. Doolittle.....	481,648	Aug. 30	3077	751	60	1228
Tap. Pipe	E. M. Wolfe.....	482,955	Sept. 20	1691	425	60	1691

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Tap. Screw.	A. Cameron	471,948	Mar. 29	3538	904	58	1817
Tap. Self-closing water.	O. Schubert	470,510	Mar. 8	1379	360	58	1371
Tapping apparatus.	A. P. Smith.	485,716	Nov. 8	867	232	61	768
Tapping apparatus.	A. P. Smith.	485,717	Nov. 8	868	233	61	768
Tapping device.	D. J. Hurley	466,946	Jan. 12	1039	264	58	206
Tapping mains. Machine for.	W. S. Payne	478,711	July 12	975	{ 242 243 }	60	210
Tapping water-mains. Apparatus for.	A. P. Smith.	485,715	Nov. 8	866	232	61	767
Tapping water-mains. Method of and apparatus for.	H. H. Burritt.	473,997	May 3	115	41, 42	59	672
Tape-folding machine.	J. A. Barrett	482,153	Sept. 6	381	89	60	1410
Taper for night-lights.	E. Ludde	484,210	Oct. 11	1035	263	61	224
Tar-heating apparatus.	J. H. G. Zunner	488,414	Dec. 20	1955	489	61	1743
Target.	T. P. Nelson	473,332	Apr. 19	2084	524	59	422
Target. Rifle.	J. W. Porter	471,430	Mar. 22	2770	707	58	1663
Target. Self marking and indicating.	C. Vogel	474,109	May 3	355	85	59	705
Target. Surveyor's.	C. Urrutia	486,202	Nov. 15	1630	431	61	938
Target-trap.	F. C. Damm	477,927	June 28	2725	682	59	2018
Target-trap.	E. C. Eaton and F. C. Damm	469,904	Mar. 1	379	95	58	1174
Target-trap-carrier.	A. H. Hebbard	468,175	Feb. 2	406	101	58	603
Target-traps. Electrical releasing device for.	P. North	469,905	Mar. 1	380	96	58	1174
Targets. Machine for making composition.	J. W. Dunbar	486,396	Nov. 15	1939	{ 513 514 }	61	1001
Tassel-bunches. Machine for forming.	G., J. G., and M. O. Rehfuss	467,435	Jan. 19	1832	468	58	364
Tax-calculator.	W. Lamb	469,654	Feb. 23	2708	697	58	1081
Tea and fruit drier.	B. L. Ryder	478,134	July 5	79	21	60	18
Tea-chest.	P. Buford	469,122	Feb. 16	1834	484	58	915
Tea-kettle.	V. C. Baker.	482,972	Sept. 20	1718	433	60	1607
Tea-kettle.	J. Black and F. C. A. Natus	473,819	Apr. 26	2876	722	59	596
Tea-kettle.	J. Naber, Jr.	485,016	Oct. 25	2360	607	61	514
Tea-kettle.	W. W. Scott	477,386	June 21	1847	454	59	1820
Tea-kettle or similar vessel. Sheet-metal.	F. W. Judd.	469,742	Mar. 1	117	31	58	1122
Tea-kettle. Sheet-metal.	F. W. Judd.	469,743	Mar. 1	119	31	58	1122
Tea or coffee extractor. Floating.	J. Smith	476,568	June 7	515	121	59	1539
Tea or coffee pot.	T. E. Williams	476,851	June 14	960	233	59	1641
Tea or coffee pots or other vessels. Attachment of covers to	E. B. Manning and M. Seips	488,793	Dec. 27	2548	632	61	1877
Tea or other caddy.	J. N. Strong	470,018	Mar. 1	561	139	58	1207
Tea-pot.	R. Chidley	473,727	Apr. 26	2741	690	59	570
Tea-pot or coffee-pot handle.	B. V. Gintz.	474,905	May 17	1637	418	59	979
Teaching chemistry. Appliance for.	J. Osorio	480,275	Aug. 9	848	216	60	757
Teaching drawing. Device for.	N. O. Starks	471,442	Mar. 22	2790	712	58	1667
Teeth-regulator.	D. R. Wilder	473,040	Apr. 19	1590	405	59	328
Telegraph apparatus. Electric.	J. Robinson	469,273	Feb. 23	2134	{ 548 549 }	58	968
Telegraph apparatus. Electrical circuit for.	F. W. Jones	488,940	Dec. 27	2781	646	61	1925
Telegraph apparatus. Electro-magnetic.	A. G. Safford	485,334	Nov. 1	280	76	61	629
Telegraph apparatus for branch offices.	J. B. Hurd	469,856	Mar. 1	306	79	58	1160
Telegraph. Automatic.	F. Anderson	472,326	Apr. 5	498	130	59	93
Telegraph box. District.	C. Selden	473,024	Apr. 19	1563	398	59	324
Telegraph-box. Non-interfering fire-alarm.	F. F. Loomis	469,745	Mar. 1	121	32	58	1123
Telegraph. Duplex.	T. A. Edison	480,567	Aug. 9	1305	326	60	844
Telegraph. Fac-simile.	T. A. Edison and P. Kenny	479,184	July 19	1728	{ 433 434 }	60	363
Telegraph. Fire-alarm.	A. J. Coffee	481,847	Aug. 30	3415	838	60	1293
Telegraph indicator. Fire-alarm.	F. F. Loomis	479,950	Aug. 2	272	67	60	634
Telegraph-instrument.	C. B. Carr	476,730	June 7	753	186	59	1587
Telegraph-instrument. Mechanical.	B. F. Butler	479,782	Aug. 2	13	3	60	585
Telegraph-key.	A. E. McClaren	480,475	Aug. 9	1173	295	60	816
Telegraph-key.	A. F. Tucker	479,859	Aug. 2	125	31	60	607
Telegraph-key and circuit-closer. Combined.	W. F. Lott	481,114	Aug. 16	2183	541	60	1029
Telegraph key and sonnder. Combined.	D. J. Ludwig	482,129	Sept. 6	335	80	60	1400
Telegraph-keys. Automatic circuit-closer for.	C. W. Bradford	480,689	Aug. 9	1512	376	60	882
Telegraph or other pole.	W. Pitt.	473,522	Apr. 26	2408	{ 610 611 }	59	505
Telegraph-pole.	O. M. Knox	486,974	Nov. 29	2965	750	61	1221
Telegraph-pole.	W. H. Pratt	488,830	Dec. 27	2600	645	61	1888
Telegraph-poles. Foot-support for.	E. A. Streeter	471,626	Mar. 29	3047	776	58	1723
Telegraph. Printing.	C. L. Buckingham	487,981	Dec. 13	1209	{ 302 303 303 }	61	1578
Telegraph. Printing.	C. L. Buckingham	487,982	Dec. 13	1216	{ 304 305 305 }	61	1579
Telegraph. Printing.	C. L. Buckingham	487,983	Dec. 13	1222	{ 306 307 307 }	61	1580
Telegraph. Printing.	C. L. Buckingham	487,985	Dec. 13	1228	{ 306 307 307 }	61	1582
Telegraph. Printing.	C. L. Buckingham	487,986	Dec. 13	1233	{ 307 307 307 }	61	1582
Telegraph. Printing.	A. D. Neal and H. F. Eaton	487,229	Nov. 29	3313	{ 845 846 847 }	61	1300
Telegraph. Printing.	C. J. Reed	477,383	June 21	1840	453	59	1827
Telegraph. Printing.	C. J. Reed	477,384	June 21	1843	453	59	1828
Telegraph. Printing.	E. J. Silkman	470,768	Mar. 15	1750	{ 451 452 453 }	58	1455
Telegraph. Printing.	J. E. Wright	466,858	Jan. 12	889	{ 228 229 229 }	58	178
Telegraph. Printing or recording.	Z. T. Lillard and U. Erhard	482,015	Sept. 6	152	37, 38	60	1365
Telegraph. Railway-train.	M. S. Kelley	484,375	Oct. 11	1297	332	61	276
Telegraph-relay.	C. M. Dyer	470,557	Mar. 8	1443	375	58	1384
Telegraph-relay.	W. Mavor, Jr.	482,440	Sept. 13	877	210	60	1519
Telegraph. Ship's.	A. B. W. H. Cords	481,223	Aug. 23	2381	{ 586 587 }	60	1050
Telegraph. Signal.	C. V. Boughton	482,780	Sept. 20	1422	352	60	1638

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Telegraph-sounder.....	J. Maret and W. L. De Graff.....	426,051	Nov. 8	1379	366	61	871
Telegraph. Speaking.....	T. A. Edison.....	474,230	May 3	534	130	59	741
Telegraph. Speaking.....	T. A. Edison.....	474,231	May 3	535	130	59	741
Telegraph. Speaking.....	T. A. Edison.....	474,232	May 3	536	131	59	741
Telegraph. Synchronous multiple.....	C. L. Buckingham.....	487,984	Dec. 13	1225	306	61	1581
Telegraph system.....	A. Gipperich.....	486,332	Nov. 15	1839	484	61	980
Telegraph system. Police.....	C. A. Rolfe.....	483,768	Oct. 4	367	92, 93	61	77
Telegraph system. Writing.....	H. Etheridge.....	477,652	June 23	2284	572	59	1932
Telegraph-transmitter.....	C. Willoughby.....	480,644	Aug. 9	1438	{ 358 359 }	60	869
Telegraphs. Individualizing cut-out for printing.....	S. R. Linville.....	477,665	June 28	2299	{ 576 577 }	59	1935
Telegraphs. Unison apparatus for printing.....	H. Van Hoevenbergh.....	472,237	Apr. 5	361	93	59	67
Telegraphic apparatus.....	J. A. Parker and L. L. Summers.....	487,154	Nov. 29	3185	816	61	1277
Telegraphic relay.....	C. Cuttriss.....	475,441	May 24	2476	631	59	1159
Telegraphic repeater.....	R. H. Weiny.....	479,178	July 19	1718	431	60	361
Telegraphy.....	T. Gothorpe.....	475,938	May 31	3284	829	59	1328
Telegraphy.....	J. G. Smith.....	481,247	Aug. 23	2424	{ 598 599 600 }	60	1088
Telegraphy.....	W. F. Wentz.....	468,755	Feb. 9	1321	334	58	793
Telegraphy and telephony. Apparatus and system for compound.....	F. W. Dunbar.....	476,618	June 7	592	142	59	1554
Telegraphy and telephony. Combined.....	W. W. Jacques.....	485,279	Nov. 1	186	54	61	611
Telegraphy. Cable.....	W. E. Facer.....	466,492	Jan. 5	215	75, 76	58	56
Telegraphy. Phonoporic.....	C. Langdon-Davies.....	477,835	June 28	2581	646	59	1989
Telegraph. Electric.....	C. T. Barrett.....	477,853	June 28	2609	654	59	1995
Telephone.....	F. H. Brown.....	481,138	Aug. 16	2233	550	60	1037
Telephone.....	J. A. Christy.....	480,656	Aug. 9	1460	363	60	873
Telephone.....	P. H. D. Unger.....	478,692	July 12	951	236	60	205
Telephone.....	E. M. Harrison.....	476,200	May 31	3699	935	59	1410
Telephone.....	H. V. Hayes and W. L. Richards.....	487,219	Nov. 29	3384	838	61	1295
Telephone.....	J. H. Howard.....	471,745	Mar. 29	3240	825	58	1758
Telephone.....	J. W. McDonough.....	485,776	Nov. 8	1000	290	61	812
Telephone.....	E. Noriega.....	481,049	Aug. 16	2065	515	60	1007
Telephone.....	E. Noriega.....	481,051	Aug. 16	2066	516	60	1008
Telephone.....	P. Rabbidge.....	488,367	Dec. 20	1876	{ 469 470 }	61	1728
Telephone.....	A. Rettig.....	481,234	Aug. 23	2495	614	60	1101
Telephone.....	G. F. Shaver.....	479,226	July 19	1791	449	60	375
Telephone.....	S. F. Sherman.....	476,026	May 31	3410	861	59	1354
Telephone.....	W. A. West.....	470,634	Mar. 8	1551	404	58	1407
Telephone.....	A. C. White.....	485,311	Nov. 1	234	65	61	620
Telephone. Acoustic.....	A. L. Simpson.....	479,726	July 26	2630	632	60	550
Telephone anti-inductive device.....	S. Pollak.....	477,870	June 28	2640	660	59	2001
Telephone arm-rest.....	J. R. Bailey and L. C. Lincoln.....	481,293	Aug. 23	2515	618	60	1103
Telephone attachment.....	J. E. Hills.....	471,549	Mar. 29	2936	747	58	1703
Telephone. Automatic coin-actuated.....	F. Müller.....	483,162	Sept. 27	2019	511	60	1770
Telephone-circuit.....	H. V. Hayes.....	474,323	May 3	696	181	59	771
Telephone desk attachment.....	L. C. Butler.....	478,565	July 12	778	190	60	169
Telephone-exchange.....	C. E. Scribner.....	481,679	Aug. 30	3127	763	60	1237
Telephone-exchange apparatus.....	J. J. Carty.....	473,911	May 3	32	6, 7	59	642
Telephone-exchange apparatus.....	J. J. Carty.....	484,626	Oct. 18	1696	430	61	367
Telephone-exchange apparatus.....	A. S. Hibbard.....	482,174	Sept. 6	419	100	60	1417
Telephone-exchange apparatus.....	J. A. Seely.....	476,826	June 14	918	225	59	1633
Telephone-exchange switchboard. Canopy.....	C. E. Scribner.....	472,956	Apr. 12	1440	367	59	287
Telephone-exchange system.....	C. E. Scribner.....	487,097	Nov. 29	3096	795	61	1260
Telephone-exchange system. Multiple-switchboard.....	C. E. Scribner.....	481,678	Aug. 30	3125	763	60	1236
Telephone-exchanges. Circuit for multiple-switchboard systems of.....	J. A. Seely and C. E. Scribner.....	472,772	Apr. 12	1169	299	59	234
Telephone-exchanges. Multiple-switchboard system for.....	C. E. Scribner.....	488,035	Dec. 13	1320	329	61	1601
Telephone-exchanges. Multiple-switchboard system for.....	C. E. Scribner.....	488,036	Dec. 13	1323	329	61	1602
Telephone-exchanges. Multiple-switchboard system for.....	C. E. Scribner.....	488,038	Dec. 13	1329	330	61	1603
Telephone-exchanges. Testing apparatus for trunk-lines of.....	C. E. Scribner.....	473,089	Apr. 19	1660	422	59	341
Telephone extension-transmitter.....	V. A. Cook.....	475,300	May 24	2251	580	59	1116
Telephone for personal wear. Magneto.....	A. E. Miltimore.....	466,725	Jan. 5	669	172	58	127
Telephone-guard.....	E. B. Chase.....	488,385	Dec. 20	1905	477	61	1733
Telephone-holder.....	J. A. Christy.....	467,017	Feb. 2	18	5	58	530
Telephone-holder.....	E. C. Lewis.....	487,369	Dec. 6	216	59	61	1363
Telephone. Magnetic.....	C. S. Forbes.....	484,150	Oct. 11	937	241	61	205
Telephone. Magnetic.....	C. Vogt.....	476,583	June 7	535	127	59	1543
Telephone. Mechanical.....	W. J. Bowen.....	481,133	Aug. 16	2211	547	60	1034
Telephone. Mechanical.....	W. H. Eastman.....	469,203	Feb. 16	2029	518	58	939
Telephone or other electrical exchange. Automatic.....	A. B. Strowger.....	486,809	Nov. 29	2803	{ 727 728 }	61	1202
Telephone pay-stations. Signal device for.....	W. Gray.....	469,649	Feb. 23	2701	695	58	1079
Telephone pay-stations. Signal device for.....	W. Gray.....	469,650	Feb. 23	2702	695	58	1080
Telephone-receiver.....	J. A. Christy and E. J. Baldwin.....	471,535	Mar. 29	2915	742	58	1700
Telephone-receiver.....	A. T. Collier.....	474,214	May 3	505	{ 121 122 }	59	735
Telephone-receiver.....	E. A. Grissinger.....	468,246	Feb. 2	507	125	58	624
Telephone-receiver.....	F. Gross.....	483,718	Oct. 4	269	72	61	61
Telephone-receiver.....	E. C. Hess.....	473,256	Apr. 19	1955	490	59	396
Telephone-receiver holder.....	R. Dent.....	467,160	Jan. 19	1415	362	58	286
Telephone-repeater.....	T. A. Edison.....	478,743	July 12	1037	255	60	221
Telephone speaking attachment.....	D. Eldredge.....	479,062	July 19	1531	382	60	327
Telephone. Submarine.....	H. Finch.....	476,007	May 31	3387	854	59	1349
Telephone-support.....	G. V. Benjamin.....	485,027	Oct. 25	2377	{ 610 611 }	61	517
Telephone-support.....	H. V. Hayes.....	469,474	Feb. 23	2449	628	58	1029

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &	Vol.	Page.
Telephone-switch	C. E. Scribner	473,966	May 3	131	30	59	662
Telephone-switchboard	W. Oesterreich	479,107	July 19	1601	400	60	340
Telephone-switchboard apparatus	C. E. Scribner	487,098	Nov. 29	3100	796	61	1260
Telephone-switchboard apparatus	C. E. Scribner	488,037	Dec. 13	1326	329	61	1602
Telephone system	R. N. Dyer	481,483	Aug. 23	2816	692	60	1161
Telephone system	A. B. Ferdinand	471,352	Mar. 22	2649	673	58	1641
Telephone system	C. C. Jennings	488,502	Dec. 20	2088	519	61	1771
Telephone system	B. Marinovitch and G. Szarvady	476,887	June 14	1018	247	59	1653
Telephone system	T. W. O'Brien	469,865	Mar. 1	321	82	58	1163
Telephone system. House	C. E. Scribner	474,067	May 3	294	72	59	694
Telephone system. Long-distance	E. Gwosdeff	471,310	Mar. 22	2588	656	58	1628
Telephone system. Metallic-circuit house	W. M. Goodridge	476,793	June 14	862	212	59	1622
Telephone system. Two-wire	G. Taintor	473,532	Apr. 26	2418	613	59	507
Telephone systems. Sub-station apparatus for	C. E. Scribner	484,613	Oct. 18	1678	426	61	364
Telephone-tablet	J. S. Gold	477,931	June 28	2732	644	59	2019
Telephone-tablet support	J. S. Gold and A. H. McAlpine	477,932	June 28	2734	685	59	2020
Telephone-transmitter	E. G. Acheson	472,243	Apr. 5	367	94	59	69
Telephone-transmitter	J. C. Goulding	409,782	Mar. 1	186	48	58	1137
Telephone-transmitter	E. A. and T. Grissinger	469,085	Feb. 16	1851	474	58	906
Telephones. Appointment-signal for	S. W. Gray	470,786	Mar. 15	1781	458	58	1461
Telephones. Cut-off for	E. Cann	468,281	Feb. 9	574	142	58	635
Telephones. Toll-collecting apparatus for	J. J. Kato and T. H. Rhodes	478,169	Apr. 5	245	65	59	46
Telephonic switch and system. Electric	T. B. Sloper	488,666	Dec. 27	2354	582	61	1838
Telephonic transmitter	A. T. Collier	484,778	Oct. 25	1961	500	61	435
Telephonograph	J. P. Mageus	476,054	May 31	3456	872	59	1363
Telephony	W. Bruening	485,859	Nov. 8	1064	283	61	806
Telephony	J. W. Gibboney	481,529	Aug. 23	2888	709	60	1176
Telephony	R. Hope-Jones	477,866	June 28	2631	658	59	1999
Telephony	W. C. Lockwood	469,706	Mar. 1	53	16	58	1109
Telephony	G. F. Shaver	479,227	July 19	1792	447	60	375
Telephony. System of	E. Thomson	481,878	Aug. 30	3461	849	60	1302
Telescope	A. Rudall	471,708	Mar. 29	3160	808	58	1746
Telescope-eyepiece	H. C. McIlwain	488,506	Dec. 20	2096	520	61	1773
Telescope table	C. Jonas and I. Bauch	480,368	Aug. 9	998	251	60	783
Telescopic press. Horizontal	A. A. Diffey	468,302	Feb. 2	616	153	58	642
Telethermometer	F. J. Dibble	474,771	May 10	1413	360	59	921
Telethermometer	G. H. Hess, Jr.	466,934	Jan. 12	1020	280	58	203
Toll-tale for electrolytic refineries	F. B. Badt	482,148	Sept. 6	370	88	60	1408
Tellurian	W. Parkes and T. Hadley	470,074	Mar. 1	644	160	58	1224
Tellurian	J. K. Rassweiler	477,846	June 28	2599	651	59	1993
Tellurian	S. M. Reavis	469,719	Mar. 1	71	21, 22	58	1113
Tellurian	J. L. Riter and J. M. Alford	471,524	Mar. 22	2897	737	58	1688
Temperature. Apparatus for automatically regulating	A. Shiels	478,373	July 5	459	117	60	96
Temperature-regulating system. Automatic	W. S. Johnson	477,121	June 14	1391	338	59	1728
Temperature-regulator	L. Bell and F. H. Root	470,653	Mar. 15	1578	411	58	1421
Temperature-regulator	L. F. Easton	472,255	Apr. 5	390	162	59	72
Temperature-regulator	L. F. Easton	472,256	Apr. 5	391	102	59	73
Temperature-regulator	W. H. Kilbourn	479,761	July 26	2683	666	60	561
Temperature-regulator	J. F. McElroy	469,526	Feb. 23	2533	651	58	1044
Temperature-regulator	J. F. McElroy	471,314	Mar. 22	2592	658	58	1622
Temperature-regulator	J. F. McElroy	471,315	Mar. 22	2593	658	58	1622
Temperature-regulator	J. F. McElroy	471,523	Mar. 22	2896	737	58	1688
Temperature-regulator	J. F. McElroy	473,636	Apr. 26	2606	656	59	543
Temperature-regulator	J. F. McElroy	475,513	May 24	2596	660	59	1181
Tempering-furnace	W. H. Dayton	487,944	Dec. 13	1162	290	61	1568
Temporary holder	J. A. Thuge	475,257	May 17	2183	556	59	1086
Temporary holder	F. M. Turck	475,259	May 17	2187	557	59	1087
Temporary holder	W. A. Vawter and R. J. Copeland	475,425	May 24	2454	625	59	1154
Tennis-court marker. Lawn	H. Reichwein	475,154	May 17	2027	511	59	1055
Tennis-marker	W. M. Lindsay	487,951	Dec. 13	1172	292	61	1570
Tennis-racket	C. Malings	472,659	Apr. 12	997	253	59	203
Tenon. Metallic	A. M. and R. J. Sanders	487,778	Dec. 13	887	225	61	1515
Tenoning-machine	W. H. Bennett	474,515	May 10	1015	261	59	843
Tenoning-machine	G. W. Bugbee and F. Danner	479,389	July 19	2059	514	60	429
Tenoning-machine	A. Giddens	475,447	May 24	2488	635	59	1161
Tenoning-machine marking attachment	C. J. Zimmerman	483,887	Oct. 4	541	136	61	112
Tension device	D. W. McGlenen	485,770	Nov. 8	943	233	61	783
Tension device	H. D. Robinson	471,571	Mar. 29	2964	755	58	1708
Tension device	S. S. Taylor	488,230	Dec. 20	1655	413	61	1685
Tension device	C. E. Wintrobe	468,717	Feb. 9	1266	392	53	782
Tent	L. L. Davis	487,310	Dec. 6	136	40	61	1348
Tent	G. N. Duncan	481,014	Aug. 16	2000	502	60	906
Tent	J. W. Ormsby	471,848	Mar. 29	3401	867	58	1790
Tent. Inflatable wall	M. C. J. G. Giessmann	468,455	Feb. 9	851	215	58	699
Tent-pin	A. S. Comstock	484,998	Oct. 25	2328	600	61	507
Tent. Tourist's	N. A. B. Schon	470,900	Mar. 15	1960	501	58	1496
Texturing-machines. Chain-guiding mechanism for	D. Babcock	469,221	Feb. 23	2057	529	58	953
Texturing-machines. Sprocket-wheel for	D. Babcock	471,529	Mar. 29	2910	741	58	1699
Terminal and safety-catch connection	J. Hutchison and A. B. Herrick	474,960	May 17	1724	438	59	997
Terret	J. C. Page	488,249	Dec. 20	1680	420	61	1690
Terret. Harness	F. Park	478,632	July 12	871	214	60	188
Testing device. Strength	P. J. Dooling	482,623	Sept. 13	1168	282	60	1576
Testing-machine	L. Donne	468,763	Feb. 9	1330	336	58	794

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tether	W. E. Bradley	476,726	June 7	748	185	59	1586
Tether	M. Rooney	466,529	Jan. 5	354	89	58	68
Tether. Animal	R. E. Robison	484,377	Oct. 11	1305	334	61	278
Textile material. Ungumming and decorticating	C. Girard	475,551	May 24	2658		59	1193
Theatrical appliance	J. Herrera y Gutierrez	479,001	July 19	1441	358	60	310
Theatrical appliance	F. Wohlgegmuth	475,226	May 17	2131	540	59	1076
Theatrical illusion apparatus	J. Arthur	471,371	Mar. 22	2678	681	58	1646
Therapeutic process and apparatus. Electro	J. M. Wardell	487,655	Dec. 6	674	173	61	1455
Therapeutical coating	L. O. Helmers	478,106	July 5	44		60	11
Thermal alarm	H. F. Maxim and J. M. Price	478,701	July 12	961	239	60	207
Thermal circuit-changer and protective appliance	H. A. Rhodes	484,832	Oct. 25	2030	521	61	450
Thermocauter	F. M. S. Roy	488,454	Dec. 20	2012	502	61	1776
Thermometer attachment for ovens	A. B. Strickler	471,654	Mar. 29	3021	784	58	1729
Thermometer-case	W. A. Spurgeon	476,571	June 7	518	122	59	1539
Thermometer-case	J. D. Ward	482,050	Sept. 6	209	50	60	1376
Thermometer. Indicating	A. T. Rapkin and F. Cossor	483,365	Sept. 27	2350	591	60	1832
Thermometer. Oven	H. Murdock	477,143	June 14	1424	346	59	1735
Thermometer. Recording	W. E. Eastman	476,374	June 7	235	57	59	1482
Thermometer-scale	F. Brandt	478,984	July 19	1411	349	60	305
Thermometer-scale	S. E. Ward	483,662	Oct. 4	212	52	61	43
Thermostat	I. F. and F. C. Beers	483,339	Sept. 27	2317	582	60	1826
Thermostat	A. H. Brintnell	474,542	May 10	1059	271	59	851
Thermostat	F. O. Elliott	487,519	Dec. 6	471	123	61	1414
Thermostat	A. B. Morso	474,140	May 3	393	95	59	714
Thermostat	L. G. Rowand	474,149	May 3	404	98	59	717
Thermostat	T. W. Shepherd	470,849	Aug. 2	111	28	60	604
Thermostat. Adjustable	M. D. Compton	482,420	Sept. 13	842	202	60	1513
Thermostat and alarm	G. Fischer	485,739	Nov. 8	905	242	61	775
Thermostat. Electrical	W. L. Denio	478,788	July 12	1113	275	60	236
Thermostatic indicator and adjuster	E. C. C. Krogh	488,611	Dec. 27	2264	562	61	1821
Thermostatic instrument	M. Martin	471,130	Mar. 22	2315	594	58	1577
Thermostatic regulator	E. C. Merrill	471,182	Mar. 22	2397	611	58	1501
Thermostatic regulator	E. C. Merrill	486,727	Nov. 22	2435	640 611	61	1116
Thermostatic vessel	H. Carmichael	487,713	Dec. 13	774	198	61	1491
Thill-bolt	H. V. Appley	471,502	Mar. 22	2874	104	58	1683
Thill-coupling	G. H. Allen	469,926	Mar. 1	414	104	58	1180
Thill-coupling	G. H. Allen	478,678	July 12	936	232	60	120
Thill-coupling	J. C. Bailey	480,648	Aug. 9	1444	360	60	870
Thill-coupling	J. N. Berry	480,244	Aug. 9	789	201	60	743
Thill-coupling	J. Bradford, Jr	476,443	June 7	339	77	59	1503
Thill-coupling	C. C. Bradley	485,368	Nov. 1	340	90	61	642
Thill-coupling	C. C. Bradley	485,856	Nov. 8	1059	282	61	806
Thill-coupling	P. Broadbooks	484,566	Oct. 18	1602	407	61	348
Thill-coupling	C. P. Button	469,933	Mar. 1	427	107	58	1183
Thill-coupling	W. Danz	486,436	Nov. 22	2010	533	61	1028
Thill-coupling	A. A. Froehlich	478,957	July 12	1361	335	60	284
Thill-coupling	T. C. Greene	468,245	Feb. 2	506	125	58	624
Thill-coupling	H. Greenland and J. C. Carrick	483,440	Sept. 27	2460	619	60	1854
Thill-coupling	H. A. Groux	486,579	Nov. 22	2222	583	61	1068
Thill-coupling	W. H. Hannan. (Reissue)	11,260	Aug. 16	2267	559	60	1043
Thill-coupling	W. H. Hannan	486,251	Nov. 15	1715	452	61	955
Thill-coupling	W. H. Hannan	487,005	Nov. 29	2253	761	61	1231
Thill-coupling	E. F. Hopkins	485,194	Nov. 1	62	19	61	585
Thill-coupling	F. B. Hunt	477,053	June 14	1236	312	59	1707
Thill-coupling	E. E. Kimball	470,892	Mar. 15	1948	499	58	1493
Thill-coupling	J. A. Kirby	480,772	Aug. 16	1639	410	60	924
Thill-coupling	A. C. Laycock	488,396	Dec. 20	1918	420	61	1736
Thill-coupling	T. D. Lines	475,507	May 24	2588	658	59	1180
Thill-coupling	T. D. Lines	475,508	May 24	2590	659	59	1180
Thill-coupling	T. D. Lines	475,509	May 24	2591	659	59	1180
Thill-coupling	J. E. Miller	481,961	Sept. 6	59	14	60	1346
Thill-coupling	S. Mirfield	476,753	June 7	794	195	59	1596
Thill-coupling	J. V. Myers	483,261	Sept. 27	2206	554	60	1805
Thill-coupling	C. F. Neer	488,771	Dec. 27	2511	624	61	1869
Thill-coupling	W. H. Newton	474,503	May 10	992	256	59	839
Thill-coupling	H. S. Nunamaker and L. D. Blanchard	475,886	May 31	3208	812	59	1313
Thill-coupling	W. H. Pardee	485,978	Nov. 8	1261	333	61	847
Thill-coupling	R. D. Patton	480,622	Aug. 9	1402	349	60	862
Thill-coupling	J. K. Pfeiger	485,426	Nov. 1	427	114	61	660
Thill-coupling	T. H. Pruner	486,410	Nov. 15	1964	521	61	1006
Thill-coupling	L. C. Rasmussen	466,716	Jan. 5	634	168	58	124
Thill-coupling	T. M. Richardson	467,052	Jan. 12	1214	307	58	239
Thill-coupling	W. B. Root	487,450	Dec. 6	370	97	61	1394
Thill-coupling	W. M. Sayre	484,052	Oct. 11	797	201	61	178
Thill-coupling	H. A. Sevrigne	481,064	Aug. 16	2108	524	60	1014
Thill-coupling	S. J. Stevens	470,903	Mar. 15	1965	502	58	1197
Thill-coupling	A. L. Straw	481,436	Aug. 23	2740	674	60	1146
Thill-coupling	D. W. Tanner	471,199	Mar. 22	2423	616	58	1596
Thill-coupling	D. W. Tanner	488,998	Dec. 27	2734	674	61	1916
Thill-coupling	C. Thorp	488,781	Dec. 27	2529	628	61	1873
Thill-coupling	C. Thorp	488,782	Dec. 27	2530	628	61	1873
Thill-coupling	V. A. Tyler	474,070	May 3	298	72	59	695
Thill-coupling	T. A. Watrous	467,024	Jan. 12	1163	235	58	229
Thill-coupling	T. A. Watrous	469,106	Feb. 16	1875	480	58	911
Thill-coupling	O. T. Welch	471,690	Mar. 29	3143	801	58	1741
Thill-coupling	S. A. Whitfield	480,052	Aug. 2	475	120	60	673
Thill-coupling	W. F. Whiton	476,345	June 7	184	44	59	1472
Thill-coupling	W. C. Williams	479,146	July 19	1657	416	60	352
Thill-coupling bolt	M. H. Risser	470,507	Mar. 8	1373	359	58	1370
Thill-coupling jack	A. A. Bray	478,043	June 28	2906	726	59	2053
Thill-couplings. Anti-rattler for	H. V. Appley	471,503	Mar. 22	2875	732	58	1684
Thill-couplings. Anti-rattler for	C. A. Carman	481,549	Aug. 30	2924	719	60	1198
Thill or pole prop for vehicles	H. T. Gregg	485,843	Nov. 8	1039	278	61	801
Thill-support	J. A. Bean	480,652	Aug. 9	1450	361	60	871

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Thill-support.....	L. T. Bow.....	467,395	Jan. 19	1769	451	58	352
Thill-support.....	W. M. Buchnan.....	488,180	Dec. 20	1567	393	61	1668
Thill-support.....	A. H. Fletcher.....	472,476	Apr. 5	732	187	59	139
Thill-support.....	D. B. Morgan.....	488,130	Dec. 13	1475	372	61	1633
Thill-support.....	T. Siggins.....	467,758	Jan. 26	2366	600	52	473
Thill-support.....	T. B. Woodward.....	485,023	Oct. 25	2371	609	61	516
Thill-support and anti-rattler. Combined.....	E. F. Woodruff.....	470,613	Mar. 8	1525	398	53	1402
Thill. Vehicle.....	W. Patterson and L. Swenson.....	480,129	Aug. 2	590	150	60	695
Thill. Vehicle.....	E. M. Van Valkenburg.....	466,386	Jan. 5	120	34	58	25
Thrasher. Bean.....	P. Bourgin.....	481,841	Aug. 30	3108	836	60	1291
Thrasher. Flax.....	J. M. Smith.....	478,542	July 5	746	182	60	148
Thrasher. Pea or bean.....	W. H. Grayson.....	472,452	Apr. 5	694	177	59	131
Thrashers. Head-light for steam.....	F. H. Wilson.....	473,991	May 3	166	39	59	670
Thrashing and separating machine. Grain.....	A. B. Farquhar, H. W. Eisenhart, and S. S. Morton.....	480,660	Aug. 9	1465	364 365	60	874
Thrashing-cylinder.....	S. Hamilton.....	481,864	Aug. 30	3442	845	60	1298
Thrashing-machine.....	W. Alpert.....	480,484	Aug. 9	1187	298	60	819
Thrashing-machine.....	O. Anderson.....	482,494	Sept. 13	968	234 235	60	1538
Thrashing-machine.....	J. E. Ball.....	469,461	Feb. 23	2426	621 622	58	1024
Thrashing-machine.....	J. Buchanan.....	467,477	Jan. 19	1897	485	58	378
Thrashing-machine.....	W. Butler.....	477,507	June 21	2031	503	59	1865
Thrashing-machine.....	W. W. Dingee.....	488,730	Dec. 27	2450	609	61	1857
Thrashing-machine.....	J. Hershberger.....	469,184	Feb. 16	1922	507	58	932
Thrashing-machine.....	E. W. Jenkins.....	487,274	Dec. 6	55	18	61	1333
Thrashing-machine.....	E. G. N. Salenius.....	469,871	Mar. 1	331	84.85	58	1166
Thrashing-machine.....	J. Weller.....	474,275	May 3	597	149	59	753
Thrashing-machine.....	J. N. Wilson.....	482,709	Sept. 13	1298	317 318	60	1603
Thrashing-machine and grain-separator. Combined.....	J. Galland.....	482,554	Sept. 13	1071	260	60	1558
Thrashing-machine attachment.....	C. L. Eastham.....	470,639	Mar. 8	1550	406	58	1409
Thrashing-machine attachment.....	A. Reason.....	479,156	July 19	1679	420	60	354
Thrashing-machine band-cutter and feeder.....	W. Conn.....	487,847	Dec. 6	173	48.49	61	1354
Thrashing-machine band-cutter and feeder.....	C. F. Graham.....	478,996	July 19	1433	355 356	60	308
Thrashing-machine band-cutter and feeder.....	F. R. Hill.....	485,499	Nov. 1	531	141	61	680
Thrashing-machine band-cutter and feeder.....	J. W. Turner.....	479,477	July 26	2233	500 561	60	476
Thrashing-machine belt-reel.....	E. D. Mullaney.....	473,948	May 3	99	23	59	656
Thrashing-machine belt-tightener.....	E. Huber.....	481,176	Aug. 23	2300	567	60	1064
Thrashing-machine fan and regulator.....	F. F. Landis.....	482,846	Sept. 20	1508	375	60	1057
Thrashing-machine feeder and cutter.....	F. Dworshak.....	480,254	Aug. 9	809	207	60	747
Thrashing-machine self-feeder.....	J. Juel.....	474,254	May 3	565	139	59	747
Thrashing-machine straw-carrier.....	J. H. Fulton.....	485,099	Oct. 25	2477	637	61	539
Thrashing-machine table.....	J. B. McChesney.....	471,490	Mar. 22	2859	727	58	1680
Thrashing-machine tooth.....	Z. Macomber.....	472,131	Apr. 5	193	52	59	36
Thrashing-machines. Band-cutter and feeder for.....	O. S. Fellows.....	467,464	Jan. 19	1870	477 478	58	372
Thrashing-machines. Feeder and spreader for.....	S. G. Gilbert.....	470,932	Mar. 15	2004	513 514	58	1504
Thrashing-machines, &c. Straw-separator for.....	J. E. Cook.....	467,636	Jan. 26	2163	550	58	435
Thread and needle case.....	H. Rogers.....	470,250	Mar. 15	1892	484	58	1482
Thread. Apparatus for forming a knotless.....	R. M. Macintosh.....	484,212	Oct. 11	1037	263 264	61	225
Thread. Apparatus for forming a knotless.....	R. M. Macintosh. (Reissue).....	11,296	Dec. 27	2839	700	61	1939
Thread-cabinet.....	C. W. Hudgens.....	476,924	June 14	1078	260	59	1685
Thread-cutter for spools.....	H. and B. Oakes.....	477,778	June 28	2480	621	59	1972
Thread holder and cutter.....	H. and B. Oakes.....	467,689	Jan. 26	2248	572	58	450
Thread. Machine for removing superfluous material from.....	C. L. Travis.....	477,285	June 21	1684	412 413	59	1798
Thread smoothing and hardening apparatus.....	P. Klug.....	488,267	Dec. 20	1710	430	61	1696
Threading-machine.....	J. Goebler.....	466,605	Jan. 5	475	122	58	91
Ticket case or holder.....	C. L. Davis.....	476,005	May 31	3382	852	59	1348
Ticket. Combination.....	M. Ralph.....	487,540	Dec. 6	502	131	61	1420
Ticket-holder.....	A. P. Dewey.....	485,002	Oct. 25	2332	601	61	508
Ticket-holder.....	M. Lincoln.....	485,202	Nov. 1	75	23.24	61	588
Ticket-holder.....	W. H. Thayer.....	473,135	Apr. 19	1746	411	59	356
Ticket-holding device. Milk.....	J. White.....	476,343	June 7	182	43	59	1472
Ticket. Railway.....	H. A. Bierley.....	477,496	June 21	2017	500	59	1662
Ticket. Railway.....	W. H. Campbell.....	468,927	Feb. 16	1595	403 404	58	855
Ticket. Railway.....	E. L. Lomax and B. B. Anderson.....	484,331	Oct. 11	1237	315	61	264
Ticket. Railway.....	R. McCoy.....	469,586	Feb. 23	2623	672	58	1062
Ticket. Railway.....	R. R. Moheany.....	471,876	Mar. 29	3441	878	53	1797
Ticket. Railway.....	J. Reid.....	487,294	Dec. 6	86	26	61	1339
Ticket. Railway.....	W. B. Shattuc.....	473,592	Apr. 26	2538	640	59	531
Ticket receiving and delivering apparatus.....	J. A. Milliken.....	468,981	Feb. 16	1701	433 434	58	876
Ticket. Sleeping and parlor car coupon.....	I. E. Smith.....	475,424	May 24	2453	625	59	1154
Ticket. Time-limit.....	J. H. Stedman.....	491,210	Aug. 23	2354	580	60	1075
Tickets, checks, &c. Device for holding and cutting.....	A. D. Joslin.....	467,936	Feb. 2	52	12	58	535
Tickets. Excess-baggage stamp or check for railway.....	T. M. Cunningham.....	478,923	July 12	1309	326	60	274
Tide and current wheel.....	J. Sutter.....	475,632	May 24	2780	704	59	1218
Tidy-holder.....	W. Palmer.....	469,590	Feb. 23	2629	674	58	1063
Tie: See Bag, bale, and bun- dle tie. Bale-tie. Cattle-tie. Cow-tie. Cross-tie.	Metal tie. Metal cross-tie. Rail-tie. Railway-tie. Railway cross-tie.						
Tie for bags, boxes, &c.....	D. G. Stone.....	485,067	Oct. 25	2430	624	61	528
Tie-plate.....	W. Goldie.....	485,030	Oct. 25	2381	612	61	518

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Tie-plate and brace	W. H. Phillips	482,318	Sept. 6	664	158	60	1465
Tile	B. Edwards	467,791	Jan. 26	2410	614	58	482
Tile	R. E. Humm	484,741	Oct. 18	1886	481	61	407
Tile	F. N. Marvick	479,442	July 26	2157	538	60	463
Tile	F. N. Marvick and J. Walter	479,441	July 26	2155	538	60	462
Tile	A. M. Strusholm	478,656	July 12	902	223	60	194
Tile	H. Sturm	483,180	Sept. 27	2049	517	60	1776
Tile-frame	O. P. and G. O. Elterich	477,746	June 28	2429	607	59	1963
Tile. Illuminating	L. E. Davenport	472,699	Apr. 12	1072	275	59	215
Tile. Illuminating	J. Jacobs	479,645	July 26	2477	616	60	523
					617		
Tile. Illuminating	J. Jacobs	488,122	Dec. 13	1461	368	61	1630
Tile. Illuminating	J. Jacobs	488,435	Dec. 20	1981	494	61	1748
Tile. Illuminating	C. T. Richards	467,832	Jan. 26	2474	628	58	494
Tile. Illuminating and ventilating	J. Jacobs	467,814	Jan. 26	2453	623	58	499
Tile-molding apparatus	M. Scott	489,486	Sept. 27	2513	633	60	1864
Tile or brick cutter	E. M. Freese	476,627	June 7	604	145	59	1557
					146		
Tile-press	A. M. Strusholm	479,749	July 26	2685	661	60	557
					662		
Tile. Roofing	L. H. Montross	472,680	Apr. 12	1030	266	59	207
Tile. Roofing	J. Rapp	478,171	July 5	160	41	60	34
Tile. Sheet-metal	J. White	471,450	Mar. 22	2801	714	58	1669
					715		
Tile. Sheet-metal	J. White. (Reissue)	11,294	Dec. 13	1552	389	61	1648
					390		
Tile-stand	G. Holt	475,980	May 31	3352	845	59	1341
Tile-work	D. N. Lanyon	466,741	Jan. 5	690	178	58	131
Tile-work	D. N. Lanyon	466,742	Jan. 5	692	178	58	131
Tiles. Die for roofing	J. E. Donaldson	472,189	Apr. 5	279	73	59	53
Tiles. Machine for edging and surfacing marble	G. Taylor	474,033	May 3	237	5	59	683
Tiles. Manufacture of	H. Bagdaley	471,740	Mar. 29	3233	823	58	1757
Tiling	J. E. Williams	471,339	Mar. 22	2624	666	58	1636
Till-lock	H. Brav	478,392	July 5	512	124	60	101
					125		
Till-lock	W. R. Van Vliet	478,897	July 12	1266	313	60	265
Till. Recording money	J. J. W. H., and F. Walker	475,643	May 24	2794	708	59	1221
Till with money-changer inclosed	W. H. Staats	470,083	Mar. 1	660	163	58	1227
Tilting gate	A. J. Duck, W. S. Savidge, and G. W. Wolfe	483,432	Sept. 27	2450	616	60	1852
Tilting gate	N. A. Dull and A. H. Moore	487,179	Nov. 29	3223	825	61	1285
					826		
Tilting gate	S. H. Merridith	475,132	May 17	1996	505	59	1049
Tilting seat	S. W. Peregrine	480,961	Aug. 16	1930	433	60	981
Tilting-vessel support	T. F. Walters	474,886	May 17	1611	411	59	974
Time-alarm. Electric	J. Jacobi	478,865	July 12	1224	303	60	258
					304		
Time-call	J. and J. Jones, Jr.	474,835	May 17	1533	391	59	958
Time-check. Automatic electric	C. K. Jardine	475,566	May 24	2681	681	59	1198
Time-indicating apparatus. Electric	E. Weston	480,890	Aug. 16	1812	452	60	958
Time-indicator and alarm	H. Bennett	470,816	Mar. 15	1840	472	58	1471
Time-indicator. Workman's	J. L. F. Pinto	477,448	June 21	1939	481	59	1847
Time-lock	L. N. Bedford	478,212	July 5	220	55	60	45
Time-lock	L. N. Bedford	478,213	July 5	221	55	60	46
Time-lock	E. S. Phelps	486,603	Nov. 22	2261	591	61	1076
Time-lock	W. G. Spiegel	474,871	May 17	1587	404	59	968
Time-lock attachment	F. H. Peck	472,224	Apr. 5	341	89	59	64
Time-lock attachment	J. X. Kaiser	481,572	Aug. 30	2965	728	60	1206
Time-lock for savings-banks	W. G. Spiegel	474,870	May 17	1585	403	59	968
Timepiece-dial	G. Reiss	483,696	Oct. 4	261	64	61	55
Timepiece for boiling eggs	L. Günther	477,252	June 21	1633	398	59	1788
Timepiece. Illuminated	B. Haas, Jr., and G. Trouvé	486,563	Nov. 22	2191	577	61	1062
Timepiece repeating mechanism	F. Terstegen	487,398	Dec. 6	258	70, 71	61	1372
Timepiece repeating mechanism	F. Terstegen	487,399	Dec. 6	270	71, 72	61	1375
Timepiece setting mechanism	E. E. Ellis	478,321	July 5	408	98	60	82
Timepieces. Bearing for balance-staffs of	G. Newton	489,585	Sept. 13	1110	268	60	1566
Timepieces. Calendar attachment for	P. J. Johnson and J. H. Hamill	481,793	Aug. 30	3330	812	60	1277
Timepieces. Cannon-pinion for	H. C. Klein	476,656	June 7	647	157	59	1565
Timepieces. Hand for	S. V. Beckwith	469,673	Mar. 1	5	2	58	1099
Timepieces. Hand-setting mechanism for	A. Brandley	476,515	June 7	441	104	59	1523
Time-recorder. Employé's	M. B. Lawrence, D. M. Patterson, and J. Q. A. Sand	467,179	Jan. 19	1441	367	58	290
					368		
Time-recorder. Employé's	W. Lucas and T. A. Garrett	470,810	Mar. 15	1827	469	58	1469
					470		
Time-recorder. Watchman's	W. L. Bundy	488,687	Dec. 27	2390	592	61	1845
					593		
Time-recorder. Watchman's	H. May	472,896	Apr. 12	1343	345	59	269
Time-recorder. Watchman's electric	E. R. Heyser	482,251	Sept. 6	534	127	60	1438
Time-recorder. Watchman's electric	N. H. Raymond	483,308	Sept. 27	2273	572	60	1818
Time-recorder. Watchman's electric	J. A. Tilden	485,591	Nov. 1	668	177	61	711
					178		
Time-recorder. Workman's	W. L. Bundy	482,293	Sept. 6	611	144	60	1454
					145		
Time-recorder. Workman's	W. L. Bundy	486,028	Nov. 8	1342	356	61	864
					357		
Time-recorder. Workman's	A. L. Jaynes	483,629	Oct. 4	165	41, 42	61	35
Time-recorder. Workman's	F. N. Johnston and C. E. Egan	471,733	Mar. 29	3222	820	58	1755
Time-recorder. Workman's	J. C. Koch	478,284	July 5	354	86	60	71
Time-recorder. Workman's	M. Martin	475,457	May 24	2504	638	59	1164
					639		
Time-recorder. Workman's	M. Martin	475,458	May 24	2506	639	59	1164

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Time-recorder. Workman's	R. D. Morgan	486,977	Nov. 29	2907	{ 750 751	{ 61	1222
Time-recording mechanism	D. E. Pursell	483,767	Oct. 4	365	91	61	77
Time-register. Workman's	C. J. Garnett and A. Moore	486,399	Nov. 15	1945	515	61	1002
Time systems. Method of and apparatus for testing circuits for electric	W. F. Gardner	480,576	Aug. 9	1315	329	60	846
Time-table. Perpetual train	J. I. Covington	483,138	Sept. 27	1974	500	60	1761
Tin andterne plates. Apparatus for cleaning	T. Jenkins	485,387	Nov. 1	370	99	61	648
Tin can	E. Norton	475,336	May 24	2312	593	59	1129
Tin can	E. E. Oerzen	479,015	July 19	1461	364	60	314
Tin can	W. Pratt	471,736	Mar. 29	3227	821	58	1755
Tin can or receptacle	W. Pratt. (Reissue)	11,264	Aug. 16	2272	560	60	1044
Tin cans. Machine for manufacturing	W. Hipperling	487,270	Dec. 6	46	15	61	1331
Tin cans. Machine for manufacturing	W. Hipperling	488,674	Dec. 27	2366	{ 585 586 586 587 588	{ 61	1841
Tin cans. Machine for the manufacture of	W. Hipperling	488,675	Dec. 27	2370	{ 587 588	{ 61	1841
Tin from other metals. Separating	I. A. F. Bang and M. C. A. Rutlin	483,245	Sept. 27	2148	544	60	1795
Tin from scrap. Recovering	J. J. Naef	477,320	June 21	1571	336	59	1776
Tin from scraps and waste of tin-plate Recovering	C. L. C. Berton	477,348	June 21	1781	59	59	1816
Tin from tin-plate waste. Separating	H. C. W. Harnsen	485,035	Oct. 25	2389	61	61	520
Tin-plate. Apparatus for manufacturing	D. Edwards	486,635	Nov. 22	2313	{ 604 605	{ 61	1087
Tin-plate-coating apparatus	A. T. Davies	478,051	June 28	2014	728	59	2054
Tin-plate or metallic sheets. Cleaning	E. Norton	487,763	Dec. 13	863	219	61	1503
Tin-plate. Recovering tin from	M. R. Garcia	480,920	Aug. 16	1862	465	60	968
Tin plates. Machine for removing oil from	D. Walters and I. L. Morris	471,284	Mar. 22	2548	647	58	1620
Tin plates. Making	G. H. Benjamin	472,691	Apr. 12	1044	269	59	210
Tin-scrap. Utilizing	H. B. Nye	488,796	Dec. 27	2552	61	61	1878
Tinning	J. Gould, Jr.	467,801	Jan. 26	2420	{ 617 618	{ 58	494
Tinning iron and steel plates	E. Norton	486,496	Nov. 22	2093	61	61	1045
Tinning plate	J. Gould, Jr.	467,800	Jan. 26	2427	{ 616 617	{ 58	494
Tire and means for inflating the same. Pneumatic	P. W. Tillinghast	477,316	June 21	1736	425	59	1808
Tire and rim therefor. Cushion	R. M. Keating	485,633	Nov. 8	732	191	61	738
Tire. Bicycle	G. R. Bassett	487,596	Dec. 6	579	148	61	1436
Tire. Bicycle	F. E. Belden	467,245	Jan. 19	1545	394	58	311
Tire. Bicycle	E. G. Dorchester	468,560	Feb. 9	1034	263	58	735
Tire. Bicycle	E. G. Dorchester	472,786	Apr. 12	1189	305	59	238
Tire. Bicycle	E. G. Dorchester	477,048	June 14	1277	310	59	1705
Tire. Bicycle	A. A. and H. C. Kupfer	481,038	Aug. 16	2048	511	60	1004
Tire. Bicycle	F. H. Mason	475,785	May 31	3018	765	59	1276
Tire. Bicycle	C. W. Millet	477,769	June 28	2471	618	59	1970
Tire. Bicycle	C. H. Mitchell and R. M. Veitch	476,670	June 7	665	161	59	1569
Tire. Bicycle	W. Swain and W. Philipson	488,852	Dec. 27	2645	655	61	1897
Tire. Bicycle-wheel	G. A. Burwell	483,990	Oct. 11	708	178	61	160
Tire. Bicycle-wheel	G. W. Dorr	469,516	Feb. 23	2515	646	58	1041
Tire. Bicycle-wheel	T. H. Sweeting	485,898	Nov. 8	1133	300	61	821
Tire. Carriage-wheel	F. S. Willoughby and T. Horsfield	467,112	Jan. 12	1327	{ 335 336	{ 58	261
Tire. Cushioned	G. T. Reed	476,215	May 31	3787	944	59	1417
Tire. Cycle	T. Fane and C. F. Lavender	484,786	Oct. 25	1975	503	61	438
Tire. Cycle	T. H. Stone and H. Corser	481,435	Aug. 23	2739	674	60	1146
Tire. Elastic	P. Davies	486,542	Nov. 22	2154	569	61	1056
Tire. Elastic	P. Gendron	466,822	Jan. 12	827	213	58	168
Tire. Elastic	G. W. Meigs and J. G. Ziegler	466,613	Jan. 5	485	125	58	93
Tire. Elastic	J. S. Smith	476,085	May 31	3505	883	59	1374
Tire. Elastic	C. Wagner	482,819	Sept. 20	1466	365	60	1648
Tire. Elastic vehicle	R. P. Martinez	470,249	Mar. 8	926	229	58	1288
Tire. Elastic vehicle	R. P. Martinez	486,230	Nov. 15	1676	443	61	946
Tire. Elastic wheel	A. L. Garford	467,164	Jan. 19	1420	362	58	286
Tire for bicycles. Cushion	W. C. McIntire	470,915	Mar. 15	1981	506	58	1499
Tire for bicycles. Inflatable rubber	E. R. De Wolfe	466,556	Jan. 5	397	101	58	394
Tire for bicycles. Pneumatic	J. W. Gray	467,502	Jan. 26	1937	495	58	394
Tire for bicycles. Rubber	E. R. De Wolfe	471,813	Mar. 29	3355	854	58	1780
Tire for bicycles. Rubber	A. Straus	474,423	May 10	874	223	59	817
Tire for cycles. Pneumatic	T. H. Hicks	483,493	Sept. 27	2522	635	60	1866
Tire for vehicle-wheels. Elastic	F. H. Bullard and F. Harrington	478,564	July 12	777	190	60	169
Tire for vehicle-wheels. Inflatable	K. Brown	485,605	Nov. 8	692	182	61	730
Tire for vehicles. Pneumatic	A. T. Brown and G. F. Stillman	488,494	Dec. 20	2075	516	61	1769
Tire for velocipedes. Wheel	R. Scott	467,984	Feb. 2	118	29	58	547
Tire for wheels of velocipedes	J. B. Dunlop	473,831	Apr. 26	2896	727	59	599
Tire-furnace	F. N. Cline and H. McFarlane	469,415	Feb. 23	2358	{ 605 606	{ 58	1011
Tire-heater	W. R. Cullison	468,908	Feb. 16	1558	396	58	848
Tire-heater	S. M. Jenks	470,678	Mar. 15	1618	420	58	1423
Tire-heater. Gasoline	S. M. Jenks	470,679	Mar. 15	1620	420	58	1429
Tire-heating apparatus	J. Harris	471,704	Mar. 29	3163	806	58	1745
Tire. India-rubber	H. N. Lee	487,419	Dec. 6	312	80	61	1383
Tire. India-rubber	J. Moseley and B. Blundstone	475,732	May 24	2935	745	59	1246
Tire. Inflatable	E. H. Seddon	486,509	Nov. 22	2110	557	61	1048
Tire-inflating device	T. B. Jeffery	477,007	June 14	1212	294	59	1692
Tire. Pneumatic	F. H. Bolte	479,202	July 19	1754	{ 439 440	{ 60	368
Tire. Pneumatic	F. H. Bolte	479,203	July 19	1757	440	60	368
Tire. Pneumatic	H. Brown	468,721	Feb. 9	1271	323	58	783
Tire. Pneumatic	J. H. Bullard	483,344	Sept. 27	2324	594	60	1827
Tire. Pneumatic	T. Dunn	477,996	June 28	2829	708	59	2039
Tire. Pneumatic	S. Elliott	487,874	Dec. 13	1054	264	61	1547
Tire. Pneumatic	W. R. Foster	468,196	Feb. 2	438	109	58	610
Tire. Pneumatic	W. Golding	487,522	Dec. 6	476	124	61	1415
Tire. Pneumatic	W. B. Hardy	487,663	Dec. 6	700	178	61	1460

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tire. Pnenmatic	W. B. Hardy	488,392	Dec. 20	1913	479	61	1735
Tire. Pneumatic	C. M. Lungren	482,182	Sept. 6	430	{ 102 } { 103 }	{ 60 }	1419
Tire. Pneumatic	G. D. Moffat and R. W. Huss	470,070	Mar. 1	640	158	58	1223
Tire. Pneumatic	J. F. Palmer	467,642	Jan. 26	2174	533	58	436
Tire. Pnenmatic	J. F. Palmer	476,679	June 7	674	164	59	1571
Tire. Pneumatic	J. F. Palmer	476,680	June 7	676	164	59	1571
Tire. Pneumatic	J. F. Palmer	476,681	June 7	679	{ 164 } { 165 }	{ 59 }	1572
Tire. Pneumatic	L. J. Phelps	472,484	Apr. 5	746	190	59	142
Tire. Pneumatic	L. J. Phelps	482,487	Sept. 13	946	231	60	1533
Tire. Pneumatic	T. W. Robertson	483,583	Oct. 4	104	25	61	22
Tire. Pneumatic	C. H. Roth	481,197	Aug. 23	2330	574	60	1070
Tire. Pnenmatic	F. Sinclair	480,349	Aug. 9	965	244	60	777
Tire. Pneumatic	P. W. Tillinghast	473,798	Apr. 26	2547	715	59	590
Tire. Pneumatic	P. W. Tillinghast	486,915	Nov. 29	2817	729	61	1205
Tire. Pnenmatic	G. W. Toney and M. V. Livingston	472,411	Apr. 5	632	161	59	118
Tire. Pneumatic	E. Ulbricht	473,034	Apr. 19	1576	401	59	326
Tire. Pneumatic	J. Wellstein and M. E. Maxfield	481,681	Aug. 30	3131	764	60	1238
Tire. Pneumatic	A. F. Wyman	471,323	Aug. 23	2563	629	60	1112
Tire. Pneumatic wheel	K. Lehmann	480,595	Aug. 9	1355	337	60	852
Tire. Pneumatic wheel	O. Lindner	474,453	May 10	928	238	59	826
Tire-punching machine	P. Gendron	466,823	Jan. 12	828	{ 213 } { 214 }	{ 58 }	168
Tire. Rubber wheel	A. W. Grant and D. P. Jefferies	470,483	Mar. 8	1344	349	58	1364
Tire. Sectional pneumatic	F. Gleason	484,420	Oct. 18	1372	351	61	302
Tire setter and cooler	A. J. Janson	486,032	Nov. 29	2841	735	61	1209
Tire-setting machine	C. W. Cotton	474,162	May 3	425	102	59	721
Tire-setting machine	B. McGovern	473,948	May 3	101	23, 24	59	656
Tire-shrinker	J. M. Liles and J. B. Williams	474,392	May 10	819	214	59	806
Tire shrinker or upsetter	P. Barnes	466,392	Jan. 5	127	36	58	27
Tire. Spring	W. C. Smith	479,851	Aug. 2	114	28	60	605
Tire-tightener	R. W. Cayce	476,870	June 14	988	239	59	1647
Tire-tightener	J. P. Ross	487,777	Dec. 13	886	225	61	1515
Tire-upsetting machine	E. Chaquette	469,962	Mar. 1	481	120	58	1192
Tire. Vehicle	A. T. Brown	474,589	May 10	1135	290	59	866
Tire. Vehicle	W. I. Bunker	488,061	Dec. 13	1372	341	61	1612
Tire. Vehicle	F. Douglas	472,341	Apr. 5	528	137	59	99
Tire. Vehicle	F. Sweetland	468,370	Feb. 9	726	179	58	674
Tire. Vehicle-wheel	J. H. Bingham	483,131	Sept. 27	1962	497	60	1759
Tire. Vehicle-wheel	L. K. McClymonds	485,110	Oct. 25	2491	640	61	542
Tire. Vehicle-wheel	A. L. H. Messmer	469,029	Feb. 16	1776	453	58	891
Tire. Velocipede wheel	F. H. Bolte	479,201	July 19	1752	439	60	368
Tire. Wheel	W. E. Bartlett	466,532	Jan. 5	356	90	58	69
Tire. Wheel	C. Challiner	467,769	Jan. 26	2379	605	58	475
Tire. Wheel	R. Edlin	486,191	Nov. 15	1613	428	61	935
Tire. Wheel	T. B. Jeffery	466,565	Jan. 5	412	105	58	79
Tire. Wheel	T. B. Jeffery	466,789	Jan. 12	777	{ 202 } { 203 }	{ 58 }	157
Tire. Wheel	H. Myers	468,971	Feb. 16	1674	427	58	870
Tire. Wheel	H. Myers	477,773	June 28	2475	619	59	1971
Tire. Wheel	H. Myers	477,774	June 28	2477	619	59	1971
Tire. Wheel	I. R. Newkirk	467,015	Jan. 12	1146	291	58	226
Tire. Wheel	F. Schrader	466,577	Jan. 5	428	110	58	82
Tire. Wheel	W. R. Wilcox	476,714	June 7	725	179	59	1581
Tire. Wheel	C. E. W. Woodward	466,548	Jan. 5	380	97	58	73
Tires. Apparatus for the application and removal of	E. Ekströmer and H. Mörner	468,797	Feb. 16	1391	{ 352 } { 353 }	{ 58 }	816
Tires. Clamping device for elastic	J. T. Morris, Jr	469,165	Feb. 16	1952	499	58	927
Tires. Cover for velocipede-wheel	F. L. Lange	467,742	Jan. 26	2345	594	58	469
Tires. Device for repairing	C. D. Rice	475,344	May 24	2328	597	59	1132
Tires. Fastening device for wheel	W. U. Colthar	467,083	Jan. 12	1262	319	58	248
Tires. Heater for cementing rubber	J. Parkinson	471,802	Mar. 29	3340	805	58	1777
Tires. Repairing pneumatic	C. D. Rice	475,343	May 24	2327	597	59	1132
Tires. Tool for tightening wheel	W. H. Hamblen	473,223	Apr. 19	1907	480	59	386
Toaster	T. J. Murrey	475,884	May 31	3207	811	59	1313
Tobacco-bag	W. J. Cussen	467,108	Jan. 12	1317	333	58	259
Tobacco box and cutter. Combined	H. J. Saxton	487,162	Nov. 29	3200	820	61	1280
Tobacco-box clamp	W. P. Watt	468,272	Feb. 2	561	138	58	632
Tobacco caddies or boxes. Angle-strip for	C. Peper	467,827	Jan. 26	2470	627	58	493
Tobacco-casing machine	J. T. Carter	474,650	May 10	1228	314	59	84
Tobacco-casing machine	J. T. Carter	480,070	Aug. 2	497	{ 126 } { 127 }	{ 60 }	677
Tobacco cask or tierce	W. T. Aaron	477,484	June 21	2000	497	59	1859
Tobacco. Chemical compound for treating	G. S. Yingling	475,737	May 24	2942	559	59	1247
Tobacco. Cured	A. Schneider	467,055	Jan. 12	1218	319	58	239
Tobacco-curing barn	J. R. Jewel	481,954	Sept. 6	50	11, 12	60	1344
Tobacco-cntter	O. E. Toole	488,588	Dec. 27	2232	552	61	1815
Tobacco-cutting device. Plug	T. Hill	471,859	Mar. 29	3416	{ 871 } { 872 } { 873 }	{ 58 }	1792
Tobacco for cigarettes. Machine for preparing or reducing and comminuting	S. Abojador	485,483	Nov. 1	510	134	61	676
Tobacco granulating, grading, and separating machine	W. W. Smith and G. R. Hayes	483,292	Sept. 27	2251	567	60	1813
Tobacco. Hand of leaf	G. Falk	476,943	June 14	1117	269	59	1673
Tobacco. Hand of leaf	G. Falk	484,930	Oct. 25	2223	573	61	487
Tobacco-hanger	B. B. Byrnside	478,153	July 5	122	31	60	27
Tobacco-hanger	D. V. Davis	472,861	Apr. 12	1288	330	59	257
Tobacco-hanger	H. L. Freeman	471,474	Mar. 22	2840	723	58	1676
Tobacco-hiller	W. P. and O. Marshall	483,567	Oct. 4	76	19	61	18
Tobacco-hoisting device	N. L. Frizzell	476,140	May 31	3593	909	59	1391
Tobacco-lath holder	J. M. Wood	486,804	Nov. 22	2582	673	61	1141
Tobacco. Machine for attaching tags to plug	G. M. and C. W. Guerrant	476,010	May 31	3390	855	59	1349

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Tobacco. Machine for making plug.	J. L. Jones	468,661	Feb. 9	1174	300	58	763
Tobacco. Machine for stripping and booking leaf.	C. Bowman	479,550	July 26	2341	584	60	497
Tobacco. Machine for treating leaf.	R. E. Ellis	467,246	Jan. 19	1546	394	58	311
Tobacco. Machine for treating leaf.	C. A. Snyder	483,401	Sept. 27	2406	605 606	60	1843
Tobacco-moistening case.	H. D. Streator	474,424	May 10	875	228	59	817
Tobacco-moistening device.	G. M. Sherman	469,001	Feb. 16	1735	441	58	883
Tobacco-ordering apparatus.	S. P. Mayo and G. A. Peple	478,801	July 12	1136	280	60	240
Tobacco-packing machine.	W. J. Cussen	477,186	June 14	1498	367	59	1750
Tobacco-pipe.	E. Dannenberg	473,212	Apr. 19	1882	474	59	381
Tobacco-pipe.	F. Edler	486,093	Nov. 15	1469	3-7	61	906
Tobacco-pipe.	T. T. Ely	480,570	Aug. 9	1309	327	60	845
Tobacco-pipe.	W. B. Hughes	473,666	Apr. 26	2649	668	59	553
Tobacco-pipe.	A. Osterloh	480,209	Aug. 2	729	184	60	720
Tobacco-pipe.	I. Pfortner	486,296	Nov. 15	1785	469	61	970
Tobacco-pipe.	W. M. Pratt	485,654	Nov. 8	759	200	61	744
Tobacco-pipe.	J. F. Schulhoff	473,088	Apr. 19	1659	422	59	340
Tobacco-pipe cleaner.	F. W. Carpenter	471,504	Mar. 22	2876	732	58	1684
Tobacco-pipe cleaner.	W. Wirz	470,530	Mar. 8	1407	367	58	1377
Tobacco-pouch.	W. J. Cussen	467,129	Jan. 12	1357	346	58	266
Tobacco-pouch.	W. J. Cussen	475,676	May 24	2839	718 719	59	1229
Tobacco shaper. Plug.	C. D. Souers	480,302	Nov. 15	1792	471	61	971
Tobacco-shaver.	J. B. Tarr	480,638	Aug. 9	1426	355 356	60	867
Tobacco stick or hanger.	J. H. Cain	471,532	Mar. 29	2013	742	58	1699
Tobacco stick or hanger.	E. A. Hasteu	470,124	Mar. 1	718	179	58	1239
Tobacco-stripping machine.	E. L. Tevis	467,143	Jan. 12	1384	354	58	272
Tobacco-transplanter.	C. Simmons	469,506	Feb. 23	2499	641	58	1037
Tobacco wrapper and package.	T. J. Maloney	477,015	June 14	1822	296	59	1695
Toboggan-slide.	J. W. Grantland	471,510	Mar. 22	2882	733	58	1665
Toboggan-slide.	A. Guerra	475,081	May 17	1913	485 486 487	59	1032
Toe-weight.	B. D. Geib	488,311	Dec. 20	1779	448	61	1708
Toe-weight.	E. L. Gregg	467,779	Jan. 26	2394	608	58	478
Toe-weight.	M. Heagerty	486,671	Nov. 22	2371	620	61	1098
Toe-weight.	C. C. Jerome	484,022	Oct. 11	756	191	61	170
Toe-weight.	T. Knoder	477,663	June 28	2297	576	59	1934
Toe-weight.	C. M. McMillan	479,831	Aug. 2	88	22	60	599
Toe-weight.	J. Pinkerman	488,450	Dec. 20	2005	501	61	1754
Toe-weight for horses.	H. Armstrong	481,611	Aug. 30	3025	739	60	1217
Toilet-stand.	M. Y. Ransom	470,337	Mar. 8	1103	281	58	1319
Tongs.	W. A. Cornelius	472,436	Apr. 5	667	170 171	59	125
Tongs. Blacksmith's.	W. M. Haworth	478,600	July 12	829	204	60	180
Tongs. Fire.	S. W. Bartholomew	486,963	Nov. 29	2829	746	61	1218
Tongs. Flooring and ceiling.	S. L. Clements	484,299	Oct. 11	1186	302	61	253
Tongs. Flooring and siding.	G. W. Miller	483,571	Oct. 4	82	21	61	19
Tongs, shovel, and kindling-splitter. Combined.	O. N. Richardson	467,782	Jan. 26	2397	609	58	479
Tongue iron. Vehicle.	T. H. Parry and T. J. Baker	475,986	May 31	3359	847	59	1342
Tongue. Metallic wagon.	W. P. Bettendorf	479,622	July 26	2441	608	60	516
Tongue-support.	J. M. Barr	469,531	Feb. 23	2538	653	58	1046
Tongue-support.	R. F. Foster	470,931	Mar. 15	2003	512	58	1504
Tongue-support.	W. B. Johnson	484,856	Oct. 25	2090	538	61	461
Tongue-support.	G. W. Lester	468,879	Feb. 16	1514	326	58	839
Tongue-support.	D. Ward	475,366	May 24	2358	604	59	1137
Tongue support. Wagon.	J. W. Wetmore	475,836	May 31	3118	790	59	1296
Tongue. Vehicle.	J. P. Johnson	469,838	Mar. 1	276	72	58	1154
Tongue. Vehicle.	W. C. Oswald	467,622	Jan. 26	2147	545	58	431
Tongue. Vehicle.	E. M. Van Valkenburg	466,385	Jan. 5	119	34	58	25
Tongue. Vehicle.	E. M. Van Valkenburg	466,387	Jan. 5	121	34	58	26
Tongue. Wagon.	R. Condon	474,816	May 17	1495	381	59	951
Tongue. Wagon.	J. W. Maxwell	474,582	May 10	1125	287	59	864
Tongues. Manufacture of metallic vehicle.	R. R. Singer	469,952	Mar. 1	463	115 116	58	1189
Tool.	J. Boatner	485,148	Oct. 23	2551	655	61	553
Tool.	C. E. Harris	481,865	Aug. 30	3443	845	60	1298
Tool-bracket.	J. N. Hager	468,802	Feb. 16	1399	355	58	817
Tool. Combination.	L. Hinkle	474,384	May 10	808	211	59	804
Tool. Combination.	J. F. Sullivan	472,147	Apr. 5	214	57	59	40
Tool-handle.	F. A. Albert	471,456	Mar. 22	2811	716	58	1670
Tool-handle.	A. Landon and L. Martel	482,256	Sept. 6	548	130	60	1441
Tool-handle.	G. Potter and H. Dangerfield	483,865	Oct. 4	512	129	61	106
Tool-handle.	W. L. Smith	471,031	Mar. 15	2158	555	58	1534
Tool-handle.	W. B. Swan	468,969	Feb. 16	1670	426	58	869
Tool-handle. Flexible.	J. S. Surbaugh	479,032	July 19	1429	370	60	319
Tool-heater.	A. Weiler	479,686	July 26	2545	634	60	535
Tool-holder.	E. W. Cooke	466,327	Jan. 5	28	6	58	8
Tool-holder.	S. J. Davidson	486,664	Nov. 22	2361	618	61	1096
Tool-holder.	J. E. Giroux	486,285	Nov. 15	1772	466	61	967
Tool-holder.	W. Lawson	488,361	Dec. 20	1864	467	61	1725
Tool-holder.	J. W. Plummer	474,302	May 3	646	163	59	762
Tool-holder.	G. M. O. and J. G. Rehfuß	478,943	July 12	1337	332	60	280
Tool-holding device.	F. H. Richards	481,193	Aug. 23	2325	573	60	1069
Tool or hook. Combination.	G. E. Shea	466,628	Jan. 5	506	130	58	97
Tool or reaper-knife holder.	L. W. Butler	473,058	Apr. 19	1613	412	59	333
Tool. Pneumatic.	D. Drawbaugh	472,495	Apr. 5	761	193	59	145
Tool-post.	A. G. Roman	467,437	Jan. 19	1834	468	58	365
Tool-rest. Adjustable.	L. E. Rhodes	470,010	Mar. 1	549	136	58	1205
Tool-sharpener.	E. Houlbrook	487,328	Dec. 6	149	43	61	1350
Tool-sharpener device.	G. A. Keist	478,608	July 12	839	207	60	182
Tools. Press for attaching abrasive material to.	R. Ross, Jr.	472,824	Apr. 12	1241	318	59	247
Tooth. Artificial.	R. Brewster	476,605	June 7	572	136	59	1550

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Tooth. Artificial	C. E. Friel	470,332	Mar. 8	1097	280	58	1318
Tooth. Artificial	D. B. McHenry	475,141	May 17	2010	508	59	1051
Tooth. Artificial	J. W. Moffitt	482,377	Sept. 13	779	187	60	1501
Tooth. Artificial	R. G. Stanbrough	468,922	Feb. 16	1584	401	58	853
Tooth-crown. Metal	G. Evans	472,344	Apr. 5	533	138	59	100
Toothed wheel	J. Lindsay	480,930	Aug. 16	1877	468	60	971
Toothpick-case	H. McKay	469,064	Feb. 16	1822	466	58	900
Top. Gyroscopic	J. J. Hardy	484,960	Oct. 25	2261	5-4	61	495
Top roll	A. A. Andrews	474,204	May 3	493	118	59	733
Top rolls. Saddle for	E. Dixon	482,789	Sept. 20	1434	355	60	1641
Top. Spinning	F. W. L. Boldeck	468,233	Feb. 2	491	120	58	620
Top. Spinning	F. M. Idle	480,817	Aug. 16	1706	426	60	937
Torch. Gasoline	G. Heidel	486,039	Nov. 8	1361	362	61	868
Torch. Signal	F. D. Marston	478,623	July 12	857	211	60	186
Torpedo	J. H. Bates	483,126	Sept. 27	1955	495	60	1757
Torpedo	J. H. Bevington	474,718	May 10	1339	340	59	906
Torpedo	C. Nelson	485,974	Nov. 8	1257	331	61	846
Torpedo-boat. Submersible	J. P. Holland	472,670	Apr. 12	1018	263	59	205
Torpedo-case	W. S. Lowe and G. W. Van Rensselaer	482,060	Sept. 6	224	54	60	1379
Torpedo clip-fastening	W. C. Schooley	480,520	Aug. 9	1234	309	60	829
Torpedo-defense	W. P. Bullivant	466,976	Jan. 12	1087	275	58	215
Torpedo-launching apparatus	J. B. G. A. Canet	474,201	May 3	633	160	59	760
Torpedo-launching apparatus	J. A. Howell	484,658	Oct. 18	1759	447 448	61	380
Torpedo-launching apparatus	A. Scheibel	472,553	Apr. 12	851	218	59	176
Torpedo-net	W. W. Winship	485,074	Oct. 25	2439	627	61	531
Torpedo-placer	C. F. Edgar	487,917	Dec. 13	1121	279	61	1560
Torpedo-placer	S. D. Edgar	467,926	Feb. 2	36	8	58	533
Torpedo-placer	G. W. Peifer, Jr., and R. Johnston	484,864	Oct. 25	2100	541	61	464
Torpedo-placer	L. Sennett	471,984	Mar. 29	3586	915 916	58	1825
Torpedo. Railway	E. N. Hill	479,879	Aug. 2	159	40	60	613
Torpedo-signal	W. H. Milliken	482,019	Sept. 6	159	39	60	1366
Torpedo-tube mounting	J. B. G. A. Canet	470,288	Mar. 8	1009	258 259	58	1304
Torpedoes and other vessels. Depth-regulating mechanism for marine	F. H. Paine	478,813	July 12	1153	2-5 286	60	244
Torpedoes and other vessels. Speed-regulating mechanism for	F. H. Paine	478,814	July 12	1160	287	60	245
Torpedoes. Apparatus for launching fish	J. B. G. A. Canet	470,286	Mar. 8	1003	255 256	58	1303
Torpedoes. Means for exploding	W. Ramsden	470,705	Mar. 15	1663	430	58	1438
Tote-box	W. G. Avery	488,259	Dec. 20	1694	423	61	1693
Touch-regulator	F. C. Light	472,376	Apr. 5	580	149	59	109
Towel-bracket	W. A. Neidhardt	474,260	May 3	574	141	59	749
Towel-bracket	W. A. Neidhardt	477,144	June 14	1425	347	59	1734
Towel-grip	G. S. Chamberlin	479,934	Aug. 2	250	62	60	630
Towel-rack	J. F. Huber and G. L. Marvin	482,869	Sept. 20	1549	387	60	1665
Tower	W. E. Caldwell	487,902	Dec. 13	1093	273	61	1555
Tower	T. Critchlow	468,792	Feb. 16	1386	351	58	815
Tower. Frame	L. W. Beard and W. C. Westaway	471,373	Mar. 22	2681	682	58	1647
Tower. Metal	P. C. Perkins	485,879	Nov. 8	1094	291	61	813
Tower or observatory	L. Kniffen	467,639	Jan. 26	2170	552	58	436
Towing-machine	R. J. Victor	467,529	Jan. 26	1992	505 506	58	403
Toy	J. A. Allen	482,957	Sept. 20	1694	426	60	1692
Toy	C. E. Bentley	488,537	Dec. 27	2150	531	61	1797
Toy	S. M. Boyd	480,065	Aug. 2	490	125	60	676
Toy	D. C. Brennan and F. Webber	471,232	Mar. 22	2473	628	58	1606
Toy	C. J. J. Busacker	474,543	May 10	1062	271	59	851
Toy	F. W. Carpenter	475,486	May 24	2550	650	59	1173
Toy	H. Caspar	486,965	Nov. 29	2893	747	61	1219
Toy	J. M. Clifford	486,085	Nov. 15	1436	380	61	900
Toy	G. S. Crosby	487,472	Dec. 6	401	103	61	1400
Toy	C. W. Delaney	481,931	Sept. 6	16	5	60	1338
Toy	S. F. Estell	484,850	Oct. 25	2084	536	61	460
Toy	G. W. Galbreath	473,736	Apr. 26	2761	694	59	573
Toy	M. A. Gilman	470,119	July 19	1626	407	60	344
Toy	W. H. Gregg	478,423	July 5	561	136	60	109
Toy	P. H. Hillard	481,948	Sept. 6	43	10	60	1342
Toy	J. B. Kibler	473,556	Apr. 26	2466	624	59	517
Toy	E. B. Koopman	482,566	Dec. 27	2196	542	61	1807
Toy	E. Lawson	477,904	June 28	2692	674	59	2011
Toy	R. B. Monroe	468,047	Feb. 2	213	52	58	566
Toy	W. R. Park	480,619	Aug. 9	1398	348	60	861
Toy	A. A. Robinson	480,279	Aug. 9	854	218	60	758
Toy	G. W. Shattuck	485,713	Nov. 8	863	231	61	767
Toy	G. W. Snaman, Jr.	479,534	July 26	2315	579	60	493
Toy	W. V. Snyder	473,970	May 3	157	31	59	664
Toy	G. W. Thomas	483,087	Sept. 20	1895	479	60	1734
Toy	A. Wiggins	472,722	Apr. 12	1100	283	59	221
Toy acrobat	C. A. Hotchkiss	466,980	Jan. 12	1094	277	58	211
Toy animal figure	C. M. Smith	483,727	Oct. 4	303	75	61	63
Toy apparatus. Electroplating	E. A. Clark	479,557	July 26	2350	586 587	60	499
Toy ball	W. J. Faulkner	484,189	Oct. 11	996	255	61	217
Toy bank	C. M. Garland	467,404	Jan. 19	1782	454	58	354
Toy bank. Registering	W. E. Christie	478,404	July 5	531	130	60	105
Toy banks. Time-lock for	L. W. Baldwin	477,321	June 21	1743	427	59	1809
Toy boat	G. A. Goodson	472,291	Apr. 5	443	114	59	84
Toy cannon	J. B. Kibler	471,558	Mar. 29	2946	750	58	1705
Toy cannon	C. W. Lucius	484,205	Oct. 25	2005	515	61	445

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Toy cart	C. M. Collins	474,215	May 3	507	192	59	736
Toy. Coin-operated	C. F. A. Röell	474,304	May 3	648	164 165 166 167	59	763
Toy extension-ladder	R. A. Booth	482,402	Sept. 13	812	195	60	1508
Toy fence	W. Windus	473,247	Apr. 19	1941	488	59	393
Toy. Figure	R. A. Chapman	472,429	Apr. 5	657	167 168	59	123
Toy. Figure	F. O. Norton	469,169	Feb. 16	1958	501	58	928
Toy fire-escape	F. W. Carpenter	467,332	Jan. 19	1679	430	53	335
Toy. Flying	E. R. Lochmann	481,182	Aug. 23	2308	569	60	1066
Toy for emitting sound	L. Reichert	476,024	May 31	3409	60	59	1354
Toy game apparatus	G. Hill	480,725	Aug. 16	1568	392	60	908
Toy gun	S. Porter	466,574	Jan. 5	424	109	58	82
Toy gun	J. Rennie	467,238	Jan. 19	1530	390	58	308
Toy gun. Spring	P. W. Pratt	468,089	Feb. 2	269	65	58	576
Toy kitchen and stove	J. Jaeger	479,597	July 26	2402	598	60	508
Toy kitchen and stove	J. Jaeger	486,672	Nov. 22	2372	620	61	1098
Toy. Magnetic	G. A. Goodson	468,274	Feb. 2	563	138	58	633
Toy. Magnetic	G. A. Goodson	468,338	Feb. 9	682	169	58	666
Toy marble-shooter	W. W. Rand	472,608	Apr. 12	931	240	59	191
Toy. Mechanical	E. I. Pyle	476,895	June 14	1030	250	59	1655
Toy money-bank	E. S. Boynton	469,732	Mar. 1	100	27	58	1118
Toy money-safe	G. R. Rowland	478,890	July 12	1259	311	60	264
Toy mortar	G. B. Nichols	481,808	Aug. 30	3354	821	60	1381
Toy novelty. Historical	F. C. J. Grebe	482,123	Sept. 6	328	78	60	1399
Toy or puzzle	G. T. Smallwood	479,158	July 19	1683	421	60	355
Toy or puzzle	E. de Virgile	486,141	Nov. 15	1548	409	61	922
Toy or puzzle-picture and producing the same. Trans- parent	W. Grüne, Sr	481,023	Aug. 16	2024	.....	60	999
Toy pistol	D. A. Clark	471,098	Mar. 22	2265	582	58	1567
Toy pistol	R. Frisbie	472,573	Apr. 12	876	225	59	181
Toy pistol	E. R. Ives	466,954	Jan. 12	1053	267	58	208
Toy pistol	B. B. Whaley	474,707	May 10	1319	336	59	903
Toy puzzle	O. Louvier	469,818	Mar. 1	247	63	58	1149
Toy puzzle	H. I. F. Schulze	467,384	Jan. 19	1752	447	58	349
Toy savings-bank	A. Colton	469,773	Mar. 1	105	44	58	1132
Toy savings-bank. Automatic	D. R. Reynolds	487,773	Dec. 13	879	223	61	1513
Toy. Smoking	J. T. Crow	484,180	Oct. 11	986	252	61	215
Toy. Spinning	C. Schwartz	476,825	June 14	917	224	59	1633
Toy wagon	A. G. Douthitt	487,613	Dec. 6	601	154 155	61	1441
Toy wheel	T. A. Macdonald	488,944	Dec. 27	2791	688	61	1928
Toy. Wheel	J. S. Wilkins, Jr	488,342	Dec. 20	1833	452	61	1719
Toy. Wheeled	J. P. Caulfield	470,860	Mar. 15	1902	487	58	1484
Toy. Wheeled sounding	A. E. Lytle and B. K. Cowles	477,600	June 21	2179	540	59	1895
Trace	E. B. Knapp	473,420	Apr. 19	2235	561	59	451
Trace-carrier	G. A. Brown	486,846	Nov. 29	2667	697	61	1174
Trace-carrier	C. W. Bucher	466,843	Jan. 12	866	221	58	175
Trace-carrier	T. A. Cross	474,820	May 17	1505	354	59	953
Trace-carrier	H. C. Doerr	473,830	Apr. 26	2895	726	59	599
Trace-carrier	S. G. Jackson	470,848	Mar. 15	1890	484	58	1481
Trace-carrier	A. M. Miller	478,704	July 12	966	240	60	208
Trace-carrier	S. H. Wellborn	479,160	July 19	1685	421	60	356
Trace-carrier	J. W. White	476,344	June 7	183	43	59	1472
Trace connection	H. O. Stahley	473,094	Apr. 19	1667	424	59	342
Trace connection. Elastic	J. N. and I. N. Burke	472,783	Apr. 12	1185	303	59	237
Trace-fastener	D. E. Smith	482,762	Sept. 20	1400	345	60	1633
Trace-fastener	T. J. Smith	486,571	Nov. 22	2204	579	61	1065
Trace-guide	C. E. Young	476,719	June 7	733	181	59	1583
Trace-holder	J. F. Wynkoop	485,825	Nov. 8	1012	272	61	796
Trace-iron	W. J. Dankworth	473,299	Apr. 19	2023	508	59	410
Trace-lock	G. T. Alpress	487,463	Dec. 6	385	100	61	1397
Trace-protector	T. H. Lee	477,560	June 21	2120	526	59	184
Trace-protector	W. D. Reifsnider	468,692	Feb. 9	1229	313	58	774
Trace-support	R. W. Minard	474,753	May 10	1389	351	59	916
Trace-supporter	J. G. Miller	478,012	June 28	2858	715	59	2044
Tracing apparatus	A. Wyns	472,099	Apr. 5	137	37	59	26
Tracing-tool	T. E. Sipe	481,721	Aug. 30	3205	783	60	1252
Track-brake	H. E. Dikeman	487,555	Dec. 6	524	135	61	1424
Track-clamp	J. P. Kimble	477,943	June 28	2752	689	59	2023
Track-cleaner	C. E. Bostwick	485,528	Nov. 1	569	152	61	689
Track-cleaner	J. M. Taylor	469,103	Feb. 16	1872	479	58	910
Track-cleaning apparatus	P. A. Dowd and T. Long	471,814	Mar. 29	3356	854	58	1780
Track-cleaning machine	A. B. Beall and P. V. Bail	486,526	Nov. 22	2134	563	61	1052
Track-gage. Adjustable	M. Gurnett	475,309	May 24	2261	583	59	1118
Track-gage and level	C. Roberts	472,229	Apr. 5	348	90	59	65
Track-gage and level	C. Roberts	474,646	May 10	1224	313	59	883
Track-gage and level	C. Roberts	487,375	Dec. 6	222	61	61	1364
Track or tramway. Elevated	W. P. Walling	477,718	June 28	2388	596	59	1954
Track-sanding apparatus	C. W. Sherburne	481,594	Aug. 30	2994	734	60	1212
Track-sanding apparatus	C. W. Sherburne	481,595	Aug. 30	2996	734	60	1212
Track-sanding apparatus	C. W. Sherburne	487,496	Dec. 6	438	113	61	1408
Track-sanding apparatus	C. W. Sherburne	487,497	Dec. 6	439	113	61	1408
Track-sanding device	C. W. Sherburne	486,646	Nov. 22	2332	610	61	1091
Track structure	V. Angerer and C. A. Psilander	483,377	Dec. 20	1894	474	61	1731
Track-sweeper	W. H. Leigh	485,348	Nov. 1	308	82	61	635
Track switch. Overhead	J. H. Ahrens and H. Oostendorp	477,240	June 21	1613	395	59	1784
Traction-engine	J. R. Hatch	474,738	May 10	1369	347	59	912
Traction-engine	J. J. D. McNamar	475,597	May 24	2726	690	59	1207
Traction-engine	J. J. Moore	469,828	Mar. 1	358	90	58	1170
Traction-engine	P. T. Neumann	479,832	Aug. 2	88	23	60	599
Traction-engine	W. E. Richardson	480,626	Aug. 9	1408	350	60	863

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Traction-engine	D. S. Stewart	484,828	Oct. 25	2038	{ 522 523 }	{ 61	451
Traction-engine	D. S. Stewart	484,829	Oct. 25	2041	523	61	452
Traction-engine	D. S. Stewart	484,830	Oct. 25	2043	524	61	452
Traction-engine	I. Townsend	482,599	Sept. 13	1132	273	60	1570
Traction-engine gearing	F. Kitten	477,057	June 14	1291	313	59	1708
Traction-wheel	H. L. Holt	483,220	Sept. 27	2109	535	60	1788
Train-indicator	H. L. Manton	481,364	Aug. 23	2616	{ 643 644 }	{ 60	1122
Train-order catcher	E. C. Barnett	482,220	Sept. 6	489	117	60	1431
Train-signal. Electric	N. B. Cregier	476,873	June 14	992	241	59	1648
Train-signal. Electric	G. Merritt	481,042	Aug. 16	2056	513	60	1006
Trains. Device for throwing missiles from moving	M. M. Greenwade	468,801	Feb. 16	1398	355	58	817
Trains. Electric danger-signal for moving	J. McCart and A. G. Judkins	485,473	Nov. 1	498	131	61	673
Trammel	S. E. Selleck	472,829	Apr. 12	1246	319	59	248
Tramway	E. J. Wolfrom	475,102	May 17	1952	{ 494 495 }	{ 59	1039
Tramway. Aerial	A. H. De Camp	469,908	Mar. 1	386	97	58	1175
Tramway. Aerial	E. Prunetti and G. Avignone	468,208	Feb. 2	453	112	58	613
Tramway. Aerial	F. Robert	466,909	Jan. 12	985	252	58	197
Tramway-brake	F. Adler	475,171	May 17	2053	516	59	1060
Tramway. Cable	J. L. Giroux	488,734	Dec. 27	2456	{ 610 611 }	{ 61	1858
Tramway. Cable	W. E. and W. M. Winby	466,987	Jan. 12	1107	280	58	219
Tramway-switch	W. G. Carmell	488,599	Dec. 27	2250	558	61	1818
Tramway-switch	R. C. Davis and D. A. Ripley	486,769	Nov. 22	2531	661	61	1131
Tramway-switch	J. H. Gagle	484,706	Oct. 18	1823	464	61	394
Tramway-switch	G. A. McMenimen	472,381	Apr. 5	589	150	59	111
Tramway-switch	J. H. Reinhardt	488,132	Dec. 13	1478	372	61	1634
Tramway-switch	J. R. Wigginton	476,713	June 7	724	{ 173 179 }	{ 59	1581
Tramway-switch. Automatic	W. G. Fay	477,749	June 28	2441	609	59	1964
Tramways. Clip for rope	A. S. Hallidie	466,880	Jan. 12	939	240	58	188
Tramways. Conduit for cable or electric	G. S. Morison and C. Vogel	469,262	Feb. 23	2115	{ 543 544 }	{ 58	964
Transfer	H. de Groussilliers	469,898	Mar. 1	371	.....	58	1172
Transfer-sheet	F. Koskul	482,451	Sept. 13	894	217	60	1522
Transformation-box	C. Dunham	478,536	July 5	738	180	60	146
Transit	T. F. Randolph	470,076	Mar. 1	648	160	58	1224
Transit. Engineer's	C. L. Berger	476,510	June 7	433	101	59	1522
Transom-lifter	C. L. Boehme	483,597	Oct. 4	120	29, 30	61	25
Transom-lifter	H. A. Brennan	474,720	May 10	1341	341	59	907
Transom-lifter	R. R. Buehler	466,486	Jan. 5	280	71	58	54
Transom-lifter	C. P. Chambers and G. W. Taft	488,426	Dec. 20	1970	492	61	1746
Transom-lifter	G. A. Colton	470,780	Mar. 15	1774	456	58	1459
Transom-lifter	G. A. Colton	476,037	May 31	3427	866	59	1357
Transom-lifter	G. A. Colton	476,365	June 7	218	54	59	1478
Transom-lifter	G. J. Dickson	469,233	Feb. 23	2075	533	58	957
Transom-lifter	J. Finnegan	466,739	Jan. 5	687	{ 176 177 }	{ 58	131
Transom-lifter	B. G. Lowrey	474,298	May 3	643	162	59	761
Transom-lifter	H. MacFarland	468,954	Feb. 16	1643	418	58	864
Transom-lifter	J. M. Maddox	479,567	July 26	2364	590	60	502
Transom-lifter	E. Payson	482,024	Sept. 6	167	40	60	1368
Transom-lifter	J. H. and W. A. Rose	474,065	May 3	291	70	59	693
Transom-lifter	F. X. Seilnacht	470,512	Mar. 8	1381	{ 360 361 }	{ 58	1372
Transom-lifter	H. Weher	477,032	June 14	1249	303	59	1700
Transom-lifter	W. V. Willson	466,842	Jan. 12	865	221	58	174
Transom-lifter	J. F. Wollensak	481,917	Aug. 30	3532	865	60	1316
Transparency. Colored	M. Housman	477,120	June 14	1391	338	59	1728
Transplanter	H. Baldridge	485,832	Nov. 8	1022	274	61	798
Transplanter	H. Moon	482,314	Sept. 6	655	156	60	1463
Transplanter	N. O. Starks and A. G. Felland	486,200	Nov. 15	1627	431	61	937
Transplanting-machine	C. C. and F. G. Nagley	467,428	Jan. 19	1818	464	58	361
Transplanting machine. Plant	G. S. Gundersen. (Reissue)	11,262	Aug. 16	2270	560	60	1044
Transporting and transferring materials. Apparatus for	J. C. Murphy	469,912	Mar. 1	394	99	58	1177
Transporting materials. Device for	D. E. Dale	476,787	June 14	847	209	59	1619
Transportation system	L. F. Cook	482,469	Sept. 13	916	{ 224 225 }	{ 60	1527
Trap:							
See Animal-trap. Lead trap.							
Ant-trap. Lobster-trap.							
Ash-trap. Mole-trap.							
Bedbug-trap. Plumber's trap.							
Bird-trap. Sanitary trap.							
Drainage-trap. Sewer-trap.							
Fish-trap. Sporting-trap.							
Fish and game trap. Steam-trap.							
Fly-trap. Stench-trap.							
Gopher-trap. Target-trap.							
Gully-trap. Waste-trap.							
Hog-trap. Waste-pipe trap.							
Insect-trap. Water-trap.							
Trap	H. S. Goff	475,215	May 17	2120	536	59	1074
Trap and siphon	L. M. Hawley	475,396	May 24	2404	614	59	1146
Trap for sinks, &c	D. A. Horgan	483,961	Oct. 4	659	166	61	137
Traveler's case or valise. Combination	A. J. Nilsen	469,342	Feb. 23	2239	{ 574 575 }	{ 58	988
Traveling-bag	A. Bancroft	476,598	June 7	563	134	59	1548
Traveling-bag	H. Wagner	470,227	Mar. 8	896	221	58	1282
Traverse-ring	J. W. Leslie	479,713	July 26	2600	647	60	545
Traverse-ring	J. W. Leslie	479,714	July 26	2602	647	60	545

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Trawl-line	T. B. Deniston	488,874	Dec. 27	2673	662	61	1903
Tray	G. Horne-Payne	486,780	Nov. 22	2545	665	61	1132
Tray	M. S. Rosenzweig	479,664	July 26	2512	625	60	529
Tray and egg-tester. Combined dumping	J. B. Garland	481,488	Aug. 23	2822	694	60	1162
Tray filling and emptying machine	R. A. Bauer	483,488	Sept. 27	2516	634	60	1865
Tray for counters. Bottle and glass	W. C. Huss	485,743	Nov. 8	999	244	61	776
Tray for writing-tables, &c. Ornamental	T. F. Hov	471,424	Mar. 22	2763	704	58	1662
Tray. Jeweler's	H. B. Semmer	480,045	Aug. 2	465	118	60	670
Trays. Spring-clamp for children's	A. W. Wheaton	469,798	Mar. 1	213	55	58	1143
Treadle	J. H. Rouse	469,426	Feb. 23	2373	609	58	1014
Tree-prop	D. Barker	473,412	Apr. 19	2221	558	59	448
Tree-prop	T. J. Hubbell	477,939	June 28	2745	688	59	2022
Tree-protector	W. Clapp	466,654	Jan. 5	541	140	58	105
Tree-protector	T. W. Evans	469,552	Feb. 23	2576	660	58	1053
Tree-protector	W. W. McCallip	472,137	Apr. 5	200	54	59	37
Tree-protector. Fruit	A. B. Smith	481,311	Aug. 23	2547	625	60	1109
Trees. Device for felling	P. H. Brown	468,384	Feb. 9	749	186	58	678
Trees. Machine for haling	H. O. Thomas	473,482	Apr. 26	2338	592	59	493
Trellis	C. G. Derby	485,912	Nov. 8	1156	305	61	825
Trestle	M. B. Church	467,081	Jan. 12	1259	319	58	247
Triangle. Compound	A. T. Page	482,023	Sept. 6	166	40	60	1368
Trick egg	C. A. Rogers	472,822	Apr. 12	1239	318	59	247
Tricycle	C. R. Arnold	474,279	May 3	606	150	59	755
Tricycle	A. Hunter	483,495	Sept. 27	2525	635	60	1867
Tricycle	C. Koenig	487,753	Dec. 13	847	215	61	1506
Tricycle	B. McCabe	468,680	Feb. 9	1207	307	58	770
Tricycle	T. McCormick	474,036	May 3	338	81	59	702
Tricycle	A. McDougall	477,140	June 14	1420	346	59	1734
Tricycle	A. E. Miller	471,770	Mar. 29	3272	836	58	1765
Tricycle	W. V. Snyder	475,622	May 24	2764	700	59	1215
Trigger	A. S. Harrah and J. N. Nichols	488,557	Dec. 27	2174	537	61	1803
Trimmer:							
<i>See</i> Lawn-trimmer. Sheet-metal trimmer.							
Sewing-machine trimmer.	Wick-trimmer.						
Trimmer. Rotary	M. T. Harrigan and J. L. Packard	473,874	Apr. 26	2972	749	59	614
Trimming. Dress	E. Allen	485,731	Nov. 8	894	210	61	772
Trip-fastener	F. A. Stevens	485,511	Nov. 1	546	145	61	684
Trip-slip. Conductor's	E. H. Murdock	481,369	Aug. 23	2622	645	60	1123
Tripod	O. H. Hanenstein	479,000	July 19	1440	357	60	310
Tripod	J. Hewitt	478,233	July 5	272	67	60	55
Tripod	C. Mills	471,392	Mar. 22	2713	691	58	1653
Tripod-head	L. E. Bennett	476,863	June 14	978	237	59	1645
Tripod-head for engineers' transits and analogous instruments.	J. Paoli	479,196	July 19	1746	438	60	366
Trolley	J. W. Davis	478,410	July 5	543	132	60	107
Trolley	F. F. Poole	479,608	July 26	2420	604	60	512
Trolley-carriage for conduits	S. L. Platt	481,817	Aug. 30	3369	825	60	1283
Trolley-carrier. Overhead	W. F. Glenn	472,756	Apr. 12	1149	294	59	230
Trolley-catch. Automatic	S. A. Shepard and F. P. Lang	469,750	Mar. 1	128	34	58	1124
Trolley-catcher	W. L. Browne	488,706	Dec. 27	2417	599	61	1850
Trolley-catcher	J. J. Hoppes	483,689	Oct. 4	250	62	61	52
Trolley-catcher	J. Werling and J. F. Agnew	487,808	Dec. 13	943	238	61	1526
Trolley. Conduit	J. J. Cosgrove, Jr	474,218	May 3	512	123	59	737
Trolley. Conduit electric	M. Wheless	468,166	Feb. 2	389	96	58	600
Trolley-disconnector. Automatic	G. A. Kimball	481,956	Sept. 6	52	12	60	1344
Trolley. Electric	E. A. Sperry	466,807	Jan. 12	807	208	58	163
Trolley. Electric-railway	E. R. Harding	467,250	Jan. 19	1551	395	58	312
Trolley. Electric-railway	J. Kuehnle	466,981	Jan. 12	1095	277	58	217
Trolley-lubricator	E. M. Doig	466,737	Jan. 5	685	176	58	130
Trolley-pole catcher	M. M. Wood	471,206	Mar. 22	2434	620	58	1599
Trolley-pole catcher	M. M. Wood	484,986	Oct. 25	2303	595	61	503
Trolley-protector	J. Walsh	481,517	Aug. 23	2863	704	60	1171
Trolley-support	S. C. Crane	476,367	June 7	220	54	59	1479
Trolley-switch	J. S. Merkins	481,503	Aug. 23	2845	699	60	1167
Trolley-switch	S. H. Short	473,362	Apr. 19	2134	535	59	431
Trolley. Underground	J. Fischer	482,506	Sept. 13	985	238	60	1542
Trolley-wheel	L. J. Hirt	488,811	Dec. 27	2573	639	61	1883
Trolley-wire circuit-breaker	J. M. Andersen	474,037	May 3	242	58	59	684
Trolley-wire clamp	M. M. Wood	472,596	Apr. 12	907	233	59	186
Trolley-wire cleaner	D. B. Smith	484,844	Oct. 11	1253	320	61	267
Trolley-wire hanger	E. E. Lain	486,583	Nov. 22	2226	585	61	1069
Trolley-wire hanger	C. T. Lee	467,940	Feb. 2	58	13	58	536
Trolley-wire hanger	T. J. McTighe	471,491	Mar. 22	2660	727	58	1681
Trolley-wire splice	E. A. Sperry	478,140	July 5	95	24	60	21
Trolley-wire support	O. F. Evans	474,375	May 10	796	207	59	802
Trolley-wire support	J. P. B. Fiske	468,336	Feb. 9	680	168	58	665
Trolley-wire support	F. C. Prickett	472,953	Apr. 12	1435	366	59	287
Trolley-wire support	E. A. Sperry	471,151	Mar. 22	2355	602	58	1584
Trolley-wire supports, &c. Bracket for	E. P. Russell	466,956	Jan. 12	1055	267	58	209
Trolley-wires. Device for bending electric	H. D. Winton	475,261	May 17	2190	558	59	1083
Trolley-wires. Device for suspending	J. Sachs	477,781	June 28	2474	622	59	1973
Trolleys. Guide for replacing electric	C. Fortin	480,766	Aug. 16	1628	408	60	922
Trolling-hook	H. Zuckweiler	470,279	Mar. 8	982	242	58	1209
Trolling-spoon	H. Loftie	481,652	Aug. 30	3035	752	60	1229
Trombone	A. Mille	408,025	Feb. 2	183	45	58	560
Trombone. Slide	P. Robinson	408,116	Feb. 2	312	75	58	584

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Trough: See Beer-racking trough. Hog-trough. Drinking-trough. Poultry-trough. Feed-trough. Watering-trough.							
Trousers	J. Bernstein	480,060	Aug. 2	484	123	60	675
Trousers	W. C. Huffmau and J. Le Favour	481,015	Oct. 11	748	188	61	168
Trousers	S. A. Isaacson	479,564	July 26	2360	5-9	60	501
Trousers	M. and S. Rachelman	475,416	May 24	2438	621	59	1151
Trousers	S. and M. Rachelman	486,894	Nov. 29	2757	716	61	1191
Trousers	G. J. Rupprecht	472,273	Apr. 5	416	107	59	78
Trousers	J. M. Taylor and M. Falk	467,064	Jan. 12	1229	311	58	241
Trousers, &c., and pattern therefor	R. Hamilton and J. G. Lewis	478,190	July 5	187	48	60	39
Trousers, &c., and pattern therefor	R. Hamilton and J. G. Lewis	478,281	July 5	350	85	60	71
Trousers, &c., and pattern therefor	J. G. Lewis and R. Hamilton	478,195	July 5	191	49	60	40
Trousers and similar garments. Supporter for	C. S. Rogers	460,672	Aug. 9	1482	369	60	877
Trousers-guard	C. Sulzner	479,229	July 19	1794	449	60	376
Trousers-guard	J. A. Traut	478,772	July 12	1080	268	60	230
Trousers-hanger	F. C. Germann, Jr.	476,195	May 31	3690	932	59	1499
Trousers-pattern	J. G. Nickamp	484,445	Oct. 18	1418	362	61	311
Trousers. Pattern for drafting	A. F. Mead	485,014	Oct. 25	2355	605	61	513
Trousers-protector	I. M. Aaronson	485,807	Nov. 8	985	264	61	791
Trousers-protector	E. P. Benjamin	475,749	May 31	2967	752	59	1266
Trousers-shield	J. H. Prutzman	483,164	Sept. 27	2023	512	60	1771
Trousers-stretcher	F. E. Housh	472,655	Apr. 12	994	257	59	202
Trousers-stretcher	G. S. Macdonald.	480,199	Aug. 2	702	177	60	715
Trousers-stretcher	C. B. Richardson	469,272	Feb. 23	2131	548	58	967
Trousers-stretcher	F. W. Watkins	488,234	Dec. 20	1660	414	61	1686
Trousers-stretcher and hanger	G. E. Hamlin	471,858	Mar. 29	3415	871	58	1792
Trousers-supporter	S. L. Carr	488,181	Dec. 20	1568	393	61	1668
Trousers. Supporter for the rear flap of	C. S. Terpening	476,699	June 7	708	174	59	1577
Trousers-supporting rack	W. Gerhard	486,459	Nov. 22	2040	540	61	1033
Trousers. Waistband for	L. Frank	471,967	Mar. 29	3565	910	58	1832
Trousers. Waistband for	N. J. Schloss	471,850	Mar. 29	3377	861	58	1785
Truck	G. E. Bourrell	466,899	Jan. 12	968	248	58	193
Truck	J. Brack	474,360	May 10	776	202	59	797
Truck	J. C. A. Dean	485,262	Nov. 1	163	47	61	606
Truck	A. Niehlless	483,006	Sept. 20	1771	448	60	1708
Truck	O. D. Thompson	477,472	June 21	1980	492	59	1855
Truck and wire-stretcher. Combined	M. Schmitz	468,182	Feb. 2	416	103	58	605
Truck. Barrel	J. D. Arnold	466,951	Jan. 13	1049	266	58	208
Truck. Barrel	J. M. Carr	473,381	Apr. 19	2172	545	59	439
Truck. Barrel	M. E. Parham	478,710	July 12	974	242	60	210
Truck. Beam	J. B. Bancroft and A. E. Rhoades	478,731	July 12	1020	250	60	218
Truck. Bit	W. A. Grove	472,538	Apr. 12	833	213	59	172
Truck brake mechanism. Car	G. M. Brill	485,858	Nov. 8	1062	282 2-3	61	806
Truck. Brick	J. P. Hazleton	470,193	Mar. 8	845	208	58	1272
Truck. Brick	C. H. Horton	487,835	Dec. 13	982	247	61	1534
Truck. Car	J. E. Anger	479,237	July 19	1805	452	60	378
Truck. Car	F. A. Baier	476,596	June 7	560	133	59	1547
Truck. Car	J. H. Bickford	466,595	Jan. 5	454	117	58	87
Truck. Car	G. M. Brill	478,218	July 5	232	58	60	48
Truck. Car	A. B. Du Pont	487,518	Dec. 6	470	123	61	1414
Truck. Car	W. A. Dutton	469,011	Feb. 16	1755	447	58	887
Truck. Car	R. L. Ellery	483,211	Sept. 27	2096	532	60	1786
Truck. Car	W. N. Haring	487,923	Dec. 13	1131	282	61	1562
Truck. Car	C. F. Heath	470,935	Mar. 15	2013	515 516	58	1506
Truck. Car	J. Henderson	472,923	Apr. 12	1384	355	59	278
Truck. Car	H. C. and C. B. Hodges	477,657	June 28	2291	574	59	1933
Truck. Car	M. G. Hubbard	466,349	Jan. 5	62	16	58	14
Truck. Car	M. G. Hubbard	487,273	Dec. 6	54	17	61	1332
Truck. Car	M. G. Hubbard	487,740	Dec. 13	827	211	61	1502
Truck. Car	S. D. King	471,644	Mar. 29	3068	780 781	58	1727
Truck. Car	A. T. Loyd	485,286	Nov. 1	197	56	61	613
Truck. Car	A. Miller	477,765	June 28	2465	616	59	1969
Truck. Car	A. Miller	477,766	June 28	2467	616 617	59	1969
Truck. Car	A. Miller	477,767	June 28	2468	617	59	1969
Truck. Car	E. Peckham	471,061	Mar. 15	2198	565	58	1541
Truck. Car	E. Peckham	471,062	Mar. 15	2200	566	58	1542
Truck. Car	J. Taylor	471,912	Mar. 29	3482	890 891	58	1807
Truck. Car	J. Taylor	472,236	Apr. 5	358	92, 93	59	67
Truck. Electric-motor	F. O. Blackwell	468,492	Feb. 9	922	235	58	712
Truck-elevator	C. and I. Baker	473,441	Apr. 26	2269	573	59	479
Truck equalizing device. Car	J. A. Brill and W. S. Adams	476,244	June 7	15	4	59	1441
Truck for cars. Motor	W. A. McGuire and M. G. Hubbard, Jr.	476,480	June 7	396	91, 92	59	1514
Truck for electric-railway cars. Car	P. M. Kling	466,539	Jan. 5	367	91, 92	58	70
Truck for electrically-propelled vehicles	L. Pingst	474,403	May 10	834	218	59	809
Truck. Founder's	J. M. Chatfield	468,559	Feb. 9	1031	262 263	58	734
Truck frame. Car	D. L. Barnes	468,491	Feb. 9	921	234	58	712
Truck gear. Car	E. Peckham	481,704	Aug. 30	3167	774	60	1244
Truck-handle support.	C. F. Woessner	479,542	July 26	2327	581	60	495
Truck. House moving	J. C. L. and A. P. Bressler	471,598	Mar. 29	3007	765	58	1716
Truck. House-moving	A. G. Kent	469,148	Feb. 16	1929	494	58	922
Truck lifter and shifter. Overhead	H. A. Vose	470,851	Mar. 15	1893	485	58	1482
Truck. Lumber	A. T. Bemis	482,332	Sept. 13	693	165	60	1485
Truck. Lumber-drying	W. A. Leary	476,801	June 14	875	215	59	1624
Truck. Motor	J. A. Brill	480,362	Aug. 9	985	248 249	60	780

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. E.	Vol.	Page.
Truck. Railway-car.....	E. D. Dorchester.....	480,495	Aug. 9	1199	301	60	822
Truck. Railway-car.....	W. G. Miller.....	467,293	Jan. 19	1618	412	58	324
Truck. Railway-car.....	L. Pfingst and S. A. Bemis.....	472,271	Apr. 5	413	106	59	77
Truck safety attachment. Car.....	L. F. Fisher.....	486,968	Nov. 29	2895	748	61	1220
Truck. Safety car.....	G. W. Moore.....	486,833	Nov. 22	2637	688	61	1153
Truck safety device. Railway.....	J. M. Bostwick.....	476,123	May 31	3571	897	59	1386
Truck. Sleigh.....	C. M. Spencer.....	469,507	Feb. 23	2502	641	58	1038
Truck. Street-car.....	H. F. Shaw.....	488,255	Dec. 20	1690	422	61	1692
Truck. Vehicle.....	D. L. Barnes.....	468,146	Feb. 2	363	89, 90	58	595
Truck. Vehicle.....	E. A. Sperry.....	466,808	Jan. 12	808	209	58	164
Truck. Weighing.....	E. E. Chandler.....	478,403	July 5	530	129	60	104
Trucks. Corner structure for.....	E. Dietz.....	480,716	Aug. 16	1558	388	60	906
Trucks. Means for radiating car.....	H. Resley.....	480,830	Aug. 16	1728	432	60	941
Trucks. Side bearing for car.....	M. V. Mullen.....	468,057	Feb. 2	226	55	58	568
Trunk.....	L. C. Cozens.....	485,612	Nov. 8	700	184	61	732
Trunk.....	J. T. Dwyer.....	477,795	June 28	2509	629	59	1976
Trunk.....	M. L. H. Keen.....	486,254	Nov. 15	1721	453	61	956
Trunk.....	F. Lyford.....	479,438	July 26	2149	536	60	461
Trunk.....	M. J. Michelson.....	484,217	Oct. 11	1046	265	61	227
Trunk.....	C. N. Romaine.....	474,148	May 3	403	98	59	716
Trunk.....	H. W. Rountree.....	471,899	Mar. 29	3468	885	58	1803
Trunk.....	S. E. V. Seward and F. W. Leimberger.....	475,617	May 24	2758	699	59	1214
Trunk.....	P. B. Yaeger.....	479,485	July 26	2249	564	60	480
Trunk and bed. Combined.....	G. W. Snaman, Jr.....	468,704	Feb. 9	1251	318	58	778
Trunk-binder. Rope.....	F. R. Derrick.....	468,542	Feb. 9	1001	256	58	728
Trunk-carrier.....	G. W. Hill.....	488,357	Dec. 20	1859	465	61	1725
Trunk. Convertible.....	J. Dwyer.....	471,768	Mar. 29	3269	835	58	1764
Trunk-elevator.....	E. R. Palmer.....	474,145	May 3	400	97	59	715
Trunk-line system.....	J. J. O'Connell.....	474,854	May 17	1561	398	59	963
Trunk-lock.....	W. J. Henry.....	486,227	Nov. 15	1670	442	61	946
Trunk-lock.....	J. Roche.....	487,449	Dec. 6	368	96	61	1393
Trunk or case.....	S. Hermann.....	472,119	Apr. 5	172	47	59	32
Trunk or shipping-case protector.....	J. J. Jennings.....	469,571	Feb. 23	2603	667	58	1058
Trunk or valise. Hand.....	E. Dillingham.....	475,977	May 31	3346	843	59	1339
Trunk-protector.....	C. V. Thompson.....	471,154	Mar. 22	2359	603	58	1584
Trunk safety attachment.....	S. E. Sparrow.....	475,950	May 31	3303	833	59	1332
Trunk. Salesman's sample.....	L. H. Raymo and W. L. Woods.....	487,493	Dec. 6	430	111	61	1406
Trunk-stand.....	E. J. Fletcher.....	483,348	Sept. 27	2327	585	60	1828
Trunk-stay.....	L. Hillebrand.....	467,481	Jan. 19	1903	486	58	379
Trunk-strap fastener.....	W. J. Webb.....	485,671	Nov. 8	797	212	61	752
Trunk-strap holder.....	A. E. McDonald.....	483,264	Sept. 27	2209	555	60	1806
Trunk. Telescopic.....	F. J. Palica.....	479,153	July 19	1675	419	60	354
Trunk-tray.....	E. J. Cummings.....	488,753	Dec. 27	2482	617	61	1864
Trunk-tray.....	A. C. Jordan.....	486,475	Nov. 22	2064	547	61	1039
Trunk-tray. Sample.....	N. Koch.....	468,566	Feb. 9	1040	265	58	736
Trunks, &c. Manufacture of.....	E. D. Taylor.....	476,840	June 14	939	229	59	1637
Truss.....	W. A. Adair.....	473,807	Apr. 26	2860	718	59	592
Truss.....	E. E. Boomhower.....	486,753	Nov. 22	2502	653	61	1126
Truss.....	C. Clutbe.....	467,552	Jan. 26	2051	517	58	413
Truss.....	C. Colves.....	477,044	June 14	1265	307	59	1703
Truss.....	H. P. Ewell.....	477,251	June 21	1632	398	59	1787
Truss.....	C. A. Harvey.....	482,946	Sept. 20	1680	423	60	1689
Truss.....	T. Y. Kayne.....	474,088	May 3	326	78	59	700
Truss.....	J. A. Marvin.....	480,775	Aug. 16	1642	411	60	924
Truss.....	J. M. Oakley.....	481,584	Aug. 30	2981	731	60	1209
Truss.....	C. Pence.....	474,402	May 10	833	218	59	809
Truss.....	G. Reno.....	477,335	June 21	1760	431	59	1813
Truss.....	G. S. Ross.....	466,517	Jan. 5	336	84	58	65
Trussing-machine.....	W. Glader and H. Schmidt.....	477,195	June 14	1511	370	59	1753
Tub:							
See Bath-tub. Composition tub.							
Bath and wash tub. Mop-tub.							
Dye-tub. Sink and washtub.							
Tubs. Waste and overflow connection for cement laundry.	J. Clifford and J. H. Gavin.....	480,692	Aug. 9	1515	376	60	883
Tube:							
See Boiler-tube. Insulating-tube.							
Card-board tube. Larynx-tube.							
Electric-conductor tube. Ozone-tube.							
Filtering-tube. Pneumatic dispatch-tube.							
Flexible tube. Speaking-tube.							
Glass tube. Wick-tube.							
Tube-bending apparatus.....	J. Donaldson.....	472,969	Apr. 12	1456	372	59	291
Tube-blanks. Machine for finishing the edges of.....	J. B. Perrins.....	469,977	Mar. 1	509	126	58	1197
Tube-cutter.....	M. C. Coppage.....	482,496	Sept. 13	972	236	60	1538
Tube-cutter.....	A. C. Forbes.....	474,823	May 17	1508	385	59	953
Tube-expander.....	O. Pagan.....	471,678	Mar. 29	3127	797	58	1738
Tube-expander.....	W. Walker.....	476,107	May 31	3545	892	59	1381
Tube-expander.....	O. A. White.....	488,376	Dec. 20	1893	474	61	1731
Tube-flanging machine.....	J. D. Murphy.....	486,984	Nov. 29	2922	754	61	1225
Tube of parchmentized fiber and apparatus for making the same.	R. P. Frist.....	467,248	Jan. 19	1548	395	58	311
Tube-scraper.....	P. Eckenroth, Jr.....	467,028	Jan. 12	1167	296	58	230
Tubes. Electrical method of and apparatus for forming.....	G. D. Burton and E. E. Angell.....	486,624	Nov. 22	2297	599	61	1083
Tubes from mandrels. Loosening.....	F. E. and A. S. Elmore.....	473,732	Apr. 26	2748	.....	59	511
Tubes. Manufacturing.....	F. E. and A. S. Elmore.....	480,186	Aug. 2	683	173	60	711
Tubes. Manufacturing collapsible.....	H. C. Sanders.....	478,525	July 5	713	172	60	141

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr.	Vol.	Page.
Tubes. Method of and apparatus for making metal-covered	E. T. Greenfield	469,663	Feb. 23	2727	702	58	1086
Tubes or bars. Machinery or apparatus for grinding and polishing	R. J. and A. Edwards	469,910	Mar. 1	391	98	58	1176
Tubes or rods. Tool for raising casing	W. Richards	471,896	Mar. 29	3466	885	58	1803
Tubes. Tool for upsetting ends of metal	J. Kitsmiller	472,504	Apr. 5	782	200	59	148
Tubes with metal. Covering	E. T. Greenfield	469,662	Feb. 23	2725	{ 701 702 }	58	1085
Tubing. Shoe for cistern	E. Sabland	482,812	Sept. 20	1459	362	60	1646
Tubing. Tag for butt-weld	E. Bowin	476,124	May 31	3571	896	59	1386
Tubular boiler	H. Benbow	484,696	Oct. 18	1813	461	61	391
Tubular boiler	J. Pierpoint	472,660	Apr. 12	998	258	59	203
Tubular boiler. Vertical	T. L. and T. J. Sturtevant	487,794	Dec. 13	922	213	61	1522
Tubular fabrics. Apparatus for shaping	D. A. Cobb	470,800	Mar. 15	1810	465	58	1466
Tubular rollers. Making	C. D. Meneely	473,943	May 3	95	22	59	655
Tug attachment. Hame	B. Lake	475,325	May 24	2285	588	59	1124
Tug clip. Hame	G. D. Stulken and A. J. Clute, Jr.	473,978	May 3	146	34	59	666
Tug. Hame	E. L. Howe	476,881	June 14	1010	245	59	1652
Tug. Hame	E. L. Howe	486,378	Nov. 15	1909	505	61	994
Tug. Hame	W. E. King	486,379	Nov. 15	19 0	505	61	995
Tug. Hame	D. McMillan	471,395	Mar. 22	2717	693	58	1654
Tug. Hame	J. W. Roberts	469,425	Feb. 23	2373	609	58	1014
Tug. Hame	M. W. Ryland	487,379	Dec. 6	229	62	61	1366
Tug. Hame	N. Siglin	480,629	Aug. 9	1415	352	60	864
Tug. Hame	H. O. Stahley	475,951	May 31	3304	833	59	1332
Tug. Hame	G. W. Williams	466,478	Jan. 5	270	68	58	52
Tug. Harness	S. P. Chandler	481,471	Aug. 23	2797	688	60	1157
Tug-hook	A. Ryan	479,465	July 26	2200	552	60	471
Tug-hook. Harness	J. Green	483,959	Oct. 4	656	165	61	136
Tug-loop	H. Armbruster	480,003	Aug. 2	376	93	60	652
Tug-securing device	A. Bennett	473,813	Apr. 26	2273	721	59	595
Tug. Shaft	F. Fellows	484,415	Oct. 18	1366	349	61	301
Tug. Shaft	J. Grammer	473,624	Apr. 26	2589	652	59	540
Tug. Shaft	J. L. Gregory	482,243	Sept. 6	525	125	60	1437
Tug. Shaft	S. H. Haas	471,818	Mar. 29	3363	856	58	1782
Tug. Shaft	J. A. Lesh	487,950	Dec. 13	1171	292	61	1570
Tug. Thill	A. C. Marshall	488,843	Dec. 13	1291	322	61	1594
Tug. Thill	N. F. Mathewson	479,603	July 26	2412	602	60	511
Tug. Thill	S. Stewart	482,764	Sept. 20	1402	346	60	1633
Tumbler cooler and cleaner	H. H. Snow	469,874	Mar. 1	376	86	58	1166
Tumbler-washer	J. M. Gunn	484,422	Oct. 18	1378	352	61	303
Tun	L. K. F. Gutbier and E. H. Koch	484,312	Oct. 11	1207	307	61	258
Tuning-forks. Making	L. K. Fuller	483,513	Sept. 27	2564	643	60	1874
Tuning-instrument	M. Schlittenbauer	467,203	Jan. 19	1477	378	58	298
Tuning-pin	W. A. Smith	488,021	Dec. 27	2629	622	61	1994
Tunneling or mining machine	R. Stanley	476,836	June 14	932	258	59	1636
Tunnels. Construction and laying of subaqueous	R. Powell	485,983	Nov. 8	1270	{ 335 336 }	61	849
Turbine. Axial-flow double-wheel	A. Mechwart	484,601	Oct. 18	1653	{ 419 420 }	61	359
Turbine. Steam	G. J. Altham	475,957	May 31	3313	836	59	1334
Turbine. Steam	F. Hart	486,829	Nov. 22	2631	687	61	1152
Turbine wheel	J. C. Lansing	480,929	Aug. 16	1874	{ 467 468 }	60	971
Turfing implement	L. B. Robinson	477,453	June 21	1947	482	59	1248
Turfing implement	H. T. Shipley	468,288	Feb. 2	586	146	58	637
Turn-buckles. Die for making	J. Bass	468,778	Feb. 16	1366	345	58	811
Turn-table	G. W. Patnoe	486,589	Nov. 22	2236	587	61	1672
Turn-table	N. W. Thillman and C. W. Firme	479,858	Aug. 2	123	30	60	607
Turning and working machine. Wood	F. H. Niermann	487,637	Dec. 6	645	{ 165 166 }	61	1449
Turning, engraving, or planing tools. Means for moving and guiding	G. M. Guerrant	468,283	Feb. 2	577	{ 143 144 }	58	636
Turning irregular forms. Machine for	E. A. Kimball	471,006	Mar. 15	2125	545	58	1527
Turning irregular shapes. Machine for	G. C. Bardons	475,917	May 31	3249	820	59	1321
Turning. Machine for taper	W. W. Tucker	482,210	Sept. 6	472	{ 113 114 }	60	1427
Turning machine. Handle	W. D. Snyder	481,875	Aug. 30	3457	{ 848 849 }	60	1301
Turning machine. Rod and broom-handle	S. H. Britton	472,332	Apr. 5	514	133	59	96
Turning machine. Wood	M. A. Bennett and V. V. Haidacher	483,760	Oct. 4	355	89,90	61	74
Turning machine. Wood	J. D. Carey	481,661	Aug. 30	3098	{ 755 756 }	60	1231
Turning or shaping the heads of casks. Machine for	S. Wright	477,039	June 14	1258	305	59	1702
Turning patterns on pearl, ivory, or other substances. Machine for	J. H. Lawles	477,130	June 14	1407	341	59	1731
Turret-clamping device	F. H. Richards	480,962	Aug. 16	1931	483	60	981
Turret-head	F. Stolzenberg	488,152	Dec. 13	1517	380	61	1641
Turret mechanism	F. H. Richards	480,964	Aug. 16	1935	{ 484 485 }	60	982
Tuyere	J. M. Hartman	485,381	Nov. 1	359	96	61	646
Tweezers. Watchmaker's	C. W. Delaney	482,232	Sept. 6	504	120	60	1433
Twine-box. Gravity	W. G. Bolus	474,076	May 3	306	74	59	697
Twine-holder	W. T. Hanson	486,465	Nov. 22	2047	541	61	1035
Twine-holder	C. Richtmann	466,426	Jan. 5	186	48	58	36
Twine-holder	J. E. Tracy and A. N. Graham	488,856	Dec. 27	2650	636	61	1897
Twine-holder. Automatic	E. B. Andross	475,173	May 17	2057	517	59	1061
Twine-making machines. Automatic feeder for	G. A. Lowry	480,873	Aug. 16	1789	448	60	954
Twine-making machines. Nippers for	G. A. Lowry	474,580	May 10	1123	287	59	864
Twist-drills. Die for swaging	A. B. Shippee	468,469	Feb. 9	874	222	58	703
Twist-drills. Machine for making	A. B. Shippee	468,468	Feb. 9	873	222	58	703
Twisting-frame	A. Combe	482,164	Sept. 6	399	95	60	1413
Twisting machine. Skein	L. Dimock	481,227	Aug. 23	2387	{ 588 589 }	60	1082

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Twisting-machine top roll.....	J. E. Fitzgerald.....	485,266	Nov. 1	167	49	61	607
Twisting or winding machine.....	W. H. H. Sisum.....	488,227	Dec. 20	1649	412	61	1684
Type.....	A. Coleman.....	482,784	Sept. 20	1428	354	60	1640
Type-arranger.....	W. A. Lorenz.....	467,355	Jan. 19	1711	437 438 866	58	341
Type-bars. Machine for producing.....	J. C. Fowler.....	481,920	Aug. 30	3536	867 868 869	60	1317
Type-case and galley support.....	J. E. Hamilton and F. Kaufmann, Jr.....	482,522	Sept. 13	1019	246	60	1548
Type-case stand.....	G. B. Miles.....	487,932	Dec. 13	1145	286	61	1564
Type-containing channels. Slug for.....	L. K. Johnson.....	477,008	June 14	1215	294	59	1693
Type-die.....	C. L. Redfield.....	468,976	Feb. 16	1694	432	58	874
Type. Die for making.....	M. G. Merritt.....	470,432	Mar. 8	1264	324	58	1349
Type-distributing apparatus.....	L. K. Johnson.....	477,009	June 14	1215	294	59	1693
Type-distributing machine.....	L. Dow and D. Powers.....	467,087	Jan. 12	1269	321 322 564	58	249
Type-finishing machine.....	T. M. Kenney.....	484,915	Oct. 25	2191	565	61	482
Type-holder.....	L. K. Scottford.....	481,286	Aug. 23	2502	615	60	1101
Type-justifying apparatus.....	A. Lagerman.....	478,340	July 5	431	105 106 107	60	86
Type-justifying apparatus.....	W. A. Lorenz.....	467,335	Jan. 19	1684	431 200 201	58	336
Type-line-forming machine.....	L. Ransom and A. W. Maynes.....	485,655	Nov. 8	760	202 203 204 205	61	744
Type. Machine for nicking printing.....	J. R. Topliss and J. A. Kay.....	473,271	Apr. 19	1978	496	59	401
Type-making machine.....	A. T. Brown.....	484,135	Oct. 11	908	232 233	61	200
Type-matrices. Spacer for.....	J. C. Fowler.....	470,649	Mar. 8	1570	408	58	1411
Type. Mechanism for justifying composed lines of.....	J. W. Schuckers.....	474,306	May 3	656	167 168 169 170 171	59	764
Type-plate and blank for the same.....	G. D. Morso and M. Chase.....	480,933	Aug. 16	1880	469	60	972
Type-setting and distributing machine.....	E. J. Andrews.....	467,631	Jan. 26	2156	548	58	433
Type-setting and distributing machine.....	T. J. Lumis.....	467,640	Jan. 26	2171	552	58	436
Type-setting and distributing machine.....	T. J. Lumis.....	468,570	Feb. 9	1045	266	58	737
Type-setting and distributing machine.....	R. W. Nelson.....	473,405	Apr. 19	2212	555	59	446
Type-setting machine.....	G. A. Botton.....	473,691	Apr. 26	2684	676	59	559
Type-setting machine.....	W. W. Hastings and F. D. Foster.....	480,497	Aug. 9	1203	301 302 425 426	60	822
Type-setting-up machinery.....	J. Hooker.....	488,265	Dec. 20	1702	427 428 429 430	61	1694
Type-writer cabinet.....	A. T. Brown.....	484,136	Oct. 11	911	234	61	201
Type-writer cabinet.....	S. L. Condé.....	486,435	Nov. 22	2009	533	61	1028
Type-writer carriage.....	F. L. Twiss and L. A. Barber.....	473,485	Apr. 26	2345	594	59	494
Type-writer case.....	G. F. Stillman.....	468,103	Feb. 2	294	71	58	581
Type-writer counter.....	F. W. Jones.....	482,361	Sept. 13	747	180	60	1496
Type-writer. Electric.....	A. D. Neal and H. F. Eaton.....	487,228	Nov. 29	3307	843 844 845	61	1299
Type-writer. Electrical.....	A. D. Neal and H. F. Eaton.....	487,227	Nov. 29	3302	842 843	61	1298
Type-writer for stencil-making.....	J. L. Young.....	486,059	Nov. 8	1394	369	61	874
Type-writer inking device.....	J. R. Free.....	474,236	May 3	542	133	59	742
Type-writer letter-copier.....	J. T. Davis.....	488,143	Dec. 13	1493	370	61	1637
Type-writer-ribbon box.....	L. H. Rogers.....	485,712	Nov. 8	862	231	61	766
Type-writer word-counting appliance.....	E. C. de Segundo.....	488,458	Dec. 20	2017	504	61	1757
Type-writers. Apparatus for registering the number of words written on.....	G. E. Hudson.....	488,521	Dec. 20	2128	527	61	1778
Type-writers. Blank book for.....	C. G. Thomson.....	470,769	Mar. 15	1760	453	58	1457
Type-writers. Copy-holder for.....	S. L. Chapman.....	409,658	Feb. 23	2719	699	58	1084
Type-writers. Registering attachment for.....	H. I. Cromer.....	476,735	June 7	762	188	59	1589
Type-writing and printing instrument.....	A. D. Neal and H. F. Eaton.....	486,889	Nov. 29	2735	712 713 714	61	1188
Type-writing machine.....	W. J. Barron.....	470,172	Mar. 8	805	200	58	1261
Type-writing machine.....	W. J. Barron.....	470,969	Mar. 15	2061	528 529	58	1515
Type-writing machine.....	W. J. Barron.....	472,023	Apr. 5	4	2	59	3
Type-writing machine.....	W. J. Barron, F. X. Wagner, and A. Densmore.....	484,132	Oct. 11	900	230 231	61	199
Type-writing machine.....	H. T. Beauregard and F. S. Flower.....	479,085	July 19	1566	392 393	60	333
Type-writing machine.....	G. M. Beerbower.....	472,024	Apr. 5	8	2	59	4
Type-writing machine.....	G. M. Beerbower.....	480,314	Aug. 9	917	231	60	769
Type-writing machine.....	A. E. Benedict.....	476,724	June 7	741	183 184	59	1585
Type-writing machine.....	T. Bigelow.....	471,090	Mar. 22	2250	578	58	1564
Type-writing machine.....	T. Bigelow.....	471,091	Mar. 22	2251	578 579	58	1564
Type-writing machine.....	T. Bigelow.....	471,092	Mar. 22	2253	579	58	1564
Type-writing machine.....	T. Bigelow.....	471,093	Mar. 22	2255	579	58	1565

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Type-writing machine	H. E. Blauvelt and J. A. Polhemus.	477,882	June 28	2658	{ 664 665 270 271 272	59	2004
Type-writing machine	G. C. Blickensderfer	472,692	Apr. 12	1045	{ 271 272	59	210
Type-writing machine	G. C. Blickensderfer	472,693	Apr. 12	1054	273	59	212
Type-writing machine	G. C. Blickensderfer	472,694	Apr. 12	1059	273	59	213
Type-writing machine	G. C. Blickensderfer	472,696	Apr. 12	1062	274	59	213
Type-writing machine	W. Bodenbrown, Jr	470,346	Mar. 8	1121	287	58	1323
Type-writing machine	C. S. Booth	469,675	Mar. 1	6	3, 4	58	1100
Type-writing machine	W. J. Borden and J. W. Johnson ..	477,165	June 14	1461	359	59	1743
Type-writing machine	B. A. Brooks	476,941	June 14	1110	268	59	1672
Type-writing machine	B. A. Brooks	476,942	June 14	1113	268	59	1672
Type-writing machine	B. A. Brooks	482,781	Sept. 20	1423	352	60	1638
Type-writing machine	A. W. Cash	466,600	Jan. 5	462	{ 118 119	58	89
Type-writing machine	L. F. Clark	471,785	Mar. 29	3311	844	58	1772
Type-writing machine	H. D. Clemons	478,223	July 5	248	60	60	51
Type-writing machine	C. M. Clinton and J. McNamara ..	474,333	May 3	718	{ 187 188	59	775
Type-writing machine	J. S. Copeland	476,251	June 7	29	6, 7, 8	59	1445
Type-writing machine	H. B. Cox and J. W. Gordon	469,188	Feb. 16	1988	{ 508 509 436 437 438 439	58	933
Type-writing machine	J. M. Crary	477,353	June 21	1787	{ 437 438 439	59	1817
Type-writing machine	J. M. Crary	477,404	June 21	1870	{ 460 461	59	1834
Type-writing machine	J. M. Crary	477,517	June 21	2048	{ 510 511	59	1869
Type-writing machine	J. D. Daugherty	470,990	Mar. 15	2100	{ 538 539	58	1523
Type-writing machine	J. D. Daugherty	478,925	July 12	1311	{ 326 327	60	275
Type-writing machine	J. D. Daugherty	481,477	Aug. 23	2803	690	60	1158
Type-writing machine	A. Davidson	487,047	Nov. 29	3016	775	61	1242
Type-writing machine	A. Davidson	487,066	Nov. 29	3042	781	61	1248
Type-writing machine	A. P. De Long	466,332	Jan. 5	37	10	58	10
Type-writing machine	S. A. Dean	477,521	June 21	2057	{ 512 513 514	59	1871
Type-writing machine	A. Densmore	475,443	May 21	2479	632	59	1159
Type-writing machine	L. P. Diss	481,750	Aug. 30	3257	793	60	1262
Type-writing machine	G. M. Eckels	466,490	Jan. 5	287	{ 73 74 75	58	55
Type-writing machine	W. S. Edwards	482,519	Sept. 13	1010	245	60	1546
Type-writing machine	A. M. English	481,855	Aug. 30	3428	{ 841 842	60	1295
Type-writing machine	E. F. Estes	471,964	Mar. 29	3561	909	58	1821
Type-writing machine	J. M. Fairfield	478,228	July 5	259	64	60	53
Type-writing machine	C. Fleckenstein	472,445	Apr. 5	680	{ 174 175	59	127
Type-writing machine	E. A. Ford	472,870	Apr. 12	1301	334	59	260
Type-writing machine	J. F. Frankey	472,042	Apr. 5	45	{ 10 11 12	59	10
Type-writing machine	C. Glidden	470,874	Mar. 15	1925	{ 492 493	58	1488
Type-writing machine	B. Granville	482,521	Sept. 13	1015	{ 245 246	60	1547
Type-writing machine	G. S. Heath	475,057	May 17	1879	476	59	1026
Type-writing machine	F. A. Heiss	485,761	Nov. 8	929	{ 249 250	61	780
Type-writing machine	E. P. House	466,788	Jan. 12	776	202	58	157
Type-writing machine	J. V. Hulse, Jr	470,429	Mar. 8	1260	323	58	1348
Type-writing machine	R. H. Ingersoll	478,109	July 5	47	14	60	12
Type-writing machine	J. Jackson	472,481	Apr. 5	741	189	59	141
Type-writing machine	W. M. Jenne	478,964	July 12	1371	{ 337 338	60	286
Type-writing machine	H. C. Johnson	477,054	June 14	1287	312	59	1707
Type-writing machine	G. S. Jones	475,085	May 17	1921	{ 488 489	59	1034
Type-writing machine	W. P. Kidder	471,794	Mar. 29	3324	{ 846 847	58	1774
Type-writing machine	W. P. Kidder	471,795	Mar. 29	3327	{ 847 848	58	1775
Type-writing machine	K. Kiefer	468,663	Feb. 9	1181	{ 301 302	58	764
Type-writing machine	H. K. Lamb	466,947	Jan. 12	1040	265	58	207
Type-writing machine	T. F. Lee	468,934	Feb. 16	1605	{ 406 407	58	857
Type-writing machine	C. O. Maltby	474,395	May 10	822	215	59	807
Type-writing machine	J. N. Maskelyne, Jr	484,035	Oct. 11	774	195	61	173
Type-writing machine	C. H. McClellan, Jr	487,761	Dec. 13	861	{ 218 219	61	1509
Type-writing machine	M. K. Morris	473,945	May 3	97	22, 23	59	655
Type-writing machine	A. N. Petit	482,317	Sept. 6	661	158	60	1465
Type-writing machine	J. Pratt	470,704	Mar. 15	1656	430	58	1436
Type-writing machine	J. Pratt	477,224	June 21	1578	{ 387 388	59	1778
Type-writing machine	C. L. Redfield	481,309	Aug. 23	2540	624	60	1108

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &c.	Vol.	Page.
Type-writing machine	C. Rymtowitz-Prince	470,871	Mar. 15	1918	{ 490 491	58	1487
Type-writing machine	F. Sanderson	475,894	May 31	3218	814	59	1315
Type-writing machine	J. F. Seiberling	470,214	Mar. 8	877	{ 216 217	58	1278
Type-writing machine	S. J. Seifried	474,350	May 3	753	{ 196 197	59	781
Type-writing machine	M. L. Severy	476,319	June 7	137	{ 33 35	59	1464
Type-writing machine	C. H. Shepard	480,289	Aug. 9	870	222	60	761
Type-writing machine	C. H. Shepard	480,290	Aug. 9	873	222	60	761
Type-writing machine	C. H. Shepard	480,291	Aug. 9	875	222	60	762
Type-writing machine	F. Sholes	474,533	May 10	1043	267	59	848
Type-writing machine	F. L. H. Sims	476,833	June 14	929	227	59	1635
Type-writing machine	C. S. Snell	467,267	Jan. 19	1580	403	58	317
Type-writing machine	C. Spiro	475,623	May 24	2765	{ 700 701	59	1215
Type-writing machine	C. Spiro	476,903	June 14	1044	253	59	1658
Type-writing machine	C. Spiro	481,376	Aug. 23	2633	{ 647 648	60	1125
Type-writing machine	C. Spiro	481,377	Aug. 23	2638	648	60	1126
Type-writing machine	D. C. Stover	468,139	Feb. 2	351	87	58	592
Type-writing machine	W. W. Street	480,677	Aug. 9	1189	{ 370 371	60	878
Type-writing machine	H. H. Unz	472,836	Apr. 12	1257	392	59	251
Type-writing machine	S. C. Vasaly	472,612	Apr. 12	937	241	59	192
Type-writing machine	L. H. Vaughan and W. E. Evans	485,593	Nov. 1	672	178	61	712
Type-writing machine	C. W. Walker	470,633	Mar. 8	1549	404	58	1407
Type-writing machine	C. W. Walker	487,802	Dec. 13	935	236	61	1524
Type-writing machine	C. D. Wallace	474,981	May 17	1764	447	59	1003
Type-writing machine	J. A. Watson	477,236	June 21	1604	393	59	1722
Type-writing machine	J. A. Watson	477,237	June 21	1606	393	59	1723
Type-writing machine	G. B. Webb	470,273	Mar. 8	966	{ 239 240	58	1296
Type-writing machine	G. B. Webb	471,710	Mar. 29	3177	811	58	1747
Type-writing machine	G. B. Webb	474,147	July 5	111	29	60	25
Type-writing machine	G. B. Webb	480,305	Aug. 9	901	228	60	766
Type-writing machine	G. B. Webb	480,306	Aug. 9	905	229	60	766
Type-writing machine	G. B. Webb	480,641	Aug. 9	1431	{ 356 357	60	868
Type-writing machine	J. E. Wilson	487,897	Dec. 13	1085	{ 271 272	61	1553
Type-writing machine	G. W. N. Yost	474,936	May 17	1682	430	59	989
Type-writing machine	G. W. N. Yost	474,937	May 17	1684	430	59	990
Type-writing machine	G. W. N. Yost	474,938	May 17	1687	431	59	990
Type-writing machine and ribbon-holder thereof	G. B. Webb and L. N. Chapin	473,718	Apr. 26	2726	626	59	556
Type-writing-machine attachment	G. C. Blickensderfer	472,695	Apr. 12	1060	274	59	213
Type-writing-machine attachment	G. C. Blickensderfer	472,850	Apr. 12	1273	326	59	254
Type-writing-machine attachment	G. F. Loar	471,872	Mar. 29	3434	876	58	1796
Type-writing-machine attachment	C. M. Prescott	470,385	Mar. 8	1186	303	58	1334
Type-writing-machine attachment	C. J. Reed	473,236	Apr. 19	1926	455	59	390
Type-writing-machine attachment	C. J. Reed	473,237	Apr. 19	1929	485	59	391
Type-writing-machine attachment	T. H. Stackhouse	471,832	Mar. 29	3379	861	58	1786
Type-writing-machine card-holder	C. B. Godfrey	486,036	Nov. 8	1355	361	61	807
Type-writing-machine cleaning attachment	S. Ford	480,257	Aug. 9	814	208	60	749
Type-writing-machine ribbon	L. Bailey	472,847	Apr. 12	1270	325	59	254
Type-writing-machine type-cleaner	J. R. Keatinge	475,777	May 31	3009	763	59	1274
Type-writing-machine type-cleaning appliance	G. E. Graff	474,733	May 10	1360	.....	59	910
Type-writing machines. Aligner for	F. M. Spaulding	481,513	Aug. 23	2859	702	60	1170
Type-writing machines. Automatic envelope-feeder for	J. H. Brower and H. C. Ross	476,727	June 7	749	185	59	1586
Type-writing machines. Cleaning device for	O. Cohn	478,406	July 5	536	130	60	105
Type-writing machines. Device for inking	A. S. Dennis	479,351	July 19	1991	498	60	416
Type-writing machines. Inking device for	E. S. Higgins and H. C. Jenkins	479,999	Apr. 19	1520	388	59	316
Type-writing machines. Line-spacing mechanism for	A. S. Dennis	479,352	July 19	1992	498	60	416
Type-writing machines. Ribbons and ribbon attachment for	J. H. Osgood	467,191	Jan. 19	1457	372	58	294
Type-writing machines. Shifting mechanism for	J. C. Cowan	477,199	June 21	1528	373	59	1770
Type-writing machines. Type-cleaner for	B. H. Holmes and J. H. Ralston	472,760	Apr. 12	1154	296	59	231
Type-writing machines. Type-cleaning device for	J. R. Frost	467,797	Jan. 26	2422	615	58	483
Type-writing machines. Type-cleaning device for	T. H. Stackhouse	472,720	Apr. 12	1098	282	59	220
Type-writing machines. Type-cleaning device for	F. Van Fleet	469,179	Feb. 16	1973	{ 504 505	58	931
Type-written work. Duplicating	A. B. Dick	466,557	Jan. 5	398	101	58	77
Typograph attachment	J. Slocum	483,023	Sept. 20	1803	455	60	1715
Typographic machine	T. T. Heath and A. N. Verdin	483,252	Sept. 27	2158	{ 547 548 549	60	1797
Umbrella	B. F. Auld	475,028	May 17	1835	465	59	1017
Umbrella	F. A. Burnam	484,773	Oct. 25	1949	497	61	432
Umbrella	C. Thomas	488,407	Dec. 20	1934	485	61	1739
Umbrella	H. S. Whitcomb	473,649	Apr. 26	2624	661	59	547
Umbrella carrier	I. M. Fleisher	485,922	Nov. 8	1168	308	61	827
Umbrella-cover. Detachable	J. F. Witt	475,072	May 17	1902	423	59	1030
Umbrella drip-cup	J. R. Tyson	474,616	May 10	1180	300	59	874
Umbrella. Folding	F. Batzel	474,467	May 10	942	243	59	829
Umbrella. Folding	A. Beauchamp	485,905	Nov. 8	1141	303	61	822
Umbrella. Folding	G. H. Seymour	479,310	July 19	1913	478	60	400
Umbrella. Folding	G. N. Vannauker	488,341	Dec. 20	1831	457	61	1718
Umbrella. Folding	H. C. Ward	480,482	Aug. 9	1184	297	60	819
Umbrella-frame	J. Willis	478,150	July 5	118	30	60	26

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Drawg.	Vol.	Page.
Um'rella-lock	D. M. Wyatt	475,736	May 24	2940	746	59	1247
Umbrella-lock and satchel-fastener. Combined	T. J. Leehey and J. O'Connell	486,256	Nov. 15	1728	455	61	957
Umbrella-locking device	J. H. Bevington	474,356	May 10	768	200	59	796
Umbrella-notch	S. Collins	476,364	June 7	216	53	59	1478
Umbrella or parasol	H. A. Fleuss	483,212	Sept. 27	2097	532	60	1786
Umbrella or parasol. Folding	C. E. Hayes and H. L. Millay	472,457	Apr. 5	703	179	59	133
Umbrella or parasol frame	C. B. Macneal	473,470	Apr. 26	2323	587	59	490
Umbrella or parasol geat	J. Willis	479,691	July 26	2555	635	60	537
Umbrella-rib	W. L. Uhlenhart	480,353	Aug. 9	974	245	60	779
Umbrella ribs and stretchers. Guide for	H. G. Praetorius	481,283	Aug. 23	2494	614	60	1101
Umbrella-runner	R. Ardrey	475,074	May 17	1904	483	59	1030
Umbrella-runner	L. B. Couch	478,250	July 5	305	74	60	61
Umbrella-runner	C. J. Fell	486,209	Nov. 15	1640	434	61	939
Umbrella-runner	J. F. Mason	482,130	Sept. 6	335	80	60	1401
Umbrella-runner retainer	H. J. Herbert	486,778	Nov. 22	2543	664	61	1133
Umbrella-runners. Device for fastening	W. H. Gaskill	470,890	Mar. 15	1945	498	58	1493
Umbrella-stand	G. R. Davis	480,657	Aug. 9	1461	363	60	873
Umbrella-stand	H. J. Feuchtwanger	473,623	Apr. 26	2577	651	59	540
Umbrella-stand	S. S. Sencenbaugh and A. J. Ives	478,645	July 12	890	220	60	192
Umbrella-stand	S. S. Sencenbaugh and A. J. Ives	478,646	July 12	890	220	60	192
Umbrella-stand	P. V. Smith	479,671	July 26	2522	628	60	531
Umbrella-stand. Coin-controlled	H. Westphal	486,145	Nov. 15	1554	411 412 413	61	923
Umbrella-stick	J. H. Sprague	485,719	Nov. 8	870	233	61	768
Umbrella-stick	J. H. Sprague	488,638	Dec. 27	2308	571	61	1829
Umbrella-stick	G. C. Wolfe	479,929	Aug. 2	239	59	60	628
Umbrella-sticks. Machine for slotting, boring, and cutting	J. L. Brown, H. D. Walton, and G. Rich	466,321	Jan. 5	10	3, 4, 5	58	5
Umbrella-support	H. H. Pattee	473,016	Apr. 19	1546	394	59	321
Umbrella-support	C. V. W. Whaler	467,761	Jan. 26	2368	601	58	478
Umbrella-supporter	J. Devereaux	481,481	Aug. 23	2813	692	60	1161
Umbrella suspender and carrier	L. E. Stockdale and G. R. Lawrence	486,135	Nov. 15	1542	407	61	920
Umbrellas. Catch for rib-points of	O. Schmidt	476,561	June 7	505	119	59	1537
Umbrellas, &c., on bicycles, &c. Support for	J. Dugan	488,549	Dec. 27	2162	534	61	1900
Undergarment	M. C. Geldowsky	488,887	Dec. 27	2689	666	61	1907
Undergarment	J. A. Scriven	472,555	Apr. 12	854	219	59	177
Undershirt	W. F. Kneip	472,672	Apr. 12	1022	264	59	206
Undershirt and making the same	H. Holroyd	479,276	July 19	1862	467	60	390
Underwaist	G. D. McKay	474,679	May 10	1283	327	59	895
Undertaker's convertible stand	V. Klenha	485,801	Nov. 8	978	262 263	61	790
Unicycle	J. Imlah	480,585	Aug. 9	1336	333	60	849
Unicycle	J. Rawle	482,100	Sept. 6	291	70	60	1393
Unicycle	A. and F. Yost	481,883	Aug. 30	3471	851	60	1304
Universal coupling	R. S. Brown	481,780	Aug. 30	3311	809	60	1273
Universal joint	J. S. Detrick	477,625	June 21	2238	560	59	1906
Universal joint	A. J. Oehring	478,811	July 12	1151	285	60	244
Universal-jointed brace	A. C. Derlon	481,526	Aug. 23	2884	708	60	1175
Unloading vessels, cars, &c. Device for	J. Socci	482,565	Sept. 13	1085	263	60	1560
Upholstery spring-support	J. A. Staples	482,908	Sept. 20	1619	405	60	1676
Upper	G. W. Sleeper	475,619	May 24	2760	699	59	1214
Upper-clamp	W. H. Wood	488,913	Dec. 27	2741	676	61	1917
Upper-folding machine	C. E. Williams	468,590	Feb. 9	1071	274	58	742
Upper-folding machine	C. E. Williams	483,593	Dec. 27	2240	555	61	1816
Upper-machine	P. W. Minor	469,582	Feb. 23	2617	671	58	1061
Uppers. Machine for lasting and trimming	W. S. Morey	469,972	Mar. 1	499	123	58	1195
Urinal	J. Demarest	469,009	Feb. 16	1752	446	58	886
Urinal	W. S. Ross	482,754	Sept. 20	1378	341 342	60	1629
Urinal	I. D. Smead	478,648	July 12	892	221	60	192
Urinal	C. G. Zeilman	473,806	Apr. 26	2858	718	59	592
Urinal and patrol-box	W. Eglin	478,505	July 5	683	166	60	135
Urinal attachment	G. Schoen	487,130	Nov. 29	3148	807	61	1270
Urn	T. Miller	477,261	June 21	1647	402	59	1790
Urn. Coffee	F. Doering	481,851	Aug. 30	3424	840	60	1294
Urn. Coffee or tea	T. Miller	486,881	Nov. 29	2717	708	61	1164
Urn. Hot-water	T. Miller	488,320	Dec. 20	1792	450	61	1711
Vacuum-pan	J. R. Farnham	472,209	Apr. 5	320	82, 83	59	60
Vacuum-pans. Feed-pipe for	H. Basanta	478,906	July 12	1282	319	60	209
Vaginal instrument	W. A. Howard	471,865	Mar. 29	3424	874	58	1794
Valve	G. Anderson	477,398	June 21	1863	458 459	59	1832
Valve	C. L. Bastian	477,192	June 14	1507	369	59	1753
Valve	A. F. L. Bell	472,914	Apr. 12	1370	351	59	275
Valve	C. Birkey	476,511	June 7	435	102	59	1522
Valve	J. B. Case and W. H. Hendrick	481,001	Aug. 16	1900	498	60	992
Valve	F. J. Ferrell	467,796	Jan. 26	2421	615	58	483
Valve	F. J. Ferrell	468,242	Feb. 2	501	123 124	58	622
Valve	S. F. Gold	485,626	Nov. 8	723	180	61	737
Valve	E. W. Harden and M. R. Conway	486,403	Nov. 15	1951	517 518	61	1001
Valve	L. H. Jenks	487,673	Dec. 6	704	179	61	146
Valve	J. Kennedy	477,372	June 21	1823	446	59	1821
Valve	M. Long	477,845	June 28	2598	651	59	1993
Valve	D. R. McKim	468,029	Feb. 2	187	46	58	560
Valve	A. T. Miller	476,668	June 7	662	161	59	1568
Valve	G. B. Moore	482,187	Sept. 6	439	105	60	1421
Valve	B. D. Northrup	479,450	July 26	2168	542	60	465
Valve	M. D. O'Brien	473,707	Apr. 26	2713	683	59	564
Valve	G. F. Pottle	468,305	Feb. 2	622	155	58	644
Valve	R. N. Pratt	477,605	June 21	2187	542	59	1897
Valve	G. H. F. Schrader	473,672	Apr. 26	2656	669	59	554

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Gr.	Vol.	Page.
Valve	G. H. F. Schrader	484,509	Oct. 18	1519	386	61	331
Valve	A. S. Slyker	488,228	Dec. 20	1652	412	61	1684
Valve	C. E. Van Anken	468,143	Feb. 2	357	88	58	594
Valve	C. E. Van Anken	476,844	June 14	946	230	59	1639
Valve	E. Vangezell	470,270	Mar. 8	963	239	58	1295
Valve	G. Vining	478,665	July 12	914	226	60	197
Valve	A. Weber	477,392	June 21	1854	456	59	1831
Valve	A. Weber	477,720	June 28	2390	597	59	1955
Valve	D. L. Whittingham	484,384	Oct. 11	1315	336	61	280
Valve	R. Wood	473,488	Apr. 26	2351	596	59	495
Valve. Air	J. L. Judge	477,597	June 21	2175	539	59	1895
Valve. Air-brake	G. A. Boyden	481,134	Aug. 16	2212	547	60	1034
Valve. Air-brake	J. F. Carpenter	478,846	July 12	1904	299	60	254
Valve. Air-brake	W. M. Gilmore	479,978	Aug. 2	320	78	60	643
Valve. Air-cushion	D. Hale	476,957	June 14	1140	275	59	1677
Valve. Ammonia dipper	J. Dreisöerner	482,233	Sept. 6	504	120	60	1433
Valve and faucet	A. H. Dauchy	485,828	Nov. 8	1016	273	61	797
Valve and joint	C. S. Bavier	484,843	Oct. 25	2074	533	61	458
Valve and muffler. Safety	E. B. Kunkle	477,945	June 28	2754	690	59	2024
Valve and muffler. Safety	A. Lobiller	488,020	Dec. 13	1289	322	61	1594
Valve and valve-support	J. R. Maxwell	487,408	Dec. 6	296	77	61	1379
Valve apparatus for gas or petroleum motor engines	H. Schumm	486,301	Nov. 15	1791	470	61	971
Valve. Automatic	R. Wood	470,735	Mar. 15	1703	439	58	1446
Valve. Automatic	G. W. Young	469,768	Mar. 1	158	42	58	1130
Valve. Automatic regulating	J. M. Foster	483,979	Oct. 4	688	172	61	142
Valve. Automatic relief	F. Schreidt	479,724	July 26	2625	651	60	549
Valve. Back-pressure	W. W. Doolittle	486,590	Nov. 29	2872	742	61	1215
Valve. Balanced	D. Kiley	466,690	Jan. 5	597	155	58	116
Valve. Balanced slide	M. A. Green	483,054	Sept. 20	1845	468	60	1724
Valve. Balanced slide	W. T. Harrison	473,744	Apr. 26	2770	696	59	575
Valve. Balanced slide	J. McDonald	477,307	June 21	1724	422	59	1805
Valve. Balanced slide	E. L. Mills	485,818	Nov. 8	997	268	61	794
Valve. Balanced slide	J. Parker and F. E. Clark	487,962	Dec. 13	1185	295	61	1573
Valve. Balanced slide	E. B. Sintzenich	478,719	July 12	990	246	60	213
Valve. Balanced slide	F. R. Skidmore	484,060	Oct. 11	806	204	61	180
Valve. Balanced slide	W. J. Thomas	474,153	May 3	412	100	59	718
Valve. Balanced slide	F. D. Toncey	488,488	Dec. 20	2066	513	61	1767
Valve. Balanced slide	T. Tripp	470,339	Mar. 8	1106	282	58	1320
Valve. Ball-cock	W. A. Turner	481,317	Aug. 23	2553	627	60	1110
Valve. Blow-off	F. W. Johnstone	468,878	Feb. 16	1513	386	58	839
Valve. Boiler-blow-off	C. J. Gustafson	480,723	Aug. 16	1566	391	60	908
Valve casing. Furnace	W. Swindell	482,463	Sept. 13	908	221	60	1526
Valve. Cesspool	R. Welling	477,977	June 28	2793	700	59	2032
Valve. Check	E. W. Craine	483,603	Oct. 4	129	32	61	27
Valve. Check	J. P. Gallon	485,740	Nov. 8	906	243	61	775
Valve. Check	W. S. Loveland	485,746	Nov. 8	914	244	61	777
Valve. Check	E. A. Marsh	468,448	Feb. 9	840	212	58	697
Valve. Check	F. A. Phillippi	486,501	Nov. 22	2099	555	61	1046
Valve. Check	S. F. Prince, Jr.	483,635	Oct. 4	175	44	61	36
Valve. Check	E. J. Sinclair	487,298	Dec. 6	91	27	61	1340
Valve. Combined intercepting and reducing	J. Player	481,148	Aug. 16	2250	555	60	1040
Valve. Combined starting and blow-off	S. M. Vanclain	471,836	Mar. 29	3385	863	58	1787
Valve. Compound engine	A. L. Church	471,842	Mar. 29	3395	866	58	1788
Valve. Compound engine	J. Player	481,057	Aug. 16	2084	520	60	1011
Valve-controller	C. L. Fortier	479,795	Aug. 2	30	8	60	588
Valve-controller	N. E. Nash and G. A. Eddy	471,999	Mar. 29	3606	921	58	1830
Valve-controller. Automatic	W. H. Kilbourn	470,143	Mar. 1	742	184	58	1243
Valve-controller. Electric	E. F. Roberts	482,139	Sept. 6	346	83	60	1403
Valve-controller. Electrical	J. V. Stout	476,573	June 7	520	123	59	1540
Valve-controller. Electro-magnetic	O. E. Lundstedt	472,461	Apr. 5	707	180	59	134
Valve-controller. Electro-magnetic	O. E. Lundstedt	472,579	Apr. 12	83	227	59	182
Valve-controller. Hygrometric	C. W. Rogers	483,725	Oct. 4	298	74	61	62
Valve. Cut-off	D. B. Kenney	467,033	Jan. 12	1175	297	58	232
Valve. Cut-off	G. V. Putman	477,022	June 14	1233	298	59	1697
Valve. Cut-off piston	F. J. Waters	482,707	Sept. 13	1295	317	60	1602
Valve device and vessel-support. Combined	J. A. Henry	468,041	Feb. 2	203	50	58	564
Valve device for air-brakes	H. R. Mason	466,502	Jan. 5	312	79	58	59
Valve device. Radiator	J. Collis	479,400	July 26	2083	522	60	448
Valve. Direct acting engine	W. Craig	485,787	Nov. 8	961	258	61	786
Valve disk-holder	J. W. Randall	485,984	Nov. 8	1272	337	61	850
Valve. Distributing	S. Gustin	481,943	Sept. 6	34	8	60	1341
Valve. Electrical stop	A. Franke	481,108	Sept. 20	1927	488	60	1741
Valve. Electrically-controlled	W. B. Fleming	476,376	June 7	237	58	59	1483
Valve. Elevator	A. Kieckhefer and G. Cadman	477,055	June 14	1284	313	59	1708
Valve. Elevator auxiliary	A. J. McAdam	484,223	Oct. 11	1054	568	61	929
Valve. Engine	F. W. Bruce	470,978	Mar. 15	2081	532	58	1519
Valve. Engine slide	J. D. Stark	484,903	Oct. 25	2169	558	61	477
Valve. Engineer's	A. P. Massey	475,695	May 24	273	726	59	1235
Valve. Feed-regulating	W. K. Farrand	486,398	Nov. 15	1943	514	61	1002
Valve. Fluid-pressure	H. G. Manning	479,439	July 26	2151	537	60	461
Valve. Flushing	W. A. Turner	477,714	June 28	2383	595	59	1954
Valve. Flushing	W. A. Turner	477,715	June 28	2384	596	59	1954
Valve. Flushing	W. A. Turner	477,716	June 28	2387	596	59	1954
Valve. Flushing	W. A. Turner	477,717	June 28	2386	596	59	1954
Valve for air-brakes. Quick-release	H. R. Mason	467,038	Jan. 12	1184	299	58	233
Valve for air-brakes. Quick-release	H. R. Mason	467,111	Jan. 12	1325	335	58	261
Valve for air and gas compressors	J. Clayton	467,064	Nov. 29	3040	780	61	1248
Valve for automatic air-brakes	G. A. Boyden	481,136	Aug. 16	2223	548	60	1035

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Valve for automatic air-brakes. Relief or exhaust.	E. G. Shortt	466,434	Jan. 5	200	51, 52	58	38
Valve for automatic air-brakes. Triple.	H. H. Westinghouse	475,099	May 17	1948	494	59	1039
Valve for automatic brake mechanism. Engineer's.	E. G. Shortt	466,433	Jan. 5	198	51	58	38
Valve for automatic brake systems. Relief.	E. G. Shortt	471,441	Mar. 22	2788	712	58	1666
Valve for beer-coolers	M. Bensinger	473,248	Apr. 19	1942	488	59	393
Valve for compound engines. Balanced piston.	H. Canfield	477,924	June 28	2732	681	59	2017
Valve for compound engines. Intercepting.	F. W. Dean	474,000	May 3	181	43	59	673
Valve for compound steam-engines	J. C. Hobart	467,933	Feb. 2	48	11	58	534
Valve for controlling the inflow and discharge of hydraulic pressure, &c.	H. J. Gwynne and G. E. Fowler	471,421	Mar. 22	2758	704	58	1661
Valve for elevators. Automatic stop.	H. J. Reedy	480,278	Aug. 9	851	217	60	757
Valve for engines. Cut-off.	O. E. Brown and P. Stetson	482,516	Sept. 13	1001	242	60	1545
Valve for engines. Reversing.	C. F. Christopher	474,212	May 3	502	121	59	735
Valve for engines. Steam-actuated.	A. A. Nanney	471,882	Mar. 29	3448	860	58	1799
Valve for evaporating-pans. Float.	M. J. Rhodes	484,560	Oct. 18	1595	405	61	347
Valve for gas-compressors	P. Dieter	471,787	Mar. 29	3316	845	58	1773
Valve for high pressures. Stop.	H. W. Loss	486,722	Nov. 22	2448	632	61	1115
Valve for hot-blast stoves	H. Kennedy	472,640	Apr. 12	974	252	59	198
Valve for hydraulic elevators. Automatic stop.	W. H. Hultgren	488,763	Dec. 27	2497	621	61	1867
Valve for pneumatic tires	E. R. De Wolfe	480,400	Aug. 9	1050	293	60	793
Valve for pneumatic tires	W. E. Gibbs	485,540	Nov. 1	594	158	61	695
Valve for pneumatic tires	J. F. Ives and F. B. Colman	481,762	Aug. 30	3277	798	60	1266
Valve for pneumatic tires	G. H. F. Schrader	473,673	Apr. 26	2658	670	59	554
Valve for pneumatic tires	G. H. F. Schrader	483,172	Sept. 27	2034	514	60	1773
Valve for oil-wells. Shut-off.	E. Evans	469,996	Mar. 1	533	133	58	1202
Valve for radiators. Automatic relief.	A. S. Hodge	479,806	Aug. 2	48	12	60	591
Valve for radiators. Combined automatic relief and vacuum air.	W. O. Whitman	478,489	July 5	652	160	60	130
Valve for radiators or other heating apparatus.	G. Hill	468,874	Feb. 16	1505	383	58	838
Valve for safety-plugs for steam-boilers	L. Sleno	472,233	Apr. 5	353	91	59	66
Valve for set bowls. Outlet.	J. L. Thurston and F. B. How	482,534	Sept. 13	1035	250 251	60	1551
Valve for steam-heaters. Automatic.	C. J. Valentine	484,526	Oct. 18	1545	392	61	336
Valve for steam or high-pressure fluids	W. G. Adams and J. S. Forbes	479,391	July 26	2067	519	60	445
Valve for steam-radiators. Automatic	W. H. Thorn	467,883	Jan. 26	2565	649	58	510
Valve for tanks. Slow-closing.	J. V. Glover	478,793	July 12	1125	277	60	238
Valve for traps and water-pipes. Air.	C. H. Rhett	473,961	May 3	124	29	59	661
Valve. Four-way	W. Rymer	477,706	June 28	2369	592	59	1951
Valve. Gate	K. N. Pratt	477,608	June 21	2190	543	59	1897
Valve-gate	F. H. Richards	467,955	Feb. 2	73	17	58	539
Valve-gate	F. H. Richards	476,313	June 7	128	31	59	1463
Valve, gate, or similar device	F. J. Ferrell	468,334	Feb. 9	677	167	58	664
Valve-gear	S. Chaplin	487,249	Dec. 6	18	5	61	1324
Valve-gear	F. H. A. Devlin	486,437	Nov. 22	2011	533	61	1028
Valve-gear	J. R. Frikart	482,007	Sept. 6	136	33	60	1362
Valve-gear	P. Jennings	474,452	May 10	926	238	59	826
Valve-gear	W. H. von Mengerinhausen	480,474	Aug. 9	1171	295	60	816
Valve-gear	J. Riddell	478,022	June 28	2873	718	59	2047
Valve-gear	G. Rothenbücher	477,848	June 28	2601	652	59	1994
Valve-gear	F. E. Smith	481,072	Aug. 16	2117	527	60	1016
Valve-gear	C. E. Tidblad	482,399	Sept. 13	809	194	60	1508
Valve-gear	H. Unzicker and T. Masel	485,360	Nov. 1	327	87, 88	61	639
Valve-gear. Adjustable cut-off.	H. T. Clarke	478,047	June 28	2911	727	59	2053
Valve-gear. Compound-engine	T. W. Heintzelman and C. T. Noyes	471,253	Mar. 22	2503	634 635	58	1612
Valve gear. Cut-off.	T., R., and W. Lees, Jr.	472,658	Apr. 12	996	257 258	59	203
Valve gear. Cut-off.	R. H. Rice	473,085	Apr. 19	1655	421	59	340
Valve-gear. Engine	J. Hamilton	476,229	May 31	3757	948 949	59	1421
Valve-gear. Engine	F. Herlt and J. Hirschmann	475,942	May 31	3290	830 831	59	1329
Valve-gear. Engine	F. J. Waters	478,973	July 12	1387	342 343	60	287
Valve-gear. Engine	J. Wheelock	467,868	Jan. 26	2539	644	58	505
Valve-gear for direct-acting steam-engines	J. E. Kelley	476,148	May 31	3609	912	59	1394
Valve-gear for steam-engines	B. Bertermann	472,100	Apr. 5	138	37, 38	59	27
Valve-gear for steam-hammers	S. Tythewey	470,723	Mar. 15	1687	435	58	1442
Valve-gear. Link	W. A. Winn	473,278	Apr. 19	1989	499	59	403
Valve-gear. Reversible	J. C. Nicholson	475,601	May 24	2729	691 692	59	1208
Valve-gear. Steam-engine	D. Ashworth	470,343	Mar. 8	1115	285 286	58	1321
Valve-gear. Steam-engine	M. C. Bullock	473,906	May 3	13	4	59	639
Valve-gear. Steam-engine	R. Radley	483,328	Sept. 27	2304	579 580	60	1823
Valve-gear. Steam-engine	J. W. Sargent	485,433	Nov. 1	437	117	61	662
Valve-gearing	A. S. Krotz	475,691	May 24	2866	725	59	1234
Valve-gearing. Steam-engine	H. C. Behr	474,717	May 10	1336	340	59	906
Valve. Globe.	F. M. Moore	481,803	Aug. 30	3346	819	60	1280
Valve. Globe.	W. J. Quinn	485,055	Oct. 25	2413	621	61	525
Valve. Governor equilibrium.	J. Pilet	476,550	June 7	487	116	59	1534
Valve. Hydrant.	J. D. Hooker	470,571	Mar. 8	1457	379	58	1387
Valve. Hydrant.	S. W. Lewis	488,079	Dec. 13	1401	348	61	1619
Valve. Hydraulic-elevator	J. McAdams	467,705	Jan. 26	2279	579	58	456
Valve. Hydraulic-elevator	J. McAdams	476,023	May 31	3406	859 860	59	1353
Valve-indicator	J. Giles	486,610	Nov. 22	2275	593	61	1078
Valve-indicator	J. T. Hayden	477,003	June 14	1204	292	59	1691
Valve-lever. Steam.	R. Weir	475,908	May 31	3237	818	59	1319
Valve-lever. Throttle.	F. W. Kline	470,494	Mar. 8	1358	353	58	1367
Valve levers. Stop for throttle.	G. E. Messer	484,938	Oct. 25	2233	575	61	489
Valve mechanism for washbasins	J. W. Hale	484,423	Oct. 18	1378	352	61	304

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &.	Vol.	Page.
Valve mechanism. Steam-radiator	L. H. Prentice, P. R. McLeod, R. T. Crane, and L. Pilkington.	480,512	Aug. 9	1224	306	60	827
Valve-motion indicator for steam-engines	J. Millis	481,671	Aug. 30	3112	760	60	1234
Valve. Oil-well	H. D. Jones	480,265	Aug. 9	834	213	60	753
Valve-operating device for elevators	W. H. Hultgren	468,044	Feb. 2	209	51	58	565
Valve-operating mechanism	J. W. Ogden	466,263	Nov. 15	1739	458	61	960
Valve-operating mechanism	C. L. Rowland	486,219	Nov. 15	1658	438	61	943
Valve-operating mechanism	R. E. Stephenson	488,780	Dec. 27	2525	627 628	61	1872
Valve-operating mechanism	J. Wagner	484,265	Oct. 11	1131	289	61	244
Valve-operating mechanism. Engine	E. C. Fasoldt	485,579	Nov. 1	655	174	61	708
Valve-operating mechanism for clam-shell huckets	T. Symonds	470,020	Mar. 1	563	139	58	1208
Valve operating mechanism. Hydraulic-elevator	N. C. Bassett	476,861	June 14	975	236 237	59	1644
Valve-operating mechanism. Time	H. Vignère	470,272	Mar. 8	965	239	58	1295
Valve. Packingless	A. Stirling	486,268	Nov. 15	1744	459	61	961
Valve. Piston	J. Hamilton	476,228	May 31	3756	948	59	1421
Valve. Piston	M. E. Hershey	479,273	July 19	1858	466	60	389
Valve. Piston	W. M. Smith	488,096	Dec. 13	1422	354 355	61	1623
Valve. Pop safety	W. L. Gray and J. Rivers	487,029	Nov. 29	2989	769	61	1237
Valve. Pressure-regulating	W. Gustafsson	478,856	July 12	1214	301	60	256
Valve. Pressure-regulating	A. Heithecker	473,217	May 17	2122	537	59	1074
Valve. Pressure-regulating	G. Kraiss	468,915	Feb. 16	1574	399	58	851
Valve. Pressure-regulating	C. A. Kempen and E. Andre	479,462	July 26	2196	551	60	470
Valve-protector	J. P. Shaddick	466,838	Jan. 12	860	220	58	173
Valve. Radiator	G. C. Blackmore	487,901	Dec. 13	1091	273	61	1555
Valve. Reducing	N. C. Locke	475,585	May 24	2706	686	59	1203
Valve-register	J. W. Dorgan	477,742	June 28	2425	606	59	1962
Valve. Regulating	J. S. McDaniel	478,939	July 12	1333	331	60	279
Valve. Relief	J. W. Allan	474,711	May 10	1323	337	59	903
Valve. Relief	C. Callahan	487,991	Dec. 13	1243	309	61	1584
Valve. Relief	A. S. Thoms	480,528	Aug. 9	1249	314	60	832
Valve. Removable check	W. S. Loveland	485,745	Nov. 8	913	244	61	776
Valve. Reversing	J. Clark	481,162	Aug. 23	2282	562 563	60	1060
Valve. Reversing	W. Miller	480,604	Aug. 9	1368	340	60	855
Valve. Rotary	M. Rothfuss	472,717	Apr. 12	1094	281	59	219
Valve. Rotary	F. D. Toucey	487,687	Dec. 6	732	187	61	1465
Valve. Rotary slide	R. Bayer	469,384	Feb. 23	2306	593 594	58	1002
Valve. Safety	J. W. Ball	477,487	June 21	2004	497	59	1660
Valve. Safety	S. M. Beery	478,949	July 12	1345	334	60	281
Valve. Safety	J. M. Coale	488,309	Dec. 20	1775	447	61	1708
Valve. Safety	C. W. Gibson	469,853	Mar. 1	303	78	58	1159
Valve. Safety	A. M. Johnston	475,320	May 24	2279	586	59	1123
Valve. Safety	A. P. Kinney	485,699	Nov. 8	833	224	61	760
Valve. Safety	M. B. Mills	476,755	June 7	791	194	59	1595
Valve. Safety	J. G. White	487,809	Dec. 13	944	238	61	1526
Valve-seat	J. H. McGowan	486,600	Nov. 22	2257	590	61	1075
Valve-seat grinder	H. H. Swallow and M. T. Jones	468,431	Feb. 9	817	205	58	692
Valve. Secondary	W. H. Lavinia	475,455	May 24	2501	637 638	59	1163
Valve. Slide	A. T. Doyle	481,013	Aug. 16	2008	502	60	995
Valve. Slide	A. A. Haley	473,152	Apr. 19	1771	447	59	361
Valve. Slide	J. P. Metzger	488,525	Dec. 20	2133	528	61	1778
Valve. Slide	H. von Mitzlaff	477,088	June 14	1349	328	59	1720
Valve. Slide	H. Moon	485,505	Nov. 1	539	143	61	682
Valve. Slide	C. G. Walle	478,829	July 12	1184	293	60	249
Valve. Slide-gate	R. Hughes	466,350	Jan. 5	63	16	58	15
Valve. Sliding gate	W. Crighton	467,369	Jan. 19	1729	442	58	345
Valve. Steam-actuated	E. Bartholomew	481,520	Aug. 23	2867	705	60	1172
Valve. Steam-actuated	W. H. Blake	480,167	Aug. 2	651	165 167	60	706
Valve. Steam-actuated	F. M. Brown	467,274	Jan. 19	1588	405	58	318
Valve. Steam-actuated	D. Cooper	470,609	June 7	577	138	59	1551
Valve. Steam-actuated	D. E. Kempster	485,945	Nov. 8	1205	318 319	61	836
Valve. Steam-actuated	T. G. Laney	485,046	Oct. 25	2403	618	61	523
Valve. Steam-actuated	F. M. Schorn	475,900	May 31	3223	815 816	59	1316
Valve. Steam-cylinder	G. A. Kelly	475,321	May 24	2280	587	59	1123
Valve. Steam-engine	J. R. Cook and C. S. Hinchman	479,401	July 26	2085	523	60	448
Valve. Steam-engine	H. Denney	483,996	Oct. 11	713	179	61	161
Valve. Steam-engine	P. R. Foster	476,457	June 7	355	82	59	1506
Valve. Steam-engine	H. F. Frisbie	486,099	Nov. 15	1480	390	61	909
Valve. Steam-engine	D. Pattee	473,953	May 3	111	26	59	658
Valve. Steam-engine	W. S. Pattin, W. M. Morse, and D. P. Pattin	469,173	Feb. 16	1961	502	58	929
Valve. Steam-engine	S. Psaroudaki	470,443	Mar. 8	1280	328	58	1352
Valve. Steam-engine	E. L. Sauer	482,415	Sept. 13	832	200	60	1512
Valve. Steam-engine	N. W. Twiss	473,486	Apr. 26	2347	595	59	494
Valve. Steam-engine	J. H. Wheat	486,148	Nov. 15	1560	413 414 902	61	924
Valve. Steam-engine slide	W. C. Church	476,130	May 31	3583	903 904 905	59	1388
Valve. Steam-motor	A. J. Griffin	469,695	Mar. 1	37	13	58	1105
Valve. Steam, water, or fluid	F. A. Burnham	469,230	Feb. 23	2070	532	58	956
Valve. Tank	C. Birkery	483,296	Sept. 27	2258	568	60	1815
Valve. Throttle	J. B. Michael	467,181	Jan. 19	1445	368 369	58	291

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. et.	Vol.	Page.
Valve. Water-gage	F. J. Stulp	469,336	Feb. 23	2232	572	58	987
Valves. Cut-off mechanism for slide	G. Fletcher and W. P. Abell	485,267	Nov. 1	168	49, 50	61	607
Valves for engines. Mechanism for controlling cut-off	J. Wheelock	467,867	Jan. 26	2537	643	58	505
Valves for steam-engines. Means for automatically operating throttle	F. E. Kinsman	470,825	Mar. 15	1857	644	58	1475
Valves. Machine for milling plug	W. W. Tucker	482,211	Sept. 6	475	114	60	1428
Valveless engine	H. Brousseau and G. Patterson	477,041	June 14	1262	306	59	1703
Vamp marking and throating machine	G. E. Stewart and A. G. Brewer	475,952	May 31	3305	834	59	1332
Vamp-marking machine	J. F. Rogers	480,438	Aug. 9	1109	277	60	803
Vamps to uppers. Machine for pasting	H. Fischer	487,388	Dec. 6	214	66	61	1369
Vanillin. Preparing	F. Ach	487,204	Nov. 29	3261	61	61	1291
Vapor-burner	C. V. Best	471,596	Mar. 29	3005	765	58	1715
Vapor-burner	J. E. Donovan	469,443	Feb. 23	2398	614	58	1019
Vapor-burner	L. W. Everhart	467,795	Jan. 26	2419	615	58	483
Vapor-burner	H. S. Giles	482,920	Sept. 20	1635	410	60	1680
Vapor-burner	W. R. Jeavons	467,466	Jan. 19	1880	479	58	374
Vapor-burner	J. A. Lannert and W. R. Jeavons	474,175	May 3	449	109	59	725
Vapor-burner	J. A. Lannert and W. R. Jeavons	476,543	June 7	476	113	59	1531
Vapor-burner	J. A. Lannert and W. R. Jeavons	479,220	July 19	1780	446	60	373
Vapor-burner	C. A. Pope	472,394	Apr. 5	609	154	59	114
Vapor-burner	J. R. Sapp	484,114	Oct. 11	875	232	61	193
Vapor-burner	J. S. Wood	483,855	Oct. 4	538	136	61	112
Vapor-burner or plumber's torch	H. A. Kerslake	473,159	Apr. 19	1784	450	59	363
Vapor generator and burner	E. F. Edgar	469,685	Mar. 1	23	8, 9	58	1103
Vapors and gases. Apparatus for superheating	M. Honigsmann	485,796	Nov. 8	972	260	61	789
Vaporization of liquids. Generator for the	L. Serpollet	480,286	Aug. 9	865	220	60	760
Vaporizer	A. H. Carpenter	487,247	Dec. 6	16	5	61	1324
Vaporizer	C. F. Johnson	488,790	Dec. 27	2542	631	61	1875
Vaporizer	F. E. Jordan	471,123	Mar. 22	2306	592	58	1515
Vaporizer	L. S. Lewis	474,640	May 10	1215	311	59	881
Vaporizer	G. D. Lynch	485,127	Oct. 25	2515	646	61	546
Vaporizer	C. W. Merrill	472,133	Apr. 5	196	52	59	36
Vaporizer	H. P. Roberts	488,530	Dec. 20	2140	530	61	1780
Vaporizer	W. H. Spencer	472,645	Apr. 12	981	254	59	199
Vaporizer and burner. Hydrocarbon-oil	G. Botsford	470,138	Mar. 1	736	183	58	1242
Vaporizer and burner. Hydrocarbon-oil	G. Botsford	486,026	Nov. 8	1340	356	61	864
Vaporizer and burner. Hydrocarbon-oil	H. P. Roberts	477,872	June 28	2644	660	59	2001
Vaporizer, inhaler, and atomizer. Combined	W. G. Flanders	475,274	May 17	2211	565	59	1093
Vaporizing acids in the manufacture of white lead. Apparatus for	E. V. Gardner	477,527	June 21	2072	515	59	1874
Vaporizing and burning hydrocarbon oils. Apparatus for	R. Conrader	471,505	Mar. 22	2877	732	58	1684
Vaporizing apparatus. Oil	J. A. Aldridge	469,811	Mar. 1	236	59	58	1147
Varnish. Apparatus for applying	J. J. Clause	472,286	Apr. 5	437	113	59	82
Varnish for use in oil-painting	J. E. A. Bökclund	466,393	Jan. 5	128	58	27	
Varnishing frame or holder	A. G. Weissenborn	482,664	Sept. 13	1220	298	60	1586
Vases or similar articles. Ornamenting	J. Baynes	468,591	Feb. 9	1073	274	58	742
Vat:							
See Tanning-vat.							
Vault-cover. Ventilated	W. Lake	482,013	Sept. 6	144	35	60	1364
Vault. Grave	J. G. Gray	478,102	July 5	38	12	60	10
Vault. Grave	F. C. Rheebottom	476,171	May 31	3651	923	59	1402
Vault. Safety	G. S. Clark. (Reissue)	11,240	May 24	2355	748	59	1249
Vegetable cleaning and peeling machine	F. Groos	479,562	July 26	2156	588	60	500
Vegetable-cutter	F. A. Grellet	470,671	Mar. 15	1611	418	58	1428
Vegetable cutting or slicing machine	W. Smith and J. Claydon	485,590	Nov. 1	667	177	61	711
Vegetable leaves. Machine for removing the fleshy matter from	J. H. Brown	471,097	Mar. 22	2263	581	58	1567
Vegetable slicer	G. A. Yaiser	466,930	Jan. 12	1016	259	58	202
Vegetable-washer	E. J. Hollister	486,180	Nov. 15	1600	424	61	932
Vehicle	H. L. Boyle	470,175	Mar. 8	814	201	58	1266
Vehicle	C. Comstock	480,421	Aug. 9	1086	272	60	799
Vehicle	C. Comstock	485,091	Oct. 25	2469	635	61	537
Vehicle	R. Condon	474,818	May 17	1497	322	59	951
Vehicle	A. E. Hotchkiss	478,201	Dec. 20	1598	399	61	1675
Vehicle	L. H. Johnson	473,881	Apr. 26	2982	752	59	615
Vehicle	L. Myers	486,884	Nov. 29	2725	711	61	1186
Vehicle	C. A. Reade	475,891	May 31	3214	813	59	1314
Vehicle	R. Rodgers	469,092	Feb. 16	1859	475	58	908
Vehicle	J. Ruch and E. Stair	471,026	Mar. 15	2151	553	58	1332
Vehicle	G. H. Sawyer	468,496	Feb. 9	927	236	58	713
Vehicle	J. Sommer	474,535	May 10	1049	268	59	849
Vehicle	J. Spofford, Jr.	480,442	Aug. 9	1116	279	60	804
Vehicle	J. G. Trump	477,475	June 21	1984	492	59	1856
Vehicle attachment	J. H. Akin	472,843	Apr. 12	1266	324	59	252
Vehicle attachment	W. E. Miller	478,083	Dec. 13	1405	349	61	1620
Vehicle-bodies, &c. Tool for rubbing down	W. M. Davis	470,991	Mar. 15	2104	539	58	1523
Vehicle-body	T. Fandler	484,069	Oct. 11	846	214	61	188
Vehicle-body shifting device	C. H. Mitchell	488,444	Dec. 20	1995	499	61	1751
Vehicle-box	D. R. Conch	480,764	Aug. 16	1625	407	60	921
Vehicle-brake	L. Boiron	469,958	Mar. 1	471	117	58	1190
Vehicle-brake	E. W. Broadhead	481,466	Aug. 23	2792	687	60	1156
Vehicle-brake	J. des Georges	469,013	Feb. 16	1758	448	58	887
Vehicle-brake	W. H. Grant	472,575	Apr. 12	878	226	59	181

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Vehicle-brake	M. Potter	472,075	Apr. 5	96	26	59	20
Vehicle-brake	E. Swartz and D. S. Beemer	482,027	Sept. 6	174	41	60	1369
Vehicle-brake mechanism	R. L. Munger and T. R. Capwell	478,966	July 12	1379	339	60	287
Vehicle chafe-iron	L. Thierry	476,577	June 7	525	124	59	1541
Vehicle. Electrically-propelled	F. Gardner	473,871	Apr. 26	2968	749	59	613
Vehicle-fender	C. Freese	478,585	July 12	806	199	60	175
Vehicle for carrying grain	R. W. Jones	479,328	July 19	1935	484	60	405
Vehicle. Four-wheeled	G. A. Brice	469,118	Feb. 16	1889	483	58	914
Vehicle-gear	T. R. Capwell and W. C. Fuller	480,691	Aug. 9	1514	376	60	883
Vehicle-gear	G. Gussett	469,445	Feb. 23	2403	615	58	1020
Vehicle-gear	C. H. Holdredge	483,381	Sept. 27	2386	599	60	1838
Vehicle-gearing	D. B. Ruple	476,822	June 14	914	224	59	1632
Vehicle-heater	A. E. Jones	471,866	Mar. 29	3424	875	58	1794
Vehicle-heater	E. Molloy	477,811	June 28	2529	634	59	1980
Vehicle-jack	N. E. Bradford	486,064	Nov. 8	1400	370	61	875
Vehicle jump-seat	G. H. Hutton	481,358	Aug. 23	2610	641	60	1121
Vehicle. One-wheel	F. Frazee and J. L. Wintersteen	486,456	Nov. 22	2034	537	61	1032
Vehicle. One-wheel	H. D. T. Wilson	487,359	Dec. 6	201	55	61	1360
Vehicle-propelling mechanism	I. B. Jones	473,843	Apr. 26	2916	732	59	603
Vehicle. Road-	E. V. Santee	478,715	July 12	982	244	60	211
Vehicle running-gear	G. E. Bartholomew	470,232	Mar. 8	902	223	58	1283
Vehicle running-gear	C. S. Beebe	482,154	Sept. 6	382	89	60	1410
Vehicle running-gear	C. A. Behlen	487,599	Dec. 6	583	145	61	1437
Vehicle running-gear	J. J. Black	474,113	May 3	359	86	59	706
Vehicle running-gear	C. M. Blydenburgh	482,839	Sept. 20	1499	372	60	1655
Vehicle running-gear	E. Deusing	482,234	Sept. 6	507	121	60	1434
Vehicle running-gear	R. L. Ellery	484,186	Oct. 11	993	254	61	217
Vehicle running-gear	H. T. Goodrich	483,717	Oct. 4	288	71, 72	61	60
Vehicle running-gear	W. L. Hawes	476,535	June 7	466	111	59	1529
Vehicle running-gear	J. R. Kunzelman	471,007	Mar. 15	2126	546	58	1528
Vehicle running-gear	J. W. Leek	475,578	May 24	2698	684	59	1201
Vehicle running-gear	T. G. Mandt	486,677	Nov. 22	2380	622	61	1100
Vehicle running-gear	B. H. Pangh and G. W. Fridley	478,758	July 12	1056	261	60	925
Vehicle running-gear	T. Sutherland	472,280	Apr. 5	424	109	59	79
Vehicle running-gear	J. W. Taylor	482,597	Sept. 13	1130	273	60	1569
Vehicle running-gear	E. Storm	484,259	Oct. 11	1116	283	61	241
Vehicle running-gear	J. W. Vorwick	466,813	Jan. 12	818	210	58	165
Vehicle running-gear	P. Weidner	485,673	Nov. 8	799	213	61	753
Vehicle safety device	G. Tischler and C. Holmek	466,840	Jan. 12	862	220	58	174
Vehicle sand-band	W. Klockau	481,795	Aug. 30	3333	813	60	1277
Vehicle-seat	J. P. Huber	470,381	Mar. 8	1179	302	58	1333
Vehicle-seat	J. P. Huber	475,083	May 17	1916	488	59	1033
Vehicle-seat	J. McPartland	474,097	May 3	340	81	59	703
Vehicle-seat	C. Oleson	476,811	June 14	895	219	59	1629
Vehicle-seat	T. B. Padgett	482,064	Sept. 6	228	55	60	1280
Vehicle-seat	J. E. Scott	480,144	Aug. 2	614	156	60	699
Vehicle-seat clamping device	T. Faulder	486,636	Nov. 22	2315	605	61	1087
Vehicle-seat. Shifting	P. J. Hanley	488,275	Feb. 2	564	139	58	633
Vehicle-seats. Lazy-back for	A. G. Brunsman and H. H. Uckotter	481,745	Aug. 30	3247	790	60	1260
Vehicle-seats. Spring for supporting	S. L. Saunders	470,707	Mar. 15	1666	431	58	1438
Vehicle shifting seat	R. Fawcett	484,414	Oct. 18	1365	349	61	301
Vehicle. Shifting-seat	G. W. Kerr	475,059	May 17	1881	477	59	1027
Vehicle. Side-bar	P. S. Tartt	484,689	Oct. 18	1804	459	61	389
Vehicle. Side-spring	J. H. Cloyes	468,422	Feb. 9	804	201	58	690
Vehicle. Spring-	C. C. Bradley	472,518	Apr. 12	804	206	59	166
Vehicle. Spring-	F. G. Davis	488,690	Dec. 27	2398	594	61	1846
Vehicle. Spring-	F. A. Gnnkelmann	470,563	Mar. 8	1449	376	58	1385
Vehicle. Spring-	T. D. Lines	478,937	July 12	1330	330	60	278
Vehicle-spring	W. Atkinson	483,505	Sept. 27	2546	639	60	1771
Vehicle-spring	C. A. Behlen	487,598	Dec. 6	582	149	61	1437
Vehicle-spring	N. H. Bloom	487,414	Dec. 6	307	79	61	1382
Vehicle-spring	E. H. Booth	468,234	Feb. 2	491	120	58	621
Vehicle-spring	E. H. Booth	471,414	Mar. 22	2748	701	58	1659
Vehicle-spring	J. Diehl	476,921	June 14	1074	259	59	1665
Vehicle-spring	G. W. Farrell	481,394	Aug. 23	2668	654	60	1131
Vehicle-spring	G. T. Glover	481,695	Aug. 30	3150	768	60	1241
Vehicle-spring	D. C. Hamlin	481,303	Aug. 23	2529	621	60	1106
Vehicle-spring	J. Heilrath	466,538	Jan. 5	366	91	58	70
Vehicle-spring	A. Jabrozky	477,419	June 21	1892	466	59	1838
Vehicle-spring	V. O. Jeffries	476,385	June 7	248	60	59	1485
Vehicle-spring	T. S. King	467,376	Jan. 19	1741	445	58	347
Vehicle-spring	T. P. McKee	476,062	May 31	3471	876	59	1367
Vehicle-spring	J. McPartland	488,795	Dec. 27	2551	633	61	1877
Vehicle-spring	C. E. Pearl	485,649	Nov. 8	753	198	61	743
Vehicle-spring	H. R. Raudenbush	482,385	Sept. 13	789	190	60	1504
Vehicle-spring	P. C. Schwalen and J. M. Powers	467,204	Jan. 19	1478	378	58	298
Vehicle-spring	W. Sharp	476,931	June 14	1094	264	59	1668
Vehicle-spring	H. Timken	487,201	Nov. 29	3258	833	61	1291
Vehicle-spring	H. Timken	487,202	Nov. 29	3259	834	61	1291
Vehicle-spring	J. W. Wetmore	482,933	Sept. 20	1649	415	60	1684
Vehicle-spring attachment	G. T. Chapman	477,622	June 21	2235	559	59	1906
Vehicle-spring brace	S. J. Graham	466,675	Jan. 5	576	149	58	112
Vehicle-spring brace	G. M. Harris	468,340	Feb. 9	685	169	58	666
Vehicle-spring bumper	M. Hall	477,114	June 14	1381	337	59	1726
Vehicle-spring coupling	W. Boughton	472,724	Apr. 12	1101	283	59	221
Vehicle spring-draft attachment	H. Barber	478,777	July 12	1090	270	60	232
Vehicle spring-gear	J. Faske	475,304	May 24	2256	581	59	1117

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Vehicle-starter.....	J. W. Lee.....	485,125	Oct. 25	2511	645	61	546
Vehicle-starter.....	P. D. Van Vradenburg.....	474,538	May 10	1053	269 270	59	850
Vehicle. Steam-propelled.....	G. J. Saurbrey.....	488,221	Dec. 20	1643	409 411	61	1683
Vehicle-step.....	S. H. Walton and J. H. Smith.....	477,719	June 28	2389	597	59	1955
Vehicle-supporting device.....	W. S. Overfelt, J. R. Evans, and C. J. Capp.....	486,790	Nov. 22	2564	668	61	1137
Vehicle-top.....	I. N. Cool.....	485,610	Nov. 8	698	184	61	731
Vehicle-top-joint.....	A. M. Hess.....	478,696	July 12	955	237	60	205
Vehicle-top valance.....	T. H. Parry and C. C. Hull.....	474,457	May 10	932	239	59	827
Vehicle-tops. Storm-curtain for.....	P. Lugenbell.....	479,910	Aug. 2	199	50	60	621
Vehicle. Two-wheeled.....	J. A. Bilz.....	475,974	May 31	3341	842	59	1339
Vehicle. Two-wheeled.....	J. W. Hewitt.....	482,739	Sept. 20	1355	335	60	1625
Vehicle. Two-wheeled.....	A. B. Keyes.....	475,943	May 31	3293	831	59	1330
Vehicle. Two-wheeled.....	R. D. Scott.....	474,611	May 10	1167	296	59	872
Vehicle. Two-wheeled.....	G. A. Slocum.....	466,581	Jan. 5	436	112	58	84
Vehicle. Two-wheeled.....	W. F. Sumner.....	474,197	May 3	482	116	59	731
Vehicle. Two-wheeled.....	H. C. Swan.....	467,210	Jan. 19	1485	380	58	299
Vehicle. Two-wheeled delivery.....	M. B. Boone.....	467,912	Feb. 2	10	3	4	58
Vehicle-wheel.....	J. Arbtin and W. J. Anderson.....	471,933	Mar. 29	3520	899	58	1813
Vehicle-wheel.....	W. E. Baker.....	480,162	Aug. 2	645	163	60	705
Vehicle-wheel.....	A. Bauer.....	473,812	Apr. 26	2867	720	59	594
Vehicle-wheel.....	C. D. Cannon.....	478,918	July 12	1303	324	60	273
Vehicle-wheel.....	H. Carmont.....	472,856	Apr. 12	1281	328 329	59	256
Vehicle-wheel.....	L. H. Dempsey and L. I. Folk.....	471,960	Mar. 29	3537	909	58	1820
Vehicle-wheel.....	G. D. Elges.....	466,776	Jan. 12	756	196	58	153
Vehicle-wheel.....	W. A. Fleming.....	476,533	June 7	463	110	59	1529
Vehicle-wheel.....	T. F. and J. E. Foley.....	479,495	July 26	2262	567	60	422
Vehicle-wheel.....	K. Haussner.....	486,106	Nov. 15	1490	392	61	910
Vehicle-wheel.....	J. Hessong.....	471,117	Mar. 22	2297	590	58	1573
Vehicle-wheel.....	G. Hollafolla.....	482,175	Sept. 6	422	100	60	1418
Vehicle-wheel.....	F. J. Huelsen and J. Nagal.....	477,659	June 28	2294	575	59	1934
Vehicle-wheel.....	E. G. Latta.....	479,566	July 26	2362	529	60	501
Vehicle-wheel.....	E. G. Latta.....	479,946	Aug. 2	266	65, 66	60	633
Vehicle-wheel.....	P. Merrill.....	469,708	Mar. 1	55	17	58	1109
Vehicle-wheel.....	G. W. Prickett.....	475,152	May 17	2024	511	59	1054
Vehicle-wheel.....	J. Ridge.....	473,525	Apr. 26	2411	611	59	506
Vehicle-wheel.....	J. G. Rodgers and A. W. Grant.....	468,538	Feb. 9	906	255	58	727
Vehicle-wheel.....	L. A. Russell.....	476,415	June 7	295	69	59	1495
Vehicle-wheel.....	W. W. Taylor.....	482,658	Sept. 13	1209	295	60	1585
Vehicle-wheel.....	E. A. Thuston.....	477,473	June 21	1981	492	59	1855
Vehicle-wheel.....	W. W. Valentine.....	475,906	May 31	3232	817	59	1318
Vehicle-wheel.....	G. G. Ward.....	471,781	Mar. 29	3301	841 842	58	1770
Vehicle-wheel. Pneumatic.....	J. C. Hall.....	476,764	June 7	803	197 198	59	1598
Vehicle-wheel spoke connection.....	G. E. Elliott.....	477,203	June 21	1538	376	59	1771
Vehicle-wheels. Device for packing.....	F. G. Davis.....	476,522	June 7	449	107	59	1525
Vehicles. Means for connecting draft-animals to.....	T. H. Brigg.....	486,837	Nov. 22	2643	690	61	1155
Vehicles. Side apron for.....	T. H. Joyce.....	467,032	Jan. 12	1174	297	58	231
Vehicles. Spring-seat attachment for.....	J. W. Haney and W. A. Owens.....	467,805	Jan. 26	2438	619	58	487
Vehicles. Supplementary seat for.....	W. H. Tillou.....	475,954	May 31	3309	835	59	1333
Vell-pin.....	G. H. Fien.....	483,605	Oct. 4	132	33	61	28
Velocimeter. Recording.....	J. Boyer.....	470,468	Mar. 8	1321	343 344	58	1359
Velocipede.....	W. Andrews.....	475,959	May 31	3318	837	59	1334
Velocipede.....	W. I. Bunker.....	469,624	Feb. 23	2667	686	58	1072
Velocipede.....	J. S. Copeland.....	469,626	Feb. 23	2670	686	58	1073
Velocipede.....	M. W. Cox.....	466,989	Jan. 12	1109	220	58	219
Velocipede.....	R. F. Darling.....	485,839	Nov. 8	1030	277 278	61	800
Velocipede.....	W. A. W. Eager.....	479,792	Aug. 2	27	7	60	587
Velocipede.....	W. J. Edwards.....	469,883	Mar. 1	348	89	58	1168
Velocipede.....	W. J. Edwards.....	475,207	May 17	2110	534	59	1072
Velocipede.....	W. J. Edwards.....	475,445	May 24	2482	633 634	59	1160
Velocipede.....	C. Fell.....	479,064	July 19	1533	382	60	328
Velocipede.....	P. Gendron.....	466,824	Jan. 12	832	214	58	169
Velocipede.....	H. C. Goodrich.....	468,793	Feb. 16	1392	353	58	816
Velocipede.....	J. J. Hammer.....	477,540	June 21	2089	519 520	59	1878
Velocipede.....	S. H. Kimball.....	471,358	Mar. 22	2660	675	58	1643
Velocipede.....	E. G. Latta.....	471,798	Mar. 29	3332	848 849	58	1775
Velocipede.....	E. Lisle.....	476,884	June 14	1014	246	59	1652
Velocipede.....	D. I. Lybe and W. O. Nickles.....	466,893	Jan. 12	960	245	58	192
Velocipede.....	D. J. Moody.....	473,196	Apr. 19	1858	468	59	376
Velocipede.....	E. J. O'Connor.....	468,823	Feb. 16	1428	363	58	823
Velocipede.....	M. J. O'Donnell.....	481,118	Aug. 16	2188	542	60	1030
Velocipede.....	H. S. Owen.....	481,053	Aug. 16	2069	516 517	60	1009
Velocipede.....	J. Pfeiffer.....	479,839	Aug. 2	98	25	60	601
Velocipede.....	C. W. Saladee.....	486,055	Nov. 8	1384	367 368	61	872
Velocipede.....	A. C. Shelley.....	481,428	Aug. 23	2726	670	60	1143
Velocipede.....	M. E. Slocum.....	481,070	Aug. 16	2114	526	60	1016
Velocipede.....	A. Taitte.....	488,745	Dec. 27	2473	614 615	61	1862
Velocipede.....	P. W. Tillinghast.....	486,914	Nov. 29	2815	729	61	1204
Velocipede.....	G. T. Warwick.....	467,655	Jan. 26	2261	574 575	58	452

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g	Vol.	Page.
Velocipede	J. R. Wright	478,674	July 12	938	231	60	199
Velocipede. Aquatic	J. F. Breyer	485,369	Nov. 1	342	90, 91	61	642
Velocipede attachment	G. Openshaw and C. A. Carr	482,271	Sept. 6	573	136	60	1446
Velocipede-crank	F. Westwood	476,911	June 14	1060	256	59	1661
Velocipede driving-gear	J. Magennis	480,600	Aug. 9	1362	339	60	853
Velocipede driving mechanism	F. G. Adams and F. T. Henshaw	477,095	June 14	1358	330 331	59	1722
Velocipede-fork	C. Kehr	482,090	Sept. 6	275	66	60	1389
Velocipede-frame	T. Burton	470,317	Mar. 8	1065	271	58	1313
Velocipede. Ice	G. W. Agin	475,744	May 31	2959	751	59	1265
Velocipede. Ice	P. H. Class	483,422	Sept. 27	2437	613	60	1849
Velocipede. Ice	I. Dart	471,959	Mar. 29	3556	908	58	1820
Velocipede. Ice	M. B. Gibson	485,345	Nov. 1	302	81	61	633
Velocipede. Ice	W. Guethler and F. Gellhaus	467,737	Jan. 26	2331	592	58	466
Velocipede. Ice	W. Guethler and F. Gellhaus	485,844	Nov. 8	1039	278	61	802
Velocipede. Ice	G. Seebick	485,335	Nov. 1	282	76	61	629
Velocipede. Ice	J. C. Stevens	473,434	Apr. 19	2249	566	59	454
Velocipede. Ice	J. F. Zalsman	476,857	June 14	950	235	59	1643
Velocipede. Land and water	T. G. P. Vogt	477,160	June 14	1453	356 357	59	1740
Velocipede luggage-carrier	R. D. Perry	469,715	Mar. 1	68	19, 20	58	1112
Velocipede package-carrier	E. N. Heath	479,069	July 19	1544	366	60	329
Velocipede-pedal	F. C. Rockwell	483,238	Sept. 27	2140	542	60	1794
Velocipede-pedal	T. A. Watson	471,921	Mar. 29	3500	894	58	1810
Velocipede. Railway	H. F. Mann	468,671	Feb. 9	1194	304	58	767
Velocipede. Railway	H. F. Mann	468,672	Feb. 9	1197	305	58	768
Velocipede. Railway	H. F. Mann	468,673	Feb. 9	1198	305	58	768
Velocipede. Railway	H. F. Mann	468,674	Feb. 9	1200	305	58	768
Velocipede. Railway	G. W. Miller	473,586	Apr. 26	2532	639	59	530
Velocipede-saddle	A. L. Garford	467,402	Jan. 19	1779	454	58	354
Velocipede-saddle	A. L. Garford	467,403	Jan. 19	1780	454	58	354
Velocipede-saddle	A. L. Garford	473,388	Apr. 19	2190	550	59	442
Velocipede-saddle	A. L. Garford	485,186	Nov. 1	49	15	61	582
Velocipede-saddle	H. C. Goodrich	468,799	Feb. 16	1394	354	58	817
Velocipede-saddle	J. A. Hunt	471,685	Mar. 29	3136	799 800	58	1739
Velocipede-saddle	J. A. Hunt	483,559	Oct. 4	63	16	61	15
Velocipede-saddle	E. G. Latta	467,725	Jan. 26	2314	588	58	462
Velocipede-saddle	E. G. Latta	472,732	Apr. 12	1112	285 286	59	223
Velocipede-saddle	W. D. McCoy	476,479	June 7	393	90, 91	59	1513
Velocipede-saddle	C. E. McGlinchey	468,998	Feb. 16	1725	439	58	881
Velocipede-saddle	B. F. Peet	479,656	July 26	2494	621	60	525
Velocipede-saddle	F. M. Slocum	483,875	Oct. 4	526	132	61	109
Velocipede-saddle	E. Smith	477,277	June 21	1668	407	59	1794
Velocipede-saddle	D. D. Wright and W. R. Berry	479,969	Aug. 2	311	76	60	641
Velocipede-saddle spring	G. A. Perkins	486,294	Nov. 15	1784	469	61	970
Velocipede-seat	H. E. Cooke	479,056	July 19	1521	379	60	326
Velocipede speed-gear	C. Vogel	479,177	July 19	1716	430	60	361
Velocipede-treadle	A. B. Curtis and A. Perkins	471,075	Mar. 15	2227	571	58	1546
Velocipede-wheel	J. B. Dunlop	479,255	July 19	1834	460	60	384
Velocipede-wheel	W. J. Edwards	470,185	Mar. 8	832	205	58	1270
Velocipede-wheel	A. C. Hide	478,191	July 5	188	48	60	39
Velocipede-wheel	C. D. Rice	473,408	Apr. 19	2216	556	59	447
Velocipede-wheel	J. B. Robertson	477,962	June 28	2774	695	59	2028
Velocipede-wheel	H. J. Swindley	475,828	May 31	3104	76 77	59	1293
Velocipede-wheel	F. Westwood and W. H. Butler	486,146	Nov. 15	1558	413	61	924
Velocipede-wheels. Spring-rim for	W. J. Pizze	480,030	Aug. 2	439	111	60	665
Velocipedes. Clamp for luggage-carriers for	R. D. Perry	476,948	June 14	1125	270	59	1674
Velocipedes. Floating structure for water	W. Wait	468,850	Feb. 16	1470	375	58	831
Velvets and other pile fabrics. Machine for finishing	E. T. and E. H. Marble	474,396	May 10	823	215	59	807
Velvets, &c. Machine for waxing	E. T. and E. H. Marble	478,236	July 5	275	68	60	56
Vender. Newspaper	A. E. Dain	482,824	Sept. 20	1473	366 367	60	1649
Vending apparatus	B. Adriance and J. H. Volkmann	483,199	Sept. 27	2076	524 525	60	1782
Vending apparatus	J. H. Reford	478,714	July 12	981	244	60	211
Vending apparatus	W. S. Simpson	467,442	Jan. 19	1841	470	58	366
Vending apparatus. Coin-actuated	G. Jehle	475,567	May 24	26-3	681	59	1198
Vending apparatus. Coin-controlled	A. S. Kibby	481,280	Aug. 23	2488	612	60	1100
Vending apparatus. Coin-controlled	J. G. MacPherson	468,724	Feb. 9	1275	324 325	58	784
Vending apparatus. Coin controlled	J. G. MacPherson	482,875	Sept. 20	1556	389	60	1666
Vending apparatus. Coin-operated	J. Schade	470,508	Mar. 8	1374	359	58	1370
Vending apparatus. Coin-operated	C. F. Schnoor	484,573	Oct. 18	1610	409	61	350
Vending device. Coin-operated	T. H. Bedell	474,588	May 10	1134	289	59	866
Vending-machine	J. A. Bowyer and U. L. Hull	476,513	June 7	438	103	59	1523
Vending-machine	A. B. Chandler and G. H. Powell	481,689	Ang. 30	3141	766 767	60	1240
Vending-machine	C. A. Cook	470,347	Mar. 8	1122	287 288	58	1323
Vending-machine	A. M. Docter	477,356	June 21	1799	441	59	1819
Vending-machine	A. J. Henry	482,683	Sept. 13	1253	305	60	1593
Vending-machine	T. C. Kirkham	488,610	Dec. 27	2263	561	61	1821
Vending-machine	V. A. Krepps	479,005	July 19	1445	359	60	311
Vending-machine	W. G. Latimer	475,281	May 17	2223	570	59	1095
Vending-machine	A. F. Schneider	488,840	Dec. 27	2624	651	61	1892
Vending-machine	G. A. Weller	479,688	July 26	2552	635	60	536
Vending-machine. Automatic	E. J. Graves	466,928	Jan. 12	1011	258 259	58	201
Vending-machine. Automatic	R. W. Uhlig	477,029	June 14	1245	302	59	1700
Vending-machine. Coin-actuated	R. Moran	472,507	Apr. 5	785	201	59	149
Vending-machine. Coin actuated	R. Moran	487,409	Dec. 6	298	77	61	1380

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Vending-machine. Coin-actuated.....	W. S. Van Sant.....	480,639	Aug. 9	1428	356	60	867
Vending-machine. Coin-controlled.....	E. L. Pickard.....	481,331	Aug. 23	2573	{ 632 633 }	60	1114
Vending-machine. Coin-controlled.....	C. A. Shattuck.....	482,142	Sept. 6	353	84, 85	60	1405
Vending-machine. Coin-controlled.....	G. L. Slater.....	485,140	Oct. 25	2536	651	61	550
Vending-machine. Coin-controlled.....	C. W. Smith.....	487,008	Nov. 29	2959	{ 762 763 }	61	1232
Vending-machine. Coin-operated.....	J. M. Hunter.....	469,636	Feb. 23	2682	690	58	1075
Vending-machine. Coin-operated.....	R. H. Little.....	483,255	Sept. 27	2194	{ 551 552 }	60	1803
Vending-machine. Coin-operated.....	W. R. Ziegler.....	483,093	Sept. 20	1905	{ 481 482 }	60	1736
Vending-machine. Electric-actuated.....	A. J. Henry.....	471,053	Mar. 15	2186	564	58	1539
Vending-machines. Coin conveyor and tester for automatic	J. H. Volkmann.....	483,178	Sept. 27	2063	521	60	1779
Vending or other purposes. Coin-actuated device for	D. H. Bacon and C. C. Hill.....	471,712	Mar. 29	3182	812	58	1748
Veneer box.....	J. T. Ferres.....	476,622	June 7	598	143	59	1556
Veneer-cutter.....	J. J. Hayes.....	467,577	Jan. 26	2083	528	58	419
Veneer-cutting machine.....	E. Adler.....	484,623	Oct. 18	1691	429	61	366
Veneer-cutting machine.....	W. Schrader.....	468,307	Feb. 2	624	{ 155 156 }	58	644
Veneer-cutting machine.....	J. B. Wilson.....	486,152	Nov. 15	1565	415	61	925
Veneer-cutting machines. Adjustable pressure-bar for	M. D. Williamson.....	479,750	July 26	2666	662	60	557
Veneer dish-blanks. Machine for cutting.....	C. H. Treat and A. B. Banghart.....	477,086	June 14	1346	{ 327 328 }	59	1720
Veneer-machine.....	W. H. Williams.....	472,839	Apr. 12	1261	323	59	251
Veneer. Ornamental wood.....	N. A. Hull.....	471,552	Mar. 29	2939	748	58	1704
Veneered lumber.....	W. E. Brock.....	468,435	Feb. 9	821	207	58	693
Veneering lumber. Implement for.....	W. E. Brock.....	476,782	June 14	841	208	59	1618
Veneering-machine.....	C. Spewitz.....	477,158	June 14	1447	{ 355 356 }	59	1740
Vent-closure.....	J. L. Bartels, Jr.....	482,223	Sept. 6	494	118	60	1431
Vent for casks. Automatic air.....	E. R. Buhrman.....	488,160	Dec. 13	1530	384	61	1644
Vent for liquid-receptacles.....	F. W. Polle.....	484,816	Oct. 25	2023	519	61	448
Ventilating apparatus. Grain-bin.....	F. Morton.....	474,676	May 10	1277	325	59	893
Ventilating curtain-fixture.....	J. Q. A. Sand.....	468,286	Feb. 2	583	145	58	637
Ventilating-furnace.....	L. J. Trecey.....	471,701	Mar. 29	3160	806	58	1744
Ventilating, refrigerating, heating, &c., carriages, balls, or rooms. Apparatus for	H. and T. A. Carter.....	484,353	Oct. 11	1266	323	61	270
Ventilating sewers, &c. Appliance for.....	R. McKenzie.....	480,958	Aug. 16	1927	482	60	980
Ventilation, &c. Device for producing blasts of air for	J. T. Lowe.....	472,544	Apr. 12	840	214	59	173
Ventilation. System of.....	J. F. Duffy.....	472,163	Apr. 5	238	63	59	45
Ventilation. System of house.....	F. P. Smith.....	485,141	Oct. 25	2538	651	61	551
Ventilator:							
See Air-ventilator. Hat-ventilator.							
Car-ventilator. Sanitary ventilator.							
Fruit-receptacle Ship's ventilator.							
ventilator. Window-ventilator.							
Ventilator.....	F. Dnestorwald.....	476,134	May 31	3588	906	59	1389
Ventilator.....	G. H. Ennis.....	484,879	Oct. 25	2125	546	61	468
Ventilator.....	J. Gross and H. Beck.....	483,650	Oct. 4	197	49	61	40
Ventilator.....	W. S. Laycock.....	468,933	Feb. 16	1604	406	58	857
Ventilator.....	C. Redpath.....	485,050	Oct. 25	2419	622	61	526
Ventilator.....	J. and F. Skobis.....	482,389	Sept. 13	794	191	60	1505
Ventilator and drip-tray.....	A. B. Brown.....	468,786	Feb. 16	1377	348	58	813
Ventilator or chimney-cowl.....	R. M. Pancoast.....	476,682	June 7	681	165	59	1572
Vessel.....	F. L. Norton.....	473,406	Apr. 19	2213	{ 555 556 }	59	447
Vessel.....	A. Werner.....	486,006	Nov. 8	1311	349	61	857
Vessel. Air-tight.....	G. A. Lawrence.....	472,460	Apr. 5	705	180	59	134
Vessel. Anti-rust.....	T. D. Brown.....	469,991	Mar. 1	525	131	58	1200
Vessel. Anti-rust.....	G. W. Lisk.....	479,517	July 26	2295	573	60	488
Vessel-closure.....	J. B. McNabb.....	483,575	Oct. 4	86	23	61	20
Vessel. Conveyor-barge storage.....	F. H. Briggs.....	485,836	Nov. 8	1026	{ 275 276 }	61	799
Vessel draft-indicator.....	W. R. Patterson.....	484,642	Oct. 18	1723	438	61	372
Vessel-hulls. Construction of.....	C. D. Doxford.....	485,462	Nov. 1	479	{ 126 127 }	61	669
Vessel-loading apparatus.....	D. C. Shepherd and L. C. Ballard.....	475,814	May 31	3078	779	59	1288
Vessel. Marine.....	G. G. Airey and W. W. Uhl.....	475,172	May 17	2055	517	59	1060
Vessel. Portable.....	A. C. Kimber.....	482,368	Sept. 13	756	182	60	1498
Vessel supporting and carrying device.....	J. Mailiard and J. H. Jones.....	482,643	Sept. 13	1192	288	60	1581
Vessel-transporting apparatus.....	C. Brühl.....	467,079	Jan. 12	1257	318	58	247
Vessel. Wooden liquid-containing.....	J. M. Schofield.....	484,249	Oct. 11	1102	279	61	238
Vessels. Apparatus for ejecting ashes from.....	H. See.....	473,770	Oct. 4	374	93	61	78
Vessels. Apparatus for raising sunken.....	A. H. Tyler and J. S. E. de Vesian.....	485,398	Nov. 1	387	{ 104 105 }	61	652
Vessels. Apparatus for regulating the rolling and pitching of.....	C. E. Emery.....	471,212	Mar. 22	2445	622	58	1601
Vessels. Automatic course, speed, and time recorder for	J. J. Townsend.....	477,284	June 21	1682	412	59	1797
Vessels. Construction of.....	O. Congelton.....	472,859	Apr. 12	1285	330	59	257
Vessels. Construction of.....	A. C. A. Holzapfel.....	476,643	June 7	628	152	59	1561
Vessels. Covering for false bottoms of.....	A. McDougall.....	480,823	Aug. 16	1719	430	60	939
Vessels. Draft-indicator for.....	R. C. Pringle.....	467,996	Feb. 2	137	33	58	550
Vessels. Means for preventing the attachment of barnacles to	G. B. Cabell.....	468,741	Feb. 9	1301	330	58	789
Vessels. Means for towing.....	J. P. Manton.....	473,471	Apr. 26	2324	588	59	490
Vessels. Process of and apparatus for electroplating the hulls of	A. D. Buchanan.....	469,538	Feb. 23	2547	655	58	1047
Vessels. Rigging for sailing.....	W. M. Brisben.....	469,076	Feb. 16	1838	470	58	904

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & G.	Vol.	Page.
Vessels. Screw-purchase power for raising sunken.	N. McArthur and M. Lutz.	467,515	Jan. 26	1973	{ 501 502 }	58	399
Vest and drawers holder.	A. Lustig.	483,462	Sept. 27	2484	625	60	1859
Veterinary dental forceps.	D. M. Scheffer.	476,688	June 7	691	170	59	1574
Veterinary impregnator.	C. C. Lyford.	473,632	Apr. 26	2600	654	59	542
Veterinary instrument.	A. J. Ziegler.	486,153	Nov. 15	1568	416	61	925
Veterinary mouth-speculum.	C. S. Elliott.	477,838	June 28	2588	648	59	1991
Veterinary parturition-hook.	E. H. Graves.	472,536	Apr. 12	831	212	69	171
Veterinary surgical instrument.	S. B. Dunn.	471,107	Mar. 22	2282	586	58	1570
Veterinary tooth-cutter.	J. Hamlin.	475,940	May 31	3287	829	59	1329
Veterinary truss.	H. Haussmann.	480,323	Aug. 9	930	236	60	771
Victoria. Convertible.	A. C. Sage.	478,641	July 12	883	{ 218 219 }	60	191
Vine-cutter.	S. H. Francis.	483,627	Oct. 4	164	40	61	34
Vine-holder.	J. H. Cornell.	466,932	Jan. 12	1018	260	58	202
Vine-holder.	J. L. McGarrell.	483,856	Oct. 4	503	125	61	104
Vine rake. Pea.	P. E. Berthier.	484,394	Oct. 18	1336	340	61	295
Vinegar-making apparatus.	R. M. Hughes.	483,063	Sept. 20	1858	471	60	1727
Violin.	G. Abrams.	473,439	Apr. 26	2257	569	59	477
Violin.	D. F. Burgner.	483,897	Oct. 4	555	140	61	115
Violin attachment.	O. B. Bullard.	467,768	Jan. 26	2378	605	58	475
Violin-bow.	J. R. Perry.	485,651	Nov. 8	755	199	61	743
Violin-bow.	F. Searle.	471,028	Mar. 15	2154	553	58	1533
Violin-bow frog.	J. A. Houlihan.	485,038	Oct. 25	2391	614	61	520
Violin-cases. Valance for.	H. Kleineick.	467,724	Jan. 26	2313	587	58	462
Violin-key.	H. H. Heskett.	466,347	Jan. 5	59	15	68	14
Violin-peg.	G. H. Rowe.	473,347	Apr. 19	2110	530	59	427
Violin tail-piece.	J. A. Close.	481,783	Aug. 30	3314	809	60	1274
Violins, tenor-violos, and bass-violos. Bass-bar for.	J. H. Tibbits.	476,907	June 14	1053	255	59	1660
Vise.	W. Bradbrook.	466,859	Jan. 12	895	229	58	179
Vise.	J. J. Cowell.	488,600	Dec. 27	2251	558	61	1819
Vise.	J. F. Emuort.	471,169	Mar. 22	2377	607	58	1588
Vise.	C. Ernst.	475,760	May 31	2980	{ 755 756 }	59	1269
Vise.	W. Ibery.	486,228	Nov. 15	1671	442	61	946
Vise.	A. Kane.	488,316	Dec. 20	1785	449	61	1709
Vise.	W. Mann.	484,213	Oct. 11	1041	264	61	226
Vise.	J. W. McIntyre.	472,311	Apr. 5	478	123	59	90
Vise.	W. Peacock.	468,825	Feb. 16	1433	364	58	824
Vise.	H. C. Rasner.	473,343	Apr. 19	2105	528	59	426
Vise.	D. C. and J. Sabourin.	488,368	Dec. 20	1877	470	61	1728
Vise.	A. White.	469,093	Feb. 23	2479	636	58	1034
Vise. Bench.	M. G. Lewis.	466,466	Jan. 5	250	63	58	48
Vise. Bench.	M. G. Lewis.	472,674	Apr. 12	1025	264	59	206
Vise. Bench.	J. M. Palm and J. H. Akin.	467,781	Jan. 26	2396	600	58	479
Vise. Hand.	F. J. Tomek.	468,400	Feb. 2	143	34	58	551
Vise. Pipe.	A. W. Cash.	472,010	Mar. 29	3622	926	58	1833
Vise, pipe-tongs, and cutter. Combined.	J. Ellis.	481,168	Aug. 23	2391	564	60	1062
Vitriol. Apparatus for the final concentration of oil of	R. S. Penniman.	469,439	Feb. 23	2356	612	58	1017
Volatilizer.	G. B. Underwood.	478,896	July 12	1265	313	60	265
Volt-ammeter.	F. A. La Roche.	481,573	Aug. 30	2966	728	60	1207
Voltaic battery.	H. I. Harris.	470,123	Mar. 1	717	{ 177 178 }	58	1238
Voltaic body-battery.	W. F. Potter.	477,913	June 28	2706	677	59	2014
Voltaic pile.	W. E. Washburn.	482,444	Sept. 13	883	213	60	1520
Voltmeter.	E. R. Carichoff.	485,826	Nov. 8	1013	272	61	796
Vote-registering machine.	K. Dougan.	488,938	Dec. 27	2775	685	61	1924
Votes. Apparatus for arranging and counting.	J. B. Carrier.	469,039	Feb. 16	1788	{ 456 457 }	58	894
Voter's compartment and shelf.	A. A. Hinkley and J. S. Welch.	480,925	Aug. 16	1870	466	60	970
Voting-booth.	J. M. Patton.	472,907	Apr. 12	1356	349	59	272
Voting-booth.	F. K. Plumbly.	479,458	July 26	2188	{ 548 549 }	60	469
Voting-booth.	J. B. Struble.	469,508	Feb. 23	2503	642	58	1038
Voting-booth.	I. D. Vandecar.	475,641	May 24	2791	707	59	1221
Voting-machine.	G. A. Cline and W. Trimble.	473,913	May 3	35	7, 8	59	643
Vulcanizing wood. Process of and apparatus for.	S. E. Haskin.	488,967	Dec. 27	2824	697	61	1936
Wadding.	J. Feirabend.	468,480	Feb. 9	898	228	58	708
Wadding from cellulose and cotton. Process of and machine for manufacturing.	C. Waibel.	483,590	Oct. 4	114	27	61	24
Wagon.	T. B. Moses, Jr.	485,292	Nov. 1	206	58	61	614
Wagon.	P. H. Munroe.	466,615	Jan. 5	487	{ 125 126 }	58	94
Wagon bodies or seats. Corner-iron for.	E. Finn.	480,187	Aug. 2	685	173	60	712
Wagon-body.	R. Condon.	474,817	May 17	1496	382	59	951
Wagon-body.	J. A. Manchester.	488,081	Dec. 13	1404	348	61	1619
Wagon-body.	G. F. Thompson.	482,398	Sept. 13	807	194	60	1507
Wagon-body hoist.	J. W. Sandy.	471,900	Mar. 29	3470	886	58	1804
Wagon-body riser.	E. Finn.	488,671	Dec. 27	2363	584	61	1840
Wagon-bolster.	W. P. Bettendorf.	479,621	July 26	2440	608	60	516
Wagon-bolster.	L. Burg.	475,292	May 24	2237	576	59	1113
Wagon-box.	J. McNaney.	469,167	Feb. 16	1956	500	58	927
Wagon-box.	C. Nelson.	478,706	July 12	968	{ 240 241 }	60	208
Wagon-box. Dump.	F. B. Southwick.	478,379	July 5	496	120	60	98
Wagon-brake.	R. E. Davis.	469,994	Mar. 1	530	132	58	1201
Wagon-brake.	F. W. Dobbel.	486,245	Nov. 15	1700	449	61	951
Wagon-brake.	B. F. Fleschman.	484,001	Oct. 11	725	182	61	163
Wagon-brake.	E. G. and W. A. Haney.	483,056	Sept. 20	1847	469	60	1725
Wagon-brake.	A. Kleinsorge.	476,658	June 7	650	158	59	1566
Wagon-brake.	J. Miller.	478,349	July 5	454	111	60	91
Wagon-brake.	J. Newbill.	485,332	Nov. 1	277	75	61	628
Wagon-brake.	T. P. Randall.	476,553	June 7	490	117	59	1534
Wagon-brake.	G. D. Smith.	471,030	Mar. 15	2157	554	58	1533

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. lg.	Vol.	Page.
Wagon-brake	V. T. Sweeney	484,687	Oct. 18	1801	458	61	388
Wagon-brake	D. F. Wegner and A. A. Beltman	488,489	Dec. 20	2069	514	61	1768
Wagon-brake	J. A. Whitcomb	477,979	June 28	2796	{ 700 701	59	2033
Wagon-brake. Automatic	J. A. Green	466,409	Jan. 5	153	41	58	31
Wagon-brake. Automatic	H. J. Holman	469,740	Mar. 1	114	30	58	1122
Wagon-brake. Automatic	B. Wilcox	488,644	Dec. 27	2319	574	61	1831
Wagon brake. Hay	J. Lucksinger	486,786	Nov. 22	2556	{ 666 667	61	1135
Wagon-brake lever	G. P. Riester	485,060	Oct. 25	2420	622	61	526
Wagon brake mechanism	W. H. Eagleson	485,916	Nov. 8	1160	307	61	826
Wagon. Charging	C. S. Morse	476,547	June 7	483	115	59	1533
Wagon-cover	E. Simon	487,544	Dec. 6	510	{ 132 133	61	1421
Wagon-covering	J. W. H. and R. J. Campbell	473,292	Apr. 19	2013	506	59	403
Wagon. Delivery	C. H. Supplee	479,031	July 19	1488	370	60	319
Wagon-drag	G. A. Homes	488,812	Dec. 27	2574	639	61	1883
Wagon. Dump	C. Linn	486,114	Nov. 15	1502	396	61	912
Wagon. Dump	M. L. Senderling	488,292	Dec. 20	1751	441	61	1703
Wagon. Dumping	C. Abresch	478,534	July 12	1189	295	60	251
Wagon. Dumping	E. R. Bainter and E. Shepley	466,831	Jan. 12	1017	259	58	202
Wagon. Dumping	L. Busse	484,732	Oct. 18	1866	475	61	401
Wagon. Dumping	J. M. E. Campbell and R. P. Rankin	484,491	Oct. 18	1432	379	61	326
Wagon. Dumping	T. Davenport and M. M. Doyle	468,794	Feb. 16	1389	352	58	815
Wagon. Dumping	J. S. Field and W. J. Shedd	482,731	Sept. 20	1332	{ 326 327	60	1621
Wagon. Dumping	S. J. Forsgard	482,498	Sept. 13	975	236	60	1539
Wagon. Dumping	W. A. Haller	470,484	Mar. 8	1345	349	58	1364
Wagon. Dumping	C. F. Hinman and M. G. Bunnell	475,312	May 24	2264	{ 583 584	59	1117
Wagon. Dumping	A. E. Lawrence	467,939	Feb. 2	56	13	58	536
Wagon. Dumping	C. H. McRoberts	485,294	Nov. 1	209	60	61	615
Wagon. Dumping	W. H. Sheldon	471,402	Mar. 22	2727	696	58	1656
Wagon. Dumping	G. A. Stenback and J. Erickson	467,959	Feb. 2	80	19	58	540
Wagon. Dumping	W. G. Stewart	474,872	May 17	1589	{ 404 405	59	969
Wagon. Farm	S. Howe	478,432	July 5	572	138	60	112
Wagon-frame	A. G. Turner	480,980	Aug. 16	1966	491	60	987
Wagon-frame. Metallic	W. P. Bettendorf	479,618	July 26	2437	607	60	515
Wagon-frame. Metallic	W. P. Bettendorf	479,619	July 26	2438	{ 607 608	60	515
Wagon-frame. Metallic	W. P. Bettendorf	479,620	July 26	2439	608	60	515
Wagon-gear	E. Takken	486,304	Nov. 15	1795	472	61	972
Wagon-jack	F. Finsterer	469,116	Mar. 1	708	175	58	1236
Wagon-jack	M. C. Jackson	481,713	Aug. 30	3160	777	60	1247
Wagon-jack	L. B. Reams	475,021	May 17	1827	463	59	1016
Wagon-jack	G. J. Schlosser	476,417	June 7	297	70	59	1496
Wagon-loader. Portable	J. E. Eveleth	482,169	Sept. 6	411	98	60	1416
Wagon-lock	W. A. Baird	468,992	Feb. 16	1716	437	58	879
Wagon-lock	W. McCormack and R. M. Patton	477,330	June 21	1755	{ 429 430	59	1812
Wagon-rack	G. T. Stehling and J. Bloomer	482,490	Sept. 13	952	232	60	1534
Wagon-reach	J. R. Hess	488,894	Dec. 27	2699	668	61	1909
Wagon. Rotatable delivery	H. S. Tutbill	470,022	Mar. 1	565	140	58	1209
Wagon running-gear	J. H. Baker	480,379	Aug. 9	1016	{ 255 256	60	787
Wagon running-gear	J. H. Baker	480,380	Aug. 9	1019	256	60	787
Wagon running-gear	J. M. Holler	472,225	Apr. 5	450	116	59	85
Wagon running-gear	C. E. Holley	472,053	Apr. 5	64	16	59	15
Wagon running-gear	L. D. Hurd	473,577	Apr. 26	2511	634	59	527
Wagon running-gear	G. W. Loeffler	469,155	Feb. 16	1940	497	58	924
Wagon running-gear	F. Newhouse	469,504	Feb. 23	2497	640	58	1037
Wagon running-gear	L. B. Owens and D. C. Ball	486,351	Nov. 15	1870	492	61	986
Wagon scoop-board	F. M. Gibson	486,529	Nov. 22	2138	564	61	1053
Wagon-seat	G. E. Daniel	473,211	Apr. 19	1881	473	59	381
Wagon-spring	N. H. Hill	470,297	Mar. 3	1026	262	58	1307
Wagon-starter	L. O. Tomlinson	469,758	Mar. 1	143	37	58	1128
Wagon stop-block	J. Pomroy	476,065	May 31	3475	876	59	1368
Wagon. Tip	G. Anderson	483,200	Sept. 27	2079	{ 525 526 527 528	60	1782
Wagon-top	W. Leonhardt	471,484	Mar. 22	2850	725	58	1679
Wagon-tops. Removable folding frame for	W. Leech	474,390	May 10	817	213	59	806
Wagon, velocipede, and baby-walker. Combined child's	D. F. Long	474,138	May 3	388	94	59	713
Wagons. Vertically-extensible platform for	G. H. Bodette	478,841	July 12	1200	298	60	253
Wainscoting	K. Dieterich	463,132	Feb. 2	341	85	58	590
Wainscoting. Enameled-iron	F. D. Cook	485,259	Nov. 1	159	46	61	605
Waist	A. Bouchard	480,062	Aug. 2	487	124	60	675
Waist	Z. Demarest	485,001	Oct. 25	2331	601	61	508
Waist and suspenders. Combined	H. M. Clark	477,648	June 28	2280	571	59	1931
Waistcoat-protector	W. G. Howard and C. E. North	478,010	June 28	2854	714	59	2043
Waiver-signal	M. V. B. Ethridge	475,937	May 31	3283	828	59	1328
Walking-stick, &c	J. J. Him	476,015	May 31	3397	857	59	1351
Walking-stick and flag	J. H. Nikirk	484,446	Oct. 18	1420	362	61	312
Wall-covering	J. W. Bates	476,360	June 7	213	52	59	1477
Wall-coverings. Composition for	L. F. Griffin	486,870	Nov. 29	2705	.....	61	1182
Wall decoration. Composition of matter for	G. A. Casselman	482,544	Sept. 13	1055	.....	60	1555
Wall-facing	M. Ams	476,354	June 7	198	47	59	1474
Wall-finish and making same	B. Moore	488,024	Dec. 13	1295	.....	61	1506
Wall, floor, or roof of buildings	A. J. Judge	483,927	Oct. 4	605	153	61	125
Wall. Hollow brick	J. C. Anderson	467,489	Jan. 26	1920	491	58	391
Wall. Hollow brick	J. C. Anderson	467,490	Jan. 26	1921	491	58	391

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Wall. Hollow brick	J. C. Anderson	467,491	Jan. 26	1923	491	58	391
Wall or ceiling covering	J. P. McMurray	480,120	Aug. 2	573	145	60	691
Wall-paper and for other purposes. Composition for cleaning	J. E. Devine	476,788	June 14	850	.....	59	1620
Wall-paper cutter	T. Berney	474,899	May 17	1630	416	59	978
Wall paper-display rack	H. A. Smith and W. A. Towle	467,058	Jan. 12	1221	308	58	240
Wall-paper exhibitor	A. F. Payne	485,648	Nov. 8	752	198	61	743
Wall-paper exhibitor	J. Reading	466,727	Jan. 5	671	172	58	127
Wall-paper-banging machine	E. M. Graham	471,636	Mar. 29	3059	778	58	1725
Wall-paper. Machine for pasting, cutting, and trimming	L. Stock	479,473	July 26	2224	558	60	475
Wall-paper, &c. Machine for trimming	A. Allen	473,411	Apr. 19	2920	557	59	418
Wall-paper. Method of and apparatus for making	G. K. Birge	471,287	Mar. 22	2551	648	58	1621
Wall-paper-pasting machine	E. H. Danforth	471,958	Mar. 29	3554	908	58	1820
Wall-paper. Roller-knife for trimming	D. S. Morgan	482,830	Sept. 20	1485	370	60	1652
Wall-paper-supporting device	E. D. Mills	482,645	Sept. 13	1194	289	60	1581
Wall-paper-trimming machine	F. W. Moeller	475,134	May 17	2000	506	59	1049
Wall-protector	W. E. Bowman	469,117	Feb. 16	1888	483	58	913
Wall-table	G. W. Curtis	480,008	Aug. 16	2002	500	60	994
Walls. Brace or tie for hollow	D. A. Weese	471,204	Mar. 22	2431	619	58	1399
Walls. Construction of	M. S. Millard	475,593	May 24	2719	689	59	1206
Walls. Material for the treatment of	G. H. Wooster	471,163	Mar. 22	2368	.....	58	1586
Walls or other surfaces. Composition of matter for covering	G. W. Abell	469,394	Feb. 23	2319	.....	58	1004
Wallet	G. K. Morton	479,655	July 26	2493	621	60	525
Vantage-rod	J. F. Barker	480,058	Aug. 2	483	123	60	674
Wardrobe	T. Buechele	470,152	Mar. 1	756	188	58	1246
Wardrobe	D. B. Weightman	485,309	Nov. 1	231	64	61	620
Wardrobe, chiffonier, &c.	T. W. Purcell and J. B. Craig	479,078	July 19	1555	388 389	60	331
Warehouse	W. W. Bierce	486,367	Nov. 15	1895	501	61	991
Warm-air register	C. H. Foster	486,865	Nov. 29	2700	704	61	1181
Warmer. Body	G. D. Bailly	485,080	Oct. 25	2450	630	61	533
Warp-chains. Mechanism for wrapping	C. E. Scrimgeour and H. Gildard	482,066	Sept. 6	233	57	60	1381
Warp-drying machine	F. Haskell	485,694	Nov. 8	827	221 222	61	758
Warp-sizing and like machines. Stop-motion for	J. Blair	466,596	Jan. 5	457	117	58	88
Warp-threads. Machine for drawing in	R. H. Ingersoll	468,914	Feb. 16	1569	398 399	58	851
Warp-threads. Machine for drawing in	L. P. Sherman	487,938	Dec. 13	1153	288	61	1566
Warp-threads. Mechanism for unwinding	C. E. Scrimgeour and H. Gildard	485,776	Nov. 8	948	254 255	61	784
Warpers. Beam-doffer for	J. E. Prest	485,225	Nov. 1	109	33	61	595
Warping-machine	G. F. Knett and C. Slingland	478,162	July 5	138	35, 36	60	30
Warping-machine	A. E. Rhoades	478,523	July 5	709	172	60	141
Warping-machine	A. E. Rhoades	487,682	Dec. 6	722	184 185	61	1463
Warping-machine regulating device	N. Hicks	488,432	Dec. 20	1977	493 494	61	1747
Wash-bench and wringer. Combined	R. Davis	469,833	Mar. 1	269	70	58	1153
Wash-bench and wringer-support. Combined	W. F. Parmelee	484,160	Oct. 11	956	246	61	209
Washboard	M. C. Burke	475,663	May 24	2825	715	59	1227
Washboard	J. C. Gearhart	483,438	Sept. 27	2158	618	60	1853
Washboard	A. T. and J. H. Lapham	488,209	Dec. 20	1621	404	61	1679
Washboard	J. Pittigan	470,594	Mar. 8	1492	388	58	1395
Washboard	J. Maleckar	468,410	Feb. 9	790	196	58	687
Washboard	J. T. Sargent	467,438	Jan. 19	1836	469	58	365
Washboard	J. T. Sargent	467,439	Jan. 19	1837	469	58	365
Washboard	J. T. Sargent	467,440	Jan. 19	1838	469	58	366
Washboard	J. T. Sargent	469,980	Mar. 1	513	127 128	58	1198
Washboard breast-rest	O. T. and J. H. Lapham	483,786	Oct. 4	400	99	61	84
Washboiler	J. Fullen	484,417	Oct. 18	1369	350	61	302
Washboiler	C. C. P. Nourse	471,565	Mar. 29	2956	754	58	1707
Washboilers. Draining-bucket for	G. K. Knowlton	475,571	May 24	2689	682	59	1199
Wash-stand	N. O. Bond	479,148	July 19	1669	417	60	352
Wash-stand	N. O. Bond	484,649	Oct. 18	1744	443	61	376
Wash-stand	G. H. Gere	484,956	Oct. 25	2253	580	61	494
Wash-stand	A. Janzon	485,040	Oct. 25	2393	615	61	520
Wash-stand and chamber-pail. Combined	F. H. Brahe	475,052	May 17	1872	475	59	1025
Wash-stand and close stool. Combination	L. R. Lewing	472,673	Apr. 12	1025	264	59	206
Wash-stand and means for supplying hot and cold water thereto	W. G. Hullhorst	467,353	Jan. 19	1709	437	58	341
Wash-stand water-receptacle	N. O. Bond	483,526	Oct. 4	14	3	61	6
Washer:							
See Axle-washer. Leather washer.							
Bottle-washer. Nut-lock washer.							
Can-washer. Ore-washer.							
Coal-washer. Paper-stock washer.							
Dish-washer. Tumbler-washer.							
Glass and bottle washer. Vegetable-washer.							
Window-washer.							
Washer and nut-lock. Combined	L. Edmiston	474,821	May 17	1506	385	59	953
Washer-cutter	R. P. Frist	468,613	Feb. 9	1104	281	58	748
Washer machine. Lock	M. P. Wilkins	470,342	Mar. 8	1111	284 285	58	1321
Washer-plate and nut-lock. Combined	J. Scott	473,086	Apr. 19	1657	422	59	340
Washing compound	J. Odell	474,262	May 3	576	.....	59	750
Washing fabrics. Apparatus for	J. Haworth	485,695	Nov. 8	829	292 223	61	759
Washing-machine	J. Aber	467,219	Jan. 19	1499	383 384	58	302
Washing-machine	S. Barrett	468,477	Feb. 9	890	226	58	706
Washing-machine	J. H. Bates	484,871	Oct. 25	2115	544	61	466

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr & G.	Vol.	Page.
Washing-machine.....	R. Bitner	481,659	Aug. 30	3096	754	60	1231
Washing-machine.....	G. V. Blackstone	472,979	Apr. 19	1485	{ 379 380 }	{ 59	309
Washing-machine.....	F. L. Buckley	482,036	Sept. 6	185	44	60	1371
Washing-machine.....	M. Burgess	481,102	Aug. 16	2167	537	60	1025
Washing-machine.....	R. K. Burt	482,295	Sept. 6	616	146	60	1455
Washing-machine.....	J. M. Campbell	486,763	Nov. 22	2516	656	61	1128
Washing-machine.....	Z. T. Chambers	479,488	July 26	2254	565	60	481
Washing-machine.....	E. F. Chapman	473,140	Apr. 19	1755	443	59	357
Washing-machine.....	W. R. Chisham and S. E. Abbott	477,646	June 28	2278	571	59	1930
Washing-machine.....	G. A. Coffee	481,603	Aug. 16	1992	499	60	993
Washing-machine.....	H. Cook	488,727	Dec. 27	2447	608	61	1857
Washing-machine.....	S. Cook	473,914	May 3	45	8	59	645
Washing-machine.....	B. F. Crisenberry	477,246	June 21	1625	{ 396 397 }	{ 59	1786
Washing-machine.....	A. J. Curtis	488,543	Dec. 27	2156	532	61	1798
Washing-machine.....	C. C. Davis	482,341	Sept. 13	706	168	60	1488
Washing-machine.....	D. Davis	468,317	Feb. 2	638	159	58	648
Washing-machine.....	M. Dissinger	478,094	July 5	30	10	60	9
Washing-machine.....	D. E. and E. C. Eddleman	469,234	Feb. 23	2076	534	58	957
Washing-machine.....	E. A. Egelston	478,926	July 12	1316	327	60	276
Washing-machine.....	W. F. Elkins	483,547	Oct. 4	47	12	61	12
Washing-machine.....	J. M. Engelhardt	476,995	June 14	1192	289	59	1688
Washing-machine.....	J. W. Fell	485,791	Nov. 8	966	259	61	788
Washing-machine.....	B. L. Finch	485,812	Nov. 8	991	266	61	792
Washing-machine.....	G. L. Fisher	477,998	June 28	2833	709	59	2040
Washing-machine.....	J. Flynn	480,083	Aug. 2	518	132	60	681
Washing-machine.....	F. Foster	471,541	Mar. 29	2925	745	58	1702
Washing-machine.....	D. Gardner	484,892	Oct. 25	2150	552	61	474
Washing-machine.....	S. E. Gibson	478,004	June 28	2849	712	59	2042
Washing-machine.....	M. R. Gibbs	483,439	Sept. 27	2459	{ 618 619 }	{ 60	1854
Washing-machine.....	O. F. Glidden	477,752	June 28	2447	611	59	1965
Washing-machine.....	L. Grondahl	469,402	Feb. 23	2337	{ 600 601 }	{ 58	1008
Washing-machine.....	K. W. Hacke	485,687	Nov. 8	817	218	61	757
Washing-machine.....	J. P. Hale	486,564	Nov. 22	2192	577	61	1063
Washing-machine.....	J. P. Hallsten and C. J. Anderson	483,443	Sept. 27	2463	620	60	1855
Washing-machine.....	J. Hofmann	486,468	Nov. 22	2053	544	61	1036
Washing-machine.....	W. H. Hornby and L. M. Lent	471,862	Mar. 29	3420	{ 873 874 }	{ 58	1793
Washing-machine.....	R. D. Hulbert	483,721	Oct. 4	293	73	61	61
Washing-machine.....	M. A. Jack	469,146	Feb. 16	1927	{ 493 494 }	{ 58	922
Washing-machine.....	B. S. Kerr	474,746	May 10	1379	349	59	914
Washing-machine.....	R. T. King	485,765	Nov. 8	937	251	61	781
Washing-machine.....	S. La Point	478,440	July 5	583	141	60	115
Washing-machine.....	C. F. Lane	477,013	June 14	1220	296	59	1694
Washing-machine.....	F. A. Lapham	480,105	Aug. 2	547	138	60	687
Washing-machine.....	N. H. Long	486,721	Nov. 22	2447	638	61	1114
Washing-machine.....	S. P. Lowell	481,183	Aug. 23	2309	569	60	1066
Washing-machine.....	W. H. Mabey	468,070	Feb. 2	245	60	58	572
Washing-machine.....	J. A. Mengel	483,723	Oct. 4	295	74	61	62
Washing-machine.....	W. P. Norris	470,399	Mar. 8	1207	308	58	1339
Washing-machine.....	H. Ogborn	478,707	July 12	970	241	60	208
Washing-machine.....	C. Osbon	483,861	Oct. 4	506	126	61	105
Washing-machine.....	J. J. Otto	475,339	May 24	2318	594	59	1130
Washing-machine.....	I. B. Owens	481,419	Aug. 23	2712	667	60	1140
Washing-machine.....	H. H. and S. D. Palmer	473,521	Apr. 26	2407	610	59	505
Washing-machine.....	T. Payne	469,528	Feb. 23	2534	652	58	1045
Washing-machine.....	F. Plumb	477,334	June 21	1759	431	59	1812
Washing-machine.....	J. D. Reed	472,227	Apr. 5	346	89	59	65
Washing-machine.....	J. Restein	466,575	Jan. 5	426	{ 109 110 }	{ 58	82
Washing-machine.....	S. H. Schmuck	477,578	June 21	2141	532	59	1888
Washing-machine.....	J. Schroeder and H. T. Hahn	467,241	Jan. 19	1532	391	58	308
Washing-machine.....	F. W. Schuster and W. R. Schneider	488,094	Dec. 13	1417	353	61	1622
Washing-machine.....	A. H. Shambaugh	477,073	June 14	1326	321	59	1715
Washing-machine.....	R. H. Smith	469,846	Mar. 1	289	{ 75 76 }	{ 58	1157
Washing-machine.....	J. W. Spangler	480,214	Aug. 2	736	{ 186 187 }	{ 60	721
Washing-machine.....	W. and J. B. Stonebraker	467,315	Jan. 19	1648	420	58	330
Washing-machine.....	J. H. Taylor	477,918	June 28	2713	679	59	2015
Washing-machine.....	J. C. Thomas	485,143	Oct. 25	2540	652	61	551
Washing-machine.....	G. W. Turner	467,066	Jan. 12	1231	311	58	242
Washing-machine.....	G. S. Turpen	469,612	Feb. 23	2654	682	58	1069
Washing-machine.....	D. Updegraff	468,849	Feb. 16	1469	375	58	831
Washing-machine.....	C. Van Derzee	480,532	Aug. 9	1255	{ 315 316 }	{ 60	833
Washing-machine.....	J. W. Waynick	479,863	Aug. 2	131	32	60	608
Washing-machine.....	F. M. Webster	477,162	June 14	1457	357	59	1742
Washing-machine.....	F. C. Weiman	472,937	Apr. 12	1406	359	59	281
Washing-machine.....	L. J. Wilson	487,107	Nov. 29	3113	799	61	1263
Washing-machine.....	C. T. Woods	486,805	Nov. 22	2583	{ 673 674 }	{ 61	1141
Washing-machine attachment.....	H. L. Rowe and G. W. McDonald	480,037	Aug. 2	448	{ 113 114 }	{ 60	667
Washing-machine. Roller	E. A. Rusden	470,828	Mar. 15	1862	477	58	1476
Washing-machines, &c. Mechanism for operating	A. Mendenhall	474,915	May 17	1647	420	59	982
Washing-machines. Waste-water gate for	L. Dwight and A. A. Jepson	472,530	Apr. 12	826	210	59	170
Washing-powder	E. F. O'Neal	483,634	Oct. 4	174	.....	61	36
Waste-pipe trap	F. N. Du Bois	475,546	May 24	2650	674	59	1192
Waste-trap	G. F. Brown	477,499	June 21	2021	501	59	1863

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. & Gr.	Vol.	Page.
Waste-trap	C. H. Muckenbirm	470,647	Mar. 8	1567	408	58	1410
Watch	J. L. Newell	479,376	July 19	2034	507	60	424
Watch alarm attachment	G. J. Capewell	468,062	Dec. 13	1373	341	61	1612
Watch-balance. Compensation	J. R. Shoemaker	468,968	Feb. 16	1669	426	58	869
Watch-balance. Non-magnetic	C. F. Carpenter	487,550	Dec. 6	517	184	61	1423
Watch balance-spring	O. Olsen	469,914	Mar. 1	396	99	58	1177
Watch-balances and hair-springs. Mechanism for timing and adjusting	G. E. Hunter	484,797	Oct. 25	1992	510 511 512 513 507	61	441
Watch-balances and hair-springs. System for adjusting to temperature	G. E. Hunter	484,796	Oct. 25	1988	508 509 510	61	441
Watch-balances. Method of and apparatus for rating	C. E. Emery	469,967	Mar. 1	487	121	58	1193
Watch-bow fastener	O. Johanson	468,806	Feb. 16	1403	356	58	818
Watch-bow fastener	F. Mink	472,764	Apr. 12	1159	297	59	232
Watchcase	F. Borgel	478,734	July 12	1027	252	60	219
Watchcase	O. R. Decker	478,412	July 5	545	133	60	107
Watchcase	W. H. Fitz Gerald and A. Bencke	475,209	May 17	2113	534 535	59	1073
Watchcase	V. Nivois	481,809	Aug. 30	3355	821	60	1281
Watchcase-pendant	E. J. Arrick	479,930	Aug. 2	241	59	60	628
Watchcase-pendant	C. Arthur	482,971	Sept. 20	1716	433	60	1697
Watchcase-pendant	D. H. Church	484,177	Oct. 11	982	251	61	215
Watchcase-pendant	J. C. Dueber	467,260	Jan. 19	1566	398	59	314
Watchcase-pendant	T. A. Hopkins	485,581	Nov. 1	657	174	61	708
Watchcase-pendant	T. A. Hopkins	487,052	Nov. 29	3023	776	61	1244
Watchcase-pendant	N. T. Mills	475,064	May 17	1891	480	59	1028
Watchcase-pendant	W. S. Richardson	466,965	Jan. 12	1068	271	58	211
Watchcase-pendant	C. Schwitzer	477,338	June 21	1765	432	59	1814
Watchcase-pendant	I. Sternberg	468,707	Feb. 9	1254	319	58	779
Watchcase-pendant	A. M. Yeakel	467,390	Jan. 19	1760	449	58	350
Watchcase-spring	J. Erbeau	469,660	Feb. 23	2724	700	58	1085
Watchcase-spring	J. E. Ketchum and T. O. Nixon	476,748	June 7	781	192	59	1593
Watchcase-spring	A. J. Lustig	466,527	Jan. 5	350	87	58	68
Watchcase-spring	J. and A. Menegay	479,292	July 19	1886	472	60	395
Watchcase-spring	W. S. Richardson	466,964	Jan. 12	1066	270	58	211
Watchcases. Back and bezel for	F. Mink	470,646	Mar. 8	1566	407	58	1410
Watchcases. Cover or bezel for	F. Mink	468,749	Feb. 9	1312	333	58	791
Watchcases. Knurling or ornamenting	F. Mink	482,686	Sept. 13	1258	307	60	1594
Watchcases. Machine for ornamenting	F. Mink	468,748	Feb. 9	1311	333	58	790
Watchcases. Ornamenting	C. Wilhelm	472,490	Apr. 5	752	191	59	143
Watchcases. Perpetual calendar for	F. W. Roe	468,263	Feb. 2	548	134	58	680
Watch center arbor	N. A. Terrell	478,528	July 5	719	174	60	142
Watch-chain attachment	J. C. Koch	480,430	Aug. 9	1099	275	60	801
Watch-chain holder and badge	J. B. Pearson and V. Snerle	486,419	Nov. 15	1977	524	61	1008
Watch-charm	D. A. Smith and C. E. Grapewine	483,949	Oct. 4	634	159	61	130
Watch-charm calendar	F. W. Roe	478,888	July 12	1257	311	60	264
Watch-crown holder	N. T. Mills	467,294	Jan. 19	1619	413	58	324
Watch-holder	R. Fuchs	484,003	Oct. 11	730	183	61	164
Watchmaker's depthing and adjusting tool	G. W. Harris	483,960	Oct. 4	657	165	61	136
Watchmaker's gage	E. Beeton	473,286	Apr. 19	2005	504	59	406
Watchmakers' pliers	D. Mendelson	474,257	May 3	571	140	59	749
Watchmaker's tool	G. W. Cameron	487,988	Dec. 13	1239	308	61	1583
Watchmaker's tool	U. W. Frink	488,069	Dec. 13	1387	344	61	1615
Watchmaker's tool	F. E. Lindahl	478,615	July 12	848	208	60	184
Watchmaker's tool	C. H. Miller	477,432	June 21	1913	471	59	1841
Watchmaker's tool	C. Smith	484,680	Oct. 18	1793	456	61	387
Watch-movement	E. E. Thiel	479,923	Aug. 2	230	57	60	627
Watch-movement box	C. H. Smith	488,097	Dec. 13	1424	355	61	1623
Watch-pendant	W. T. Harrison	486,105	Nov. 15	1489	392	61	910
Watch-regulator	D. H. Church	484,176	Oct. 11	981	251	61	214
Watch-regulator	E. Klahn	470,298	Mar. 8	1027	263	58	1307
Watch-regulator	S. E. Kochendarfer	473,422	Apr. 19	2236	562	59	451
Watch-regulator indicator	W. A. Allen	474,789	May 10	1448	367	59	938
Watch. Stem-winding	F. Frey	480,814	Aug. 16	1702	425	60	936
Watch. Stem-winding	R. Jaegermann	466,935	Jan. 12	1022	260	58	208
Watch. Stem winding and setting	E. H. Flint	472,987	Apr. 19	1504	383	59	313
Watch. Stem winding and setting	J. E. Fultz	484,359	Oct. 11	1274	325	61	272
Watch. Stem winding and setting	T. F. Sheridan	467,998	Feb. 2	139	33, 34	58	550
Watch. Stop	A. Chopard	470,406	Mar. 8	1220	312	58	1340
Watch. Stop	A. Didisheim	466,558	Jan. 5	400	101	58	77
Watch. Stop	W. H. Douglas	488,710	Dec. 27	2424	601	61	1851
Watch. Stop	W. Pignet	479,900	Aug. 2	188	47	60	619
Watch. Stop	A. Raymond	474,100	May 3	344	82	59	703
Watch-winding mechanism	N. Silberberg	473,675	Apr. 26	2662	670	59	554
Watches. Banking-pin for	T. Gill	476,956	June 14	1138	275	59	1677
Watches. Machine for curving the ends of main-springs for	E. A. Marsh	467,703	Jan. 26	2275	577 578	58	455
Watches. Making bimetallic balances for	D. H. Church	474,590	May 10	1136	290	59	866
Water alarm. Shallow	H. Euler	482,550	Sept. 13	1061	258	60	1556
Water and steam gage. Combined	I. Willan	480,309	Aug. 9	910	230	60	767
Water. Apparatus for electrically purifying	L. T. Stanley	481,979	Sept. 6	87	22, 23	60	1351
Water, &c. Apparatus for heating	W. H. Wilbur	468,124	Feb. 2	327	80	58	588
Water. Apparatus for purifying, sterilizing, and filtering drinking	S. L. West	471,261	Mar. 22	2514	638 639	58	1614
Water. Apparatus for recording the rise and fall of	D. A. Carpenter	470,542	Mar. 8	1423	371	58	1380
Water. Apparatus for the propulsion and transmission of	M. P. Schetzel	482,655	Sept. 13	1205	294	60	1584
Water-bags. Valved stopper for	G. H. F. Schrader	476,421	June 7	301	70	59	1497
Water-boiler. Sectional	T. Doherty	479,873	Aug. 2	149	36, 37	60	611

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Draw.	Vol.	Page.
Water-channels. Method of and apparatus for lining.	C. H. Lyon	473,009	Apr. 19	1536	392	59	319
Water-circulator	P. and H. Bloomsburg	472,915	Apr. 12	1372	{ 351 352 }	59	275
Water-closet	J. H. Hamilton	476,011	May 31	3392	856	59	1350
Water-closet	E. Hammann	480,402	Aug. 9	1053	264	60	793
Water-closet	S. E. Hughes	481,761	Aug. 30	3275	797	60	1266
Water-closet	S. Jennings and J. Morley	482,923	Sept. 20	1639	412	60	1681
Water-closet	G. J. Kremelberg	481,498	Aug. 23	2839	698	60	1166
Water-closet	R. Morgan and J. Menzies	477,867	June 28	2634	659	59	2000
Water-closet	C. H. Muckenhirn	488,363	Dec. 20	1866	467	61	1726
Water-closet	A. J. Niles	484,559	Oct. 18	1594	404	61	346
Water-closet	A. O'Brien	474,682	May 10	1286	{ 327 328 427 428 }	59	895
Water-closet	B. C. Smith	484,617	Oct. 18	1684	448	61	365
Water-closet apparatus	W. Bunting, Jr.	474,985	May 17	1773	448	59	1005
Water-closet attachment	I. A. Martin and C. T. Hammon	485,960	Nov. 8	1236	326	61	842
Water-closet attachment and coupling	J. D. Abraham	477,485	June 21	2001	497	59	1859
Water-closet bowl	J. C. Beekman. (Reissue)	11,242	June 7	808	199	59	1599
Water-closet bowls. Flushing device for.	A. Cochran and E. C. Stover	475,537	May 24	2636	670	59	1189
Water-closet. Catch-basin	H. C. Buddenberg	486,423	Nov. 22	1997	530	61	1025
Water-closet cistern	G. W. Aldrich and J. Hueston	475,371	May 24	2368	606	59	1139
Water-closet cistern	J. Menzies and R. Morgan	485,469	Nov. 1	492	130	61	672
Water-closet coupling	G. B. Howell	484,318	Oct. 11	1215	308	61	259
Water-closet cover	M. Schubert	473,714	Apr. 26	2720	{ 684 685 }	59	565
Water-closet flush-valve	E. Herdegen	485,155	Oct. 25	2561	658	61	555
Water-closet flushing apparatus.	A. O'Brien	474,683	May 10	1287	{ 328 329 }	59	896
Water-closet flushing cistern or tank	J. Demarest	475,489	May 24	2556	651	59	1174
Water-closet-flushing device	E. McDonald and P. McHugh	467,516	Jan. 26	1975	502	58	400
Water-closet flushing device	H. C. Weber	486,994	Nov. 29	2938	757	61	1228
Water-closet reservoir	W. S. Cooper	474,217	May 3	511	123	59	736
Water-closet seat and cover.	H. H. Sievert	480,292	Aug. 9	876	223	60	762
Water-closet. Siphon	J. E. Boyle	476,867	June 14	983	239	59	1646
Water-closet. Siphon	G. F. Brown	479,182	July 19	1726	432	60	363
Water-closet siphon	R. Morgan and J. Menzies	488,794	Dec. 27	2549	632	61	1877
Water-closet tank or cistern	J. H. Tabele	473,980	May 3	149	35	59	666
Water-closet-tank siphon	P. Harvey	477,841	June 28	2592	650	59	1992
Water-closet-tank siphon	R. Morgan	475,512	May 24	2594	660	59	1181
Water-closet-tank siphon	C. L. Wilkins and A. F. Blesch	484,834	Oct. 25	2055	526	61	454
Water-closet valve	J. Hankenhof	478,963	July 12	1370	337	60	286
Water-closet valve	A. D. Hoffman	468,876	Feb. 16	1511	326	58	839
Water-closet. Ventilated.	C. A. Blum	470,740	Mar. 15	1711	441	58	1448
Water-closet water-supply apparatus	G. K. Dearborn	474,372	May 10	792	206	59	801
Water-closets. Automatic valve-operator for.	J. S. Daniel	480,494	Aug. 9	1197	301	60	821
Water-closets. Flushing device for.	G. R. Uridge	466,985	Jan. 12	1104	279	58	219
Water-closets or other receptacles. Device for automatically closing the covers of	W. R. Webster	475,170	May 17	2051	517	59	1059
Water-conduct against fires. Safety	N. Simin	471,699	Mar. 29	3158	805	58	1744
Water-conductor	S. Silberstein	466,578	Jan. 5	430	111	58	83
Water-cooler	H. J. Conant	470,745	Mar. 15	1720	443	58	1449
Water-cooler	W. H. Fruen	488,473	Dec. 20	2039	508	61	1761
Water-cooling apparatus	H. B. Ford	477,893	June 28	2676	669	59	2007
Water-distributing apparatus.	A. H. Bryan	471,347	Mar. 28	2638	{ 670 671 }	58	1639
Water-distributing apparatus. Siphonic	J. K. Leedy	485,953	Nov. 8	1225	323	61	839
Water elevating and conveying apparatus	V. Boatwright	481,099	Aug. 16	2160	536	60	1024
Water-elevator	W. Claypool	472,602	Apr. 12	919	{ 236 237 }	59	188
Water-elevator	H. Harris	473,573	Apr. 26	2507	633	59	525
Water-elevator	W. B. Simpson	483,366	Sept. 27	2402	604	60	1842
Water-elevator	R. W. Tinsley	486,002	Nov. 8	1306	{ 347 348 315 316 }	61	856
Water-elevator	A. L. White	467,072	Jan. 12	1247	315	58	245
Water-elevator. Pneumatic	A. H. Simms	484,255	Oct. 11	1109	281	61	240
Water-elevator. Pneumatic	B. F. Teal	470,386	Mar. 8	1187	{ 303 304 630 631 }	58	1334
Water-elevator. Windlass	S. H. Sayre, Jr.	467,837	Jan. 26	2487	630	58	497
Water-engine	H. Jerger	477,256	June 21	1638	{ 399 400 }	59	1789
Water-gage	J. A. and J. Hopkinson	481,493	Aug. 23	2828	695	60	1164
Water-gage	R. Klinger	470,858	Mar. 15	1900	486	58	1483
Water-gage	W. O. Schumann	468,508	Feb. 9	944	240	58	717
Water-gage	W. A. Woods	479,235	July 13	1802	451	60	377
Water-gage reflector	E. C. Carleton	485,451	Nov. 1	464	124	61	667
Water-gate. Automatic	W. R. Norton	487,961	Dec. 13	1184	285	61	1572
Water-heater	L. L. Culver	476,989	Mar. 15	2097	{ 536 537 600 601 }	58	1522
Water-heater	J. Dawson	488,709	Dec. 27	2421	601	61	1851
Water-heater	H. B. Joyce	472,128	Apr. 5	189	51	59	35
Water-heater	J. W. Kelley	484,322	Oct. 11	1219	{ 310 311 }	61	260
Water-heater	E. Nagel	479,141	July 19	1659	415	60	350
Water-heater	J. H. Shivar	485,892	Nov. 8	1124	297	61	812
Water-heater	G. H. Stahl	469,101	Feb. 16	1870	478	58	910
Water-heater	C. Stees and G. Graupensperger	481,211	Aug. 23	2356	{ 580 581 }	60	1075
Water-heater	H. Trenkamp	470,224	Mar. 8	893	{ 220 221 }	58	1281
Water-heater	R. F. Walsh	480,913	Aug. 16	1851	461	60	966

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Water-heater	G. W. Washburn	478,486	July 5	648	159	60	129
Water-heater. Electric	T. Ahearn	481,291	Aug. 23	2512	618	60	1103
Water-heater. Electrical	R. Kennedy	479,814	Aug. 2	60	14	60	593
Water-heater. Gas	W. S. Wright	479,869	Aug. 2	145	35	60	610
Water-heater. Service-pipe	J. Krumscheid	473,762	Apr. 26	2790	701	59	579
Water heating and circulating apparatus	H. A. Jones and J. E. Marcy	474,961	May 17	1727	439	59	997
Water-heating apparatus	H. B. Clarke	482,076	Sept. 6	253	61	60	1385
Water-heating device	T. Rogers	476,949	June 14	1126	{ 270 271 }	59	1674
Water-heating system	F. A. and E. N. Gates	484,193	Oct. 11	1002	256	61	218
Water indicator. Shallow	A. G. Crossman	474,221	May 3	521	127	59	738
Water-lifting apparatus. Automatic	I. T. Dyer	474,338	May 3	731	191	59	777
Water-meter	O. Beckmann	470,033	Mar. 1	581	145	58	1211
Water-meter	H. B. Williams	483,951	Oct. 4	636	160	61	131
Water-meter. Disk	J. Thomson	476,102	May 31	3534	889	59	1378
Water-meter. Disk	J. Thomson	485,437	Nov. 1	443	{ 118 119 }	61	663
Water-meter. Disk	J. Thomson and F. Lambert	471,295	Mar. 22	2564	651	58	1624
Water-meter. Disk	J. A. Tilden	486,992	Nov. 29	2934	{ 756 757 }	61	1227
Water-meter. Positive proportional	J. Thomson	475,096	May 31	3521	886	59	1377
Water-meter. Positive proportional	J. Thomson	476,100	May 31	3532	888	59	1378
Water-meter. Positive proportional	J. Thomson	485,438	Nov. 1	444	119	61	663
Water-meter. Proportional	J. Thomson	476,094	May 31	3519	886	59	1376
Water-meter. Proportional	J. Thomson	476,097	May 31	3524	886	59	1377
Water-meter. Proportional	J. Thomson	476,099	May 31	3530	888	59	1378
Water-meter. Proportional	J. Thomson	476,104	May 31	3542	891	59	1380
Water-meter. Rotary	C. Schon	484,465	Oct. 18	1447	369	61	317
Water-meter. Rotary	J. A. Tilden	488,587	Dec. 27	2230	552	61	1814
Water-meter. Rotary	T. Woollens, Jr	473,046	Apr. 19	1600	407	59	330
Water-meters. Apparatus for calibrating	J. Thomson	476,095	May 31	3520	886	59	1376
Water-motor	L. Benecke	468,068	Feb. 2	243	59	58	571
Water-motor	A. W. Brash	469,536	Feb. 23	2545	654	58	1047
Water-motor	S. B. Goff	470,190	Mar. 8	842	207	58	1271
Water-motor	A. B. Murray	474,851	May 17	1557	397	59	962
Water-motor	B. S. Partridge	478,457	July 5	604	147	60	119
Water-motor	L. Porter	482,927	Sept. 20	1642	413	60	1682
Water-motor	W. E. Seelye	483,394	Sept. 27	2399	603	60	1841
Water-motor	S. D. Shepperd	474,347	May 3	745	194	59	780
Water-motor	I. H. Spencer	479,097	July 19	1587	397	60	337
Water-motor	C. L. Wilkins	484,271	Oct. 11	1143	{ 290 291 }	61	246
Water-motor	C. C. Wilson	488,860	Dec. 27	2656	657	61	1899
Water motor. Running	J. E. Belt	472,467	Apr. 5	718	183	59	136
Water or gas meter	J. and H. M. Goodman	474,241	May 3	548	{ 134 135 }	59	744
Water or other liquids. Apparatus for raising and forcing	I. Shone and E. Ault	485,714	Nov. 8	864	232	61	767
Water or steam boiler	E. Körting	469,152	Feb. 16	1936	495	58	923
Water or wind wheel	J. Suter	487,381	Dec. 6	232	63	61	1367
Water-power	A. C. Mather	473,941	May 3	92	21	59	654
Waterproof composition	S. Huff	483,451	Sept. 27	2474	.....	60	1857
Waterproof fabric	J. R. France	481,485	Aug. 23	2818	692	60	1162
Waterproofing compound	J. Stewart	475,713	May 24	2899	.....	59	1240
Water-purifier	M. J. Hewlett and D. C. Cecil	488,673	Dec. 27	2366	585	61	1811
Water-purifier	A. Pennell	474,688	May 10	1289	329	59	896
Water-purifier and boiler-cleaner	W. V. Walker	477,615	June 21	2211	549	59	1901
Water. Purifying	J. A. Bradburn, E. N. Trump, and J. D. Pennock	466,709	Jan. 5	624	.....	58	121
Water. Purifying	C. G. Collins	478,048	June 28	2911	727	59	2054
Water-purifying apparatus	J. H. Blessing	482,515	Sept. 13	998	{ 241 242 }	60	1544
Water-purifying apparatus	F. A. Bunnell	469,770	Mar. 1	160	42	58	1131
Water-purifying apparatus	L. S. Lewis	472,641	Apr. 12	975	253	59	199
Water-raising mechanism	J. H. McGowan	473,949	May 3	104	24	59	657
Water-supply regulator	F. G. Schuerman	478,526	July 5	714	173	60	142
Water-supply system	J. W. Fisher	476,043	May 31	3436	868	59	1359
Water-tower and fire-escape. Combined	F. M. Hughes	483,001	Sept. 20	1763	{ 445 446 }	60	1706
Water-trap	J. T. Brien	476,224	May 31	3748	947	59	1420
Water-tube boiler	O. C. Barber	473,443	Apr. 26	2272	573	59	480
Water-tube boiler	L. B. Battin	469,533	Feb. 23	2542	653	58	1046
Water-tube boiler	J. E. Henshall	468,501	Feb. 9	933	237	58	715
Water-tube boiler	R. and K. Munroe, Jr	478,756	July 12	1053	259	60	225
Water-tube boiler	M. H. Plunkett	474,645	May 10	1222	{ 312 313 }	59	882
Water-tube boiler	A. F. Yarrow	472,777	Apr. 12	1176	301	59	235
Water-tube boiler	R. R. Zell	469,810	Mar. 1	234	59	58	1146
Water-wheel	F. M. Bookwalter	469,959	Mar. 1	472	118	58	1190
Water-wheel	F. M. Bookwalter and W. W. Tyler	483,133	Sept. 27	1964	{ 498 499 }	60	1759
Water-wheel	J. W. and F. M. Bookwalter	488,056	Dec. 13	1363	{ 338 339 }	61	1610
Water-wheel	J. H. Choate, Jr	471,951	Mar. 29	3541	905	58	1817
Water-wheel	C. W. Huson	485,196	Nov. 1	65	19, 20	61	585
Water-wheel	C. W. Nicholson	473,273	Apr. 26	2802	704	59	582
Water-wheel	J. H. Pierce	474,098	May 3	341	82	59	703
Water-wheel	W. G. Spencer	481,074	Aug. 16	2118	{ 527 528 }	60	1017
Water-wheel	C. Taber	488,723	Dec. 27	2442	606	61	1855
Water-wheel	W. W. Tyler	480,753	Aug. 16	1607	{ 403 404 }	60	917
Water-wheel	J. C. Walker	467,840	Jan. 26	2492	{ 631 632 }	58	497

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. &g.	Vol.	Page.
Water-wheel and means for transmitting power therefrom. Current	I. R. Beery	482,034	Sept. 6	183	44	60	1371
Water-wheel bucket	J. B. Pitchford	485,477	Nov. 1	502	133	61	674
Water-wheel nozzle	C. A. Scharff	485,663	Nov. 8	785	209	61	749
Water-wheel. Turbine	W. W. Rossman	488,029	Dec. 13	1310	327	61	1599
Watering apparatus. Stock	A. Rockfellow	479,197	July 19	1747	438	60	367
Watering device. Automatic	G. W. Schroeder	478,472	July 5	629	153	60	124
Watering device. Stock	G. W. Funk	478,745	July 12	1040	255	60	222
Watering stock. Device for	R. C. Andersen	474,621	May 10	1187	301	59	876
Watering-trough. Automatic	J. A. Brown	478,397	July 5	523	128	60	103
Wave-power motor	A. Rosenholz	472,398	Apr. 5	614	154	59	115
Wax-ends. Machine for making	R. M. Macintosh	479,093	July 19	1580	396	60	336
Wax mold. Sealing	J. C. Eckert	483,512	Sept. 27	2563	643	60	1874
Weaner. Calf	F. G. Powers	467,830	Jan. 26	2472	638	58	494
Weaner. Calf	W. H. Tyler	481,985	Sept. 6	96	25	60	1353
Weaner. Cow, calf, and colt	R. Arborn	467,144	Jan. 19	1387	355	58	281
Wear. Device for taking up	H. A. Beidler	477,831	June 28	2574	644	59	1988
Weather-board	R. Sword	467,063	Jan. 12	1228	312	58	241
Weather-board gage	R. A. Underwood	473,098	Apr. 19	1673	425	59	343
Weather-strip	E. A. Delancy	483,995	Oct. 11	712	179	61	160
Weather-strip	E. G. Duryea	475,391	May 24	2400	613	59	1145
Weather-strip	A. M. Ewers	481,229	Aug. 23	2392	590	60	1082
Weather-strip	G. L. Fowler	469,556	Feb. 23	2580	661	58	1054
Weather-strip	O. A. Gallatin	437,830	Dec. 13	973	245	61	1533
Weather-strip	J. H. Hull	476,646	June 7	633	153	59	1562
Weather-strip	D. D. Mayfield	483,076	Sept. 20	1876	475	60	1730
Weather-strip	G. W. Morris	485,747	Nov. 8	915	245	61	777
Weather-strip	W. H. Nixon	482,022	Sept. 6	165	40	60	1368
Weather-strip	H. W. Ogg	467,621	Jan. 26	2146	545	58	431
Weather-strip	J. Phillips	484,454	Oct. 18	1429	365	61	314
Weather-strip. Automatic	W. H. Orton, J. D. Hanes, and G. H. Orton	474,920	May 17	1656	423	59	983
Weather-vane indicator	C. J. Kerr	477,551	June 21	2107	524	59	1881
Weaving machine. Slat-and-wire-fabric	M. S. Cadwell	479,487	July 26	2252	565	60	481
Weaving-machines. Register and stop-motion mechanism therefor	C. Holding	485,869	Nov. 8	1081	287	61	810
Web. Machine for guiding the edges of textile	J. J. Scholfield	487,352	Dec. 6	187	51, 52	61	1357
Wedge. Ax or tool	G. P. Morrill	477,262	June 21	1649	403	59	1791
Wedge device for tool-handles	F. H. Thompson and G. P. Tormey	477,082	June 14	1341	325	59	1718
Weed and root puller	W. W. Wheelock	473,890	Apr. 26	3003	757	59	620
Weed-cutter	G. S. Andrus	479,612	July 26	2429	605	60	513
Weed-cutter	W. A. McCoy	474,399	May 10	828	217	59	808
Weed-cutter for listed corn	M. A. Chamberlain	473,912	May 3	34	7	59	642
Weed-cutter. Vineyard	D. D. Dewey	477,298	June 21	1704	417	59	1801
Weed-exterminator	W. Vreeland	480,300	Aug. 9	891	226	60	764
Weed-puller	J. F. F. Gatgens and R. C. Dowdin	466,674	Jan. 5	574	148 } 149 }	58	111
Weed-turner	J. J. Miller	469,581	Feb. 23	2616	671	58	1061
Weeder	T. L. Davis	472,749	Apr. 12	1139	292	59	228
Weeder	F. Hulse	470,133	Mar. 1	731	182	58	1242
Weeder and cultivator	W. H. M. Cate	473,868	Apr. 26	2959	746	59	611
Weeder. Lawn	J. E. Jones	488,817	Dec. 27	2583	641	61	1824
Wet fork or feeler	R. Rigby	474,780	May 10	1434	364	59	926
Weigher. Automatic grain	W. Butler	477,508	June 21	2033	504	59	1865
Weigher. Automatic grain	D. J. O'Connor	481,810	Aug. 30	3356	821	60	1281
Weigher. Grain	J. A. and D. James	485,632	Nov. 8	731	191	61	738
Weigher. Grain	T. S. Pearson	468,466	Feb. 9	870	221 } 222 }	58	703
Weigher. Grain	A. Widick	485,779	Nov. 8	951	255	61	784
Weigher. Rotating grain	W. Swartout	479,537	July 26	2319	580	60	494
Weighing and advertising device. Combined	D. W. McLaughlin	475,968	May 31	3331	140	59	1337
Weighing and bagging machine	H. E. Hawk	472,455	Apr. 5	697	178 } 179 }	59	132
Weighing apparatus	C. W. Hunt	468,108	Feb. 2	301	73	58	582
Weighing apparatus. Automatic	M. E. Reisert	483,336	Oct. 4	176	44	61	37
Weighing apparatus for liquids. Automatic	J. P. Baldwin	479,694	July 26	2559	636 } 637 }	60	538
Weighing apparatus. Grain	C. Renthner	478,465	July 5	621	151	60	123
Weighing asphalt. Apparatus for	S. R. Scharf	480,141	Aug. 2	610	155	60	699
Weighing lifting, measuring, and electric machine. Combined	A. Sundh	477,613	June 21	2204	547 } 548 }	59	1900
Weighing liquors. Apparatus for	E. Y. Gordon	472,535	Apr. 12	830	212	59	171
Weighing-machine	E. W. Spear	479,852	Aug. 2	114	28	60	605
Weighing-machine	E. W. Spear	479,853	Aug. 2	116	29	60	605
Weighing-machine. Automatic	H. Richardson	467,021	Jan. 12	1155	293 } 294 }	58	228
Weighing-machine. Automatic	J. B. Stoner	480,752	Aug. 16	1605	402 } 403 }	60	917
Weighing-machine feed mechanism	H. E. Smyser	470,146	Mar. 1	746	185 } 186 }	58	1244
Weighing machine. Grain	A. H. W. Droste and H. H. Bruns	483,909	Oct. 4	580	146	61	120
Weighing machine. Grain	J. Sprinkle	472,427	June 7	314	72	59	1498
Weighing machine. Grain	G. W. Wakefield	481,084	Aug. 16	2131	531	60	1019
Weighing oil-tank	E. N. Bachelder and F. E. Lovejoy. (Reissue.)	11,274	Oct. 4	697	174	61	144
Weighing tacks. Machine for automatically	J. Keith	474,777	May 10	1427	363	59	924
Weight-lifting attachment	J. W. McHenry	468,681	Feb. 9	1209	307	58	770
Weir. Automatic measuring	A. Johnson	472,127	Apr. 5	188	50	59	35
Welding and heating apparatus. Arc	P. I. Unwin and H. Howard	480,794	Aug. 16	1669	417	60	929
Welding apparatus. Hoop	C. L. Coffin	475,667	May 24	2828	716	59	1227
Welding apparatus. Induction-discharge protector for	H. Lemp	473,514	Apr. 26	2395	606 } 607 }	59	503
Welding compound	H. B. Straut	475,355	May 24	2342	.....	59	1134
Welding. Electric	C. L. Coffin	477,101	June 14	1367	333	59	1724

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wheel	L. J. Crecelius	473,728	Apr. 26	2742	{ 690 691	59	570
Wheel	F. S. Derr and G. W. Hess	477,740	June 28	2423	605	59	1961
Wheel	R. W. Dixon	478,577	July 12	795	196	60	173
Wheel	S. G. Hodges	467,252	Jan. 19	1554	396	58	312
Wheel	S. G. Hodges	467,253	Jan. 19	1555	396	58	312
Wheel	R. Jewell	480,586	Aug. 9	1338	334	60	850
Wheel	S. H. Kimball	487,017	Nov. 29	2971	765	61	1234
Wheel	A. Levedahl	480,022	Aug. 2	426	107	60	662
Wheel	F. S. Miller	475,510	May 24	2592	659	59	1180
Wheel	C. J. Moore	475,464	May 24	2517	641	59	1166
Wheel	T. C. Munz	482,806	Sept. 20	1452	360	60	1645
Wheel	J. Rees	481,821	Aug. 30	3376	827	60	1285
Wheel	A. M. Reeves	468,397	Feb. 9	773	192	58	683
Wheel	J. W. Rhodes	481,822	Aug. 30	3377	827	60	1285
Wheel	W. T. Robinson	486,125	Nov. 15	1523	402	61	916
Wheel	F. H. Rundquist-Wanner	479,722	July 26	2624	651	60	549
Wheel box and axle	L. Harris	476,198	May 31	3697	934	59	1410
Wheel box. Vehicle	L. Harris	474,245	May 3	553	136	59	745
Wheel-chock	I. H. Hayward	472,997	Apr. 19	1519	368	59	315
Wheel-fastener and axle-box	O. P. Jervis	470,409	Mar. 8	1225	313	58	1341
Wheel-guard	W. I. Bunker	477,504	June 21	2028	503	59	1864
Wheel-guard	P. J. Connell	484,300	Oct. 11	1187	302	61	254
Wheel lift and washer. Combined	F. A. Lyman	474,394	May 10	821	214	59	806
Wheel-locking device. Electric	G. W. Blanchard	472,329	Apr. 5	507	131	59	95
Wheel mechanism. Worm	T. A. Weston	486,814	Nov. 22	2601	677	61	1146
Wheel rim and tire	C. E. W. Woodward	481,340	Aug. 23	2587	635	60	1147
Wheel-rim attachment	P. Davies	488,670	Dec. 27	2363	584	61	1810
Wheel-rim-trimming machine	R. Hoopes	485,156	Oct. 25	2562	658	61	556
Wheel-scraper	T. L. Aveling	484,841	Oct. 25	2072	533	61	457
Wheel-shoe	J. Fransmann	479,708	July 26	2590	645	60	543
Wheel-spider	R. T. Markee	488,319	Dec. 20	1791	450	61	1711
Wheel. Vehicle or other	A. W. Robinson	484,675	Oct. 18	1788	455	61	386
Wheel-wrench and bolt-clipper. Combined	M. Martin	469,580	Feb. 23	2613	{ 670 671	58	1060
Wheels. Detachable fender for vehicle	E. B. Smead	473,971	May 3	138	31	59	664
Wheels. Device for packing vehicle	F. G. Davis	478,954	July 12	1352	335	60	283
Wheels. Making metal	J. R. Little	471,008	Mar. 15	2128	546	58	1528
Wheels. Manufacture of metal	J. R. Little	472,893	Apr. 12	1338	{ 343 344	59	268
Wheelharrow	F. H. Harris	467,411	Jan. 19	1793	457	58	357
Wheelharrow	P. Hoogerzeil	446,469	Nov. 22	2054	544	61	1036
Wheelharrow	A. O. Hubbard	487,053	Nov. 29	3024	777	61	1245
Wheelharrow	J. Otto	469,265	Feb. 23	2121	545	58	965
Wheelharrow	W. H. Wardell	469,614	Feb. 23	2655	682	58	1069
Whetstone-holder	L. C. Strong	472,685	Apr. 12	1037	268	59	208
Whetting and sharpening the cutting-edges of edge-tools, &c. Apparatus for	C. Spruce	471,679	Mar. 29	3129	797	58	1738
Whiffletree	G. M. Ayers	476,117	May 31	3563	896	59	1384
Whiffletree	S. E. Burke	472,853	Apr. 12	1277	327	59	245
Whiffletree	J. Edgar	469,736	Mar. 1	105	28	58	1120
Whiffletree	J. Edgar	483,604	Oct. 4	131	32, 33	61	28
Whiffletree	J. Edgar	486,092	Nov. 15	1468	387	61	906
Whiffletree	L. S. Flatau	485,622	Nov. 8	717	188	61	735
Whiffletree	L. S. Flatau	446,363	Nov. 29	2697	704	61	1180
Whiffletree	S. H. Haas	487,264	Dec. 6	38	12	61	1349
Whiffletree	E. Haiman	475,730	May 24	2934	744	59	1245
Whiffletree	W. F. Henry, W. P. Bolles, and A. McKee	481,028	Aug. 16	2030	506	60	1000
Whiffletree	W. H. Holsclaw	473,226	Apr. 19	1910	481	59	387
Whiffletree	J. H. Irion	467,601	Jan. 26	2121	538	58	426
Whiffletree	C. H. McBride	475,699	May 24	2878	727	59	1236
Whiffletree	J. B. McCallum	471,880	Mar. 29	3446	879	58	1799
Whiffletree	H. Poth	474,565	May 10	1102	281	59	860
Whiffletree	W. J. Rose	482,698	Sept. 13	1280	314	60	1599
Whiffletree	H. M. Wright	486,947	Nov. 29	2868	741	61	1214
Whiffletree attachment	F. J. Blanke	467,223	Jan. 19	1506	385	58	303
Whiffletree attachment	J. A. Milhan	474,026	May 3	224	54	59	681
Whiffletree-center	H. Swan	478,033	June 28	2891	722	59	2050
Whiffletree connection	A. Haggerty	481,301	Aug. 23	2527	620	60	1106
Whiffletree-coupling	B. D. Druen	485,003	Oct. 25	2333	602	61	509
Whiffletree draft device	Q. V. P. Day	482,622	Sept. 13	1167	222	60	1576
Whiffletree-hook	T. Andress	472,491	Apr. 5	754	192	59	143
Whiffletree-hook	G. Carlson	471,949	Mar. 29	3539	904	58	1817
Whiffletree-hook	C. C. Dederuick	486,280	Nov. 15	1767	465	61	966
Whiffletree-hook	C. H. Evans and F. T. Dunlap	486,929	Nov. 29	2834	734	61	1208
Whiffletree-hook	J. F. Graves	488,391	Dec. 20	1912	479	61	1735
Whiffletree-hook	A. N. Green	479,939	Aug. 2	254	63	60	631
Whiffletree-hook	J. Gross	473,311	Apr. 19	2043	513	59	414
Whiffletree-hook	H. E. Harris	480,465	Aug. 9	1159	291	60	813
Whiffletree-hook	E. G. Quicke	484,746	Oct. 18	1894	482	61	409
Whiffletree-hook	N. F. Reed	468,019	Feb. 2	170	42	58	557
Whiffletree-hook	W. C. Wentworth	486,551	Nov. 22	2164	572	61	1058
Whiffletree-hook	E. S. Whitcomb	467,667	Jan. 26	2214	564	58	444
Whiffletree-hook	W. F. White	467,566	Jan. 26	2070	523	58	417
Whiffletree-hook	D. Y. Wilson	488,491	Dec. 20	2072	514	61	1768
Whip	F. P. Couse	473,695	Apr. 26	2697	678	59	561
Whip	H. S. Cushman	472,918	Apr. 12	1378	353	59	277
Whip	H. S. Cushman	472,919	Apr. 12	1378	353	59	277
Whip	F. Foley	472,869	Apr. 12	1300	334	59	260
Whip-holder	J. E. Woodward	480,356	Aug. 9	976	246	60	779
Whip-lock and socket. Combined	H. J. Saxton	471,652	Mar. 29	3079	783	58	1729
Whip-socket	F. A. Ames	487,814	Dec. 13	951	240	61	1527
Whip-socket	F. E. Benton	482,717	Sept. 20	1318	322	60	1618

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Whip-socket.....	B. M. Johnson.....	471,555	Mar. 29	2942	749	58	1705
Whip-socket.....	G. A. L. Johnson.....	479,811	Aug. 2	55	13	60	593
Whip-socket.....	A. S. Kibby.....	472,543	Apr. 12	838	214	59	173
Whip-socket.....	H. E. Schreder.....	481,063	Aug. 16	2107	524	60	1014
Whip-socket.....	E. N. Tuttle.....	484,067	Oct. 11	814	206	61	182
Whip-socket and lock for lap-ropes. Combined.....	A. S. Kibby.....	475,982	May 31	3353	845	59	1341
Whip-socket and rein-holder.....	T. F. Burkhard.....	478,310	July 5	391	94	60	79
Whip-socket and rein-holder. Combined.....	W. H. Haney.....	486,547	Nov. 22	2160	571	61	1058
Whip-socket fastener.....	F. E. Benton.....	483,109	Dec. 13	1446	363	61	1627
Whips. Display-rack for.....	E. G. Flack.....	470,559	Mar. 8	1445	375	58	1385
Whirligig.....	A. Moe.....	475,594	May 24	2721	690	59	1206
Whisky. Making.....	W. E. Bradley.....	481,925	Sept. 6	7	60	1336	
Whist. Apparatus for duplicate.....	M. C. Work.....	481,995	Sept. 6	113	28	60	1357
Whistle. Chime.....	H. R. Frisbie.....	466,404	Jan. 5	144	40	58	29
Whistle. Chime.....	H. R. Frisbie.....	472,946	Apr. 12	1416	362	59	283
Whistle-harp.....	J. P. Nettle.....	471,015	Mar. 15	2139	549	58	1530
Whistle. Signal.....	W. M. Smonse.....	488,845	Dec. 27	2631	652	61	1894
Whistle. Steam.....	J. Einig.....	480,078	Aug. 2	510	130	60	680
Whistle. Steam.....	H. R. Frisbie.....	466,403	Jan. 5	143	39, 40	58	29
Whistle. Steam.....	H. R. Frisbie.....	471,171	Mar. 22	2378	608	58	1589
Whistle. Steam.....	E. Lukenheimer.....	476,472	June 7	375	87	59	1510
Whistle. Steam chime.....	F. M. Curran.....	468,793	Feb. 16	1388	351	58	815
Wick adjuster. Lamp.....	A. J. McAdam.....	476,477	June 7	391	90	59	1512
Wick-adjusting device.....	W. C. Homan.....	471,083	Mar. 15	2236	574	58	1549
Wick-adjusting device.....	F. Rhind.....	478,288	July 5	360	87	60	72
Wick-carrier.....	J. C. Miller.....	483,650	Oct. 4	493	122	61	102
Wick. Lamp.....	W. F. Draper.....	472,750	Apr. 12	1141	292	59	228
Wick. Lamp.....	M. E. Elder.....	470,113	Mar. 1	705	174	58	1236
Wick-lifting device.....	F. Rhind.....	485,429	Nov. 1	431	115	61	660
Wick-raiser.....	G. S. Brown.....	483,279	Sept. 27	2232	561	60	1810
Wick-raiser.....	H. E. Shaffer.....	474,488	May 10	971	250	59	835
Wick-raising device.....	H. L. Smith.....	484,981	Oct. 25	2296	593	61	501
Wick-trimmer.....	D. L. Andrews.....	476,114	May 31	3557	895	59	1383
Wick-tube.....	J. D. Luther.....	479,519	July 26	2297	574	60	489
Wick-tube and burner-plate. Design for a.....	W. H. Clemes. (Reissue).....	11,239	May 17	573	59	1098	
Wicks. Manufacturing lamp.....	S. F. Draper.....	467,871	Jan. 26	2543	645	58	506
Winch.....	J. F. Appleby.....	475,376	May 24	2374	607	59	1140
Wind and current wheel.....	D. C. Herman.....	485,933	Nov. 8	1182	311	61	830
Wind-engine.....	S. A. Rouse.....	478,945	July 12	1340	332 } 333	60	280
Wind-machine.....	J. T. Shoup, Jr.....	479,993	Aug. 2	363	90	60	650
Wind-motor.....	J. Hoffman and H. F. Turner.....	477,544	June 21	2093	521	59	1879
Wind-motor.....	H. Winge.....	476,716	June 7	729	180	59	1582
Wind-vane indicator. Electric.....	H. J. Haight.....	474,735	May 10	1362	345 } 346	59	911
Wind-wheel.....	E. Brégier.....	483,098	Sept. 20	1912	484	60	1737
Wind-wheel.....	T. J. Harrison.....	485,380	Nov. 1	357	96	61	646
Wind-wheel.....	M. Irrgang.....	469,786	Mar. 1	191	49	58	1138
Wind-wheel.....	W. B. Myers.....	472,763	Apr. 12	1157	297	59	232
Wind-wheel.....	S. L. Smolley and W. H. Bonwell, Jr.....	474,308	May 3	670	172 } 173	59	766
Wind-wheel governor. Automatic.....	J. H. Berkley.....	481,095	Aug. 16	2155	534	60	1023
Winders. Driving mechanism for cop and bobbin.....	O. Lever and W. S. Grundy.....	486,258	Nov. 15	1733	456	61	958
Winding and setting mechanism. Stem.....	R. E. Moreland.....	468,204	Feb. 2	447	111	58	612
Winding cops or balls.....	S. W. Wardwell, Jr.....	480,158	Aug. 2	637	161 } 162	60	704
Winding cops or balls. Apparatus for.....	S. W. Wardwell, Jr.....	480,157	Aug. 2	633	160 } 161	60	703
Winding machine. Cop.....	O. Lever and W. S. Grundy.....	486,257	Nov. 15	1730	455 } 456	61	958
Winding machine. Thread.....	C. Hill.....	482,308	Sept. 6	635	132 } 133	60	1459
Winding-machines. Driving mechanism for the spindles of circular.....	F. A. Ludwig.....	481,329	Aug. 23	2570	631	60	1114
Winding-machines. Traverse-motion for bobbins in.....	J. A. Murphy.....	472,383	Apr. 5	592	151 } 152	59	111
Winding ribbons, &c. Machine for.....	H. Marley.....	469,524	Feb. 23	2528	649 } 650	58	1043
Winding yarn or thread. Machine for.....	R. Broadbent.....	484,171	Oct. 11	975	249	61	213
Windlass.....	J. R. Fletcher.....	468,563	Feb. 9	1037	264	58	736
Windlass.....	J. J. Hamblin.....	483,113	Sept. 20	1933	489	60	1742
Windlass. Hauling.....	F. Uhlig.....	485,515	Nov. 1	550	146 } 147	61	685
Windlass. Power.....	H. L. Bennett and R. B. Adams.....	486,073	Nov. 15	1418	375 } 376	61	897
Windlasses. Friction device for.....	T. Symonds.....	472,564	Apr. 12	866	222 } 223	59	179
Windmill.....	E. J. Barber.....	485,082	Oct. 25	2452	631	61	533
Windmill.....	G. W. Campbell.....	481,712	Aug. 30	3179	776 } 777	60	1247
Windmill.....	A. H. Carpenter.....	468,541	Feb. 9	999	256 } 257	58	728
Windmill.....	P. Clemens.....	470,910	Mar. 15	1975	504 } 505	58	1499
Windmill.....	E. Downs.....	476,875	June 14	996	242	59	1649
Windmill.....	S. M. Hopkins.....	484,795	Oct. 25	1987	507	61	441
Windmill.....	F. C. Jacoby.....	467,976	Feb. 2	97	24	58	543
Windmill.....	A. Johnson.....	475,869	May 31	3170	804	59	1307
Windmill.....	W. P. Kimbrell.....	487,750	Dec. 13	841	214 } 215	61	1506
Windmill.....	W. S. Lamb.....	475,872	May 31	3172	805	59	1307
Windmill.....	E. Lamphear.....	474,839	May 17	1540	392	59	958
Windmill.....	J. McKnight.....	466,756	Jan. 5	715	185	58	136
Windmill.....	J. Opperud and J. I. Brorby.....	488,087	Dec. 13	1410	350 } 351	61	1620
Windmill.....	E. S. and K. T. Sheffield.....	469,343	Feb. 23	2240	575	58	989
Windmill.....	T. Snow.....	472,557	Apr. 12	857	220	59	177

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Windmill	B. T. Stauber	484,826	Oct. 25	2036	522	61	450
Windmill	A. Wallace	473,982	May 3	152	36	59	667
Windmill	W. C. Westaway and L. W. Beard	471,406	Mar. 22	2735	698	58	1657
Windmill attachment	H. D. Bixler and G. C. Ferguson	483,206	Sept. 27	2091	530	60	1785
Windmill attachment	A. M. Clark	475,009	May 17	1808	459	59	1011
Windmill-governor	G. M. Allen	466,482	Jan. 5	275	69, 70	58	53
Windmill-governor	A. P. Hay	469,315	Feb. 23	2200	564	58	980
Windmill-governor	T. L. Regester	472,549	Apr. 12	847	217	59	175
Windmill-lubricator	B. J. Sykes	471,443	Mar. 22	2792	712	58	1667
Windmill-lubricator	W. C. Westaway	471,408	Mar. 22	2738	699	58	1658
Windmill-regulator	E. C. Norton	483,080	Sept. 20	1881	476	60	1731
Windmill-regulator	C. and W. Silvester	467,057	Jan. 12	1218	308	58	239
Windmill-regulator. Automatic	E. T. Crowe	480,399	Aug. 9	1048	263	60	792
Windmill-regulator. Automatic	J. B. Gorrell and A. W. Clay	469,738	Mar. 1	111	30	58	1121
Windmill-regulator. Automatic	C. E. Tobie	486,688	Nov. 22	2395	626	61	1104
Windmill-tilting-tower	T. O. Perry	485,883	Nov. 8	1111	294	61	816
Windmill-tower	J. Luger	484,103	Oct. 11	864	220	61	191
Windmill-tower	K. A. Smith and A. M. Wead	487,787	Dec. 13	904	229	61	1518
Windmill-towers, &c. Adjustable brace for	M. J. Althouse	483,520	Oct. 4	2	1	61	3
Windmills. Shaft-bearing for	L. W. Noyes	472,809	Apr. 12	1220	313	59	214
Window	C. G. Anderson	471,729	Mar. 29	3216	819	58	1754
Window	G. E. Blaine	484,489	Oct. 18	1489	379	61	325
Window	E. B. Brundage	469,463	Feb. 23	2429	623	58	1025
Window	J. W. Cooper	480,806	Aug. 16	1692	422	60	934
Window	O. M. Edwards	482,344	Sept. 13	711	170	60	1489
Window	W. B. Eltonhead	486,223	Nov. 15	1663	440	61	944
Window	J. J. Eyraud	470,114	Mar. 1	705	174	58	1236
Window	J. H. Giesey	488,761	Dec. 27	2494	620 621	61	1866
Window	V. Schirmer	476,081	May 31	3498	881 882	59	1373
Window	O. Wagner	472,239	Apr. 5	363	93	59	68
Window	R. H. White	480,682	Aug. 9	1500	373 374	60	880
Window-chair	A. Boettcher	480,991	Aug. 16	1980	496	60	990
Window-chair	E. B. Gildersleeve	483,608	Oct. 4	137	34	61	29
Window-chair	M. Metal	472,898	Apr. 12	1346	345	59	269
Window-chair	F. Staedeli	487,859	Dec. 13	1028	257	61	1542
Window-cleaner	M. J. Becker	484,284	Oct. 11	1160	295	61	249
Window-cleaner	A. R. Kolb	487,888	Dec. 13	1071	269	61	1551
Window-cleaner	A. L. Lewis	483,350	Sept. 27	2342	589	60	1831
Window-cleaner's safety apparatus	H. K. Whitner	474,566	May 10	1131	289	59	865
Window-cleaners. Safety device for	R. d'Heureuse	482,865	Sept. 20	1538	383	60	1663
Window-frame	E. C. Conway	475,438	May 24	2471	630	59	1157
Window-frame	C. Dahlem	476,612	June 7	583	139	59	1552
Window-frame	H. Goese	472,757	Apr. 12	1150	295	59	230
Window-frame	W. T. Gregg	478,593	July 12	817	202	60	178
Window-frame	F. Mesker and T. O. Arbegust	480,908	Aug. 16	1846	450	60	965
Window frame and sash	J. Anderson	481,091	Aug. 16	2149	533	60	1092
Window frame and sash	J. Wilson	482,989	Sept. 20	1744	441	60	1702
Window-frame pocket	F. V. Phillips	483,968	Oct. 4	668	167	61	158
Window-guard	L. B. Lewis	471,056	Mar. 15	2192	564	58	1541
Window-jack	G. F. Sheehan and D. A. Mullin	484,467	Oct. 18	1452	370	61	318
Window or door screen	C. J. Shirreff	481,066	Aug. 16	2111	525	60	1015
Window-platform	P. Otto	477,602	June 21	2181	541	59	1896
Window. Reversible	J. Farquharson	487,118	Nov. 29	3129	802 803	61	1267
Window-screen	J. F. Appell	468,906	Feb. 16	1555	395	58	847
Window-screen	W. E. Cobb	479,752	July 26	2669	662	60	558
Window-screen	H. B. Dodge	480,562	Aug. 9	1299	325	60	842
Window-screen	P. Gabriel	484,418	Oct. 18	1370	350	61	302
Window-screen	L. B. Kenney	469,300	Feb. 23	2181	559	58	976
Window-screen	J. S. Lester	476,154	May 31	3622	915	59	1397
Window-screen	A. G. Macdonell and W. Y. Gambee	474,668	May 10	1258	322	59	890
Window-screen	A. McKerlie	484,540	Oct. 18	1568	399	61	341
Window-screen	W. E. Pierce	483,789	Oct. 4	404	100	61	85
Window-screen	J. Rich	484,978	Oct. 25	2293	592	61	501
Window-screen	S. Roebuck	482,811	Sept. 20	1458	362	60	1646
Window-screen frame	J. F. Butcher	484,293	Oct. 11	1169	298	61	251
Window seat	W. Engler	481,854	Aug. 30	3427	841	60	1295
Window. Sliding	A. F. M. Youtlen	469,955	Mar. 1	468	116 117	58	1189
Window-ventilator	D. N. Cook	488,920	Dec. 27	2751	678	61	1919
Window-ventilator	G. W. Greig	483,483	Sept. 27	2509	632	60	1864
Window-washer	D. Mendelson	486,726	Nov. 22	2453	640	61	1116
Window-washer. Rotating	H. B. Davis	481,140	Aug. 16	2236	551	60	1038
Wine. Treatment of sparkling	A. Walfard	485,248	Nov. 1	143	42	61	602
Wines. Preparing and bottling	G. W. Sessions	467,757	Jan. 26	2364	599	58	472
Winker-brace support and buckle	C. C. Schwaner	473,022	Apr. 19	1560	397	59	323
Winnowers. Shaking sieve for	E. G. N. Salenius	472,275	Apr. 5	418	107 108	59	78
Winnowing-wheel for separating granular substances	O. Sundgren	478,828	July 12	1183	293	60	249
Wiping-rod	H. C. Patterson	470,254	Mar. 8	934	232	58	1289
Wire. Barbed	J. D. Curtis	470,747	Mar. 15	1724	444	58	1450
Wire. Barbed	J. D. Curtis	484,890	Oct. 25	2148	551	61	473
Wire-bending machine	G. Cooper	468,301	Feb. 2	611	153	58	641
Wire-bending pliers	J. M. Cochran	470,545	Mar. 8	1427	372	58	1381
Wire-box-strap machine	J. Vermulen	481,444	Aug. 23	2751	677	60	1148
Wire-braiding machine	J. B. Cleveland	486,823	Nov. 22	2620	683	61	1150
Wire, cables, &c., and for making tubing and cord. Machine for covering	V. and J. Royle, Jr.	466,910	Jan. 12	986	252	58	197
Wire-clamping device	O. P. Briggs	471,006	Mar. 22	2262	581	58	1567
Wire-cloth. Galvanizing or tinning	C. B. Runsey	474,567	May 10	1104	282	59	861

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wire coiling and cutting machine.....	E. J. Fulghum and L. Roberts.....	483,321	Sept. 27	2294	577	60	1821
Wire-coiling machine.....	W. Edenborn.....	480,564	Aug. 9	1300	326	60	842
Wire-coiling machine.....	W. Edenborn.....	480,565	Aug. 9	1301	326	60	843
Wire-coiling machine.....	A. M. Hartley.....	484,426	Oct. 18	1384	353 354	61	304
Wire cords and cables. Machine for making.....	W. H. H. Sisum.....	477,784	June 28	2498	622 623	59	1973
Wire coupling.....	W. E. Banta.....	484,842	Oct. 25	2073	533	61	458
Wire coupling. Underground.....	J. J. Purcell.....	483,327	Sept. 27	2303	579	60	1823
Wire-covering machine.....	J. A. Barrett.....	486,270	Nov. 15	1746	460	61	962
Wire-covering machine.....	J. A. Barrett.....	486,845	Nov. 29	2664	696 697	61	1173
Wire-drawing machine.....	G. B. Lamb and A. C. Campbell.....	487,844	Dec. 13	999	251 252	61	1537
Wire fabric for bed-bottoms. Machine for making coiled.....	F. L. Bryant.....	482,071	Sept. 6	240	58, 59	60	1382
Wire-fabric machine.....	W. D. Whitney.....	484,528	Oct. 18	1548	393	61	333
Wire fabric. Machine for weaving coiled.....	O. P. Briggs and F. L. Bryant.....	480,007	Aug. 2	381	94 95 96	60	653
Wire-feeding mechanism.....	F. H. Hardman.....	478,598	July 12	825	204	60	179
Wire-gage.....	C. J. Nillor.....	476,057	May 31	3462	874	59	1365
Wire gate.....	C. Berryman.....	479,394	July 26	2071	520	60	446
Wire gate.....	M. W. St. John.....	469,923	Mar. 1	409	103	58	1180
Wire-grip. Lineman's.....	C. A. Kent.....	467,815	Jan. 26	2453	623	58	489
Wire-grip. Lineman's.....	C. A. Svensson.....	486,911	Nov. 29	2811	728	61	1207
Wire-holder.....	A. B. Hendryx.....	469,941	Mar. 1	439	110	58	1185
Wire holder. Coiled.....	A. B. Hendryx.....	467,722	Jan. 26	2311	587	58	462
Wire machine. Barb.....	I. A. Kilmer.....	479,985	Aug. 2	329	81, 82	60	645
Wire. Machine for making ornamental.....	L. Koss.....	488,941	Dec. 27	2784	686 687	61	1926
Wire. Machine to plait.....	O. Preston.....	482,589	Sept. 13	1117	269 270	60	1567
Wire, &c. Manufacture of rubber-coated.....	T. Guilleaume.....	483,110	Sept. 20	1929	489	60	1741
Wire mat.....	H. C. Brittain and P. J. Shrum.....	487,700	Dec. 6	747	191	61	1468
Wire mat.....	J. T. Howarth.....	488,335	Dec. 20	1824	456	61	1717
Wire mat.....	T. C. McPherson.....	475,598	May 24	2727	691	59	1207
Wire mat.....	T. C. McPherson.....	475,599	May 24	2728	691	59	1207
Wire mat.....	T. Midgley.....	482,061	Sept. 6	225	54	60	1379
Wire. Method of and apparatus for coiling and in- serting.....	C. Jackson.....	482,965	Sept. 20	1706	430 431	60	1695
Wire. Method of and apparatus for tempering.....	F. Purdy.....	482,879	Sept. 20	1567	391	60	1668
Wire-netting.....	B. Scarles.....	488,032	Dec. 13	1315	328	61	1600
Wire-netting machine.....	E. S. Bond.....	478,561	July 12	773	189	60	168
Wire-netting machine.....	B. Scarles.....	483,969	Oct. 4	669	168	61	139
Wire-netting machine.....	H. K. Swinscoe.....	483,181	Sept. 27	2050	517 518	60	1776
Wire-netting machine.....	H. K. Swinscoe.....	483,182	Sept. 27	2053	518	60	1777
Wire-netting machines. Detector stop-motion for.....	E. S. Bond.....	484,992	Oct. 25	2318	597 598	61	506
Wire ornaments. Manufacture of.....	M. Haendler.....	472,758	Apr. 12	1152	295	59	230
Wire. Pile.....	C. Ford.....	479,211	July 19	1767	443	60	371
Wire-reel.....	J. W. Buchanan.....	483,830	Oct. 4	467	116	61	96
Wire-reel.....	W. Dolin.....	486,828	Nov. 29	2833	734	61	1208
Wire-reel.....	R. E. Miller and J. D. Bowman.....	481,306	Aug. 23	2533	621	60	1107
Wire reel and stretcher.....	G. E. Dixon.....	476,525	June 7	453	108	59	1526
Wire-reel carrier.....	J. Phleeagar.....	486,538	Nov. 22	2148	567	61	1055
Wire reel holder.....	H. Hanson.....	485,275	Nov. 1	180	53	61	610
Wire reefing and stretching machine.....	J. Harper.....	485,541	Nov. 1	595	159	61	605
Wire-rod mill.....	G. Leiberger.....	486,382	Nov. 15	1913	506 507	61	996
Wire rope. Process of and apparatus for manufactur- ing.....	A. F. W. Partz.....	482,190	Sept. 6	443	107	60	1422
Wire-screen-cloth holder.....	C. Fach and F. Hottes.....	474,577	May 10	1120	286	59	863
Wire shelf-bracket.....	H. L. Bradley.....	472,285	Apr. 5	436	113	59	82
Wire-splicer.....	J. T. Smith and O. T. Lucas.....	487,646	Dec. 6	639	170	61	1482
Wire springs and couplings. Machine for making.....	S. Konz.....	482,427	Sept. 13	855	205	60	1516
Wire springs. Machine for compressing and form- ing the ends of sectional woven.....	D. A. Cobb.....	486,853	Nov. 29	2676	700	61	1176
Wire straightening and cutting machine.....	C. B. Barnard.....	482,000	Sept. 6	121	30	60	1358
Wire-stretcher.....	D. L. Clino.....	469,369	Feb. 23	2283	587	58	997
Wire-stretcher.....	G. A. Dean.....	474,224	May 3	526	128	59	739
Wire-stretcher.....	G. W. Delbridge.....	470,106	Mar. 1	691	170	58	1234
Wire-stretcher.....	J. Dietrich.....	486,221	Nov. 15	1661	439	61	944
Wire-stretcher.....	W. D. Fulbright.....	479,265	July 19	1848	463	60	387
Wire-stretcher.....	J. N. Hatcher.....	482,555	Sept. 13	1073	260	60	1558
Wire-stretcher.....	G. P. Kidd.....	472,927	Apr. 12	1391	356	59	279
Wire-stretcher.....	J. S. Richardson.....	468,991	Feb. 16	1716	436	58	879
Wire-stretcher.....	H. J. Rohr.....	475,892	May 31	3215	813	59	1314
Wire-stretcher.....	C. H. Salisbury.....	466,911	Jan. 12	988	253	58	197
Wire-stretcher.....	H. S. Shaw.....	473,527	Apr. 26	2413	612	59	506
Wire-stretcher.....	J. Spillinger.....	484,061	Oct. 11	807	204	61	180
Wire-stretcher.....	H. Stahl and A. F. Dickey.....	487,101	Nov. 29	3104	796	61	1262
Wire-stretcher.....	C. F. Steinkamp.....	479,901	Aug. 2	190	47	60	619
Wire-stretcher.....	L. W. Stokely.....	485,066	Oct. 25	2429	624	61	528
Wire-stretcher.....	H. H. Van Orner.....	476,338	June 7	176	42	59	1471
Wire-stretcher.....	D. C. Wallace and T. J. Parker.....	471,260	Mar. 22	2513	638	58	1614
Wire stretcher and fastener.....	G. Chamberlain.....	483,320	Sept. 27	2293	577	60	1821
Wire stretcher and splicer.....	J. F. Price.....	484,881	Oct. 25	2127	546	61	468
Wire stretcher and tension device.....	J. B. Cleaveland.....	475,383	May 24	2390	616	59	1143
Wire stretcher or clamp.....	J. M. Klein.....	481,179	Aug. 23	2303	568	60	1065
Wire-stretching device.....	C. H. Dickinson.....	488,729	Dec. 27	2449	608	61	1857
Wire-stretching device.....	F. H. Speed.....	473,528	Apr. 26	2414	612	59	506
Wire-stretching tool.....	G. C. Copper and D. F. Cox.....	485,611	Nov. 8	690	184	61	732

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr. g.	Vol.	Page.
Wire-supporting reel	W. S. Livengood	473,160	Apr. 19	1786	450	59	364
Wire switch. Overhead	A. O. Hoyt and P. W. Leffler	475,504	May 24	2584	658	59	1179
Wire-tension device	A. E. Kintner	476,655	June 7	646	157	59	1565
Wire-tightener	M. Berdan	473,899	May 3	5	2	59	638
Wire-tightener	J. L. Buckingham	468,189	Feb. 2	430	106	58	608
Wire-tightener	J. L. Buckingham	482,035	Sept. 6	184	44	60	1371
Wire-tightener	W. D. Hoyt	471,551	Mar. 29	2939	748	58	1704
Wire-tightener	L. M. Johnson	481,763	Aug. 30	3278	798	60	1267
Wire-twister. Electric	G. D. Burton and E. E. Angell	475,193	May 17	2088	528	59	1068
Wire-twisting tool	A. F. Dickey	471,419	Mar. 22	2756	704	58	1661
Wire-twisting tool	C. A. Underkircher	487,459	Dec. 6	380	99	61	1396
Wire-twisting wrench. Adjustable	C. E. Wintrobe	468,718	Feb. 9	1267	322	58	782
Wire-twisting wrench. Adjustable	C. E. Wintrobe	484,692	Oct. 18	1808	460	61	390
Wire-winding apparatus	F. B. Chase	485,256	Nov. 1	154	45	61	605
Wire with fibrous material. Apparatus for covering	J. Buckner	483,043	Sept. 20	1830	465	60	1721
Wires. Device for joining intersecting	G. M. and H. R. Lamb	472,059	Apr. 5	72	20	59	16
Wires. Seal for leading-in	H. D. Burnett and S. E. Doane	475,998	May 31	3373	850	59	1345
Wires. Swivel pull-off for overhead	C. B. Elliott	476,193	May 31	3688	932	59	1408
Wood and coal box	R. Federroll	478,931	July 12	1323	328	60	277
Wood and leather substitute	C. Heepe	488,809	Dec. 27	2571	638	61	1882
Wood and metal work. Ornamental	A. B. Cameron	473,185	Apr. 19	1844	464	59	373
Wood and other surfaces. Decorating	T. Robinson	470,899	Mar. 15	1958		58	1495
Wood-bending machine	J. Klahr	485,800	Nov. 8	976	262	61	790
Wood burnishing and embossing machine	A. L. Wood	470,612	Mar. 8	1524	397	58	1402
Wood-carving machine	W. R. Snyder	480,524	Aug. 9	1239	{ 311 } { 312 }	60	830
Wood-clamp	E. L. Still	471,909	Mar. 29	3479	889	58	1806
Wood-cutting machine	B. Damus	477,201	June 21	1536	375	59	1771
Wood-cutting machine	W. Merrill	475,881	May 31	3301	809	59	1312
Wood. Cutting plates, dishes, or bowls from	C. Spofford	474,765	May 10	1407	357	59	920
Wood-cutting tool	R. Roberts	479,306	July 19	1906	476	60	398
Wood-decorating machine	A. Tilton and A. Hormel	482,855	Sept. 20	1523	378	60	1660
Wood for seats and backs. Apparatus for and method of gaining	A. E. Preston	476,305	June 7	116	28	59	1461
Wood. Grained soft	J. Shannon	466,376	Jan. 5	107	30, 31	58	23
Wood-graining machine	P. Casey	466,322	Jan. 5	24	5	58	8
Wood-graining machine	W. W. Grier	472,260	Apr. 5	398	103	59	74
Wood-graining machine	J. Shannon	466,804	Jan. 12	802	207	58	162
Wood-graining machine	J. Shannon	474,307	May 3	668	{ 171 } { 172 }	59	765
Wood-grinder	C. Cornwell	469,812	Mar. 1	237	59	58	1147
Wood-joint	J. N. Hieronymus	477,118	June 14	1387	338	59	1727
Wood. Machine for cutting plates or dishes from	C. Spofford	474,766	May 10	1408	{ 357 } { 358 }	59	920
Wood. Manufacture of parquetry or inlaid	H. Stude	484,063	Oct. 11	810	205	61	181
Wood. Means for ornamenting	C. L. Goehring	480,462	Aug. 9	1154	{ 289 } { 290 }	60	812
Wood-molding machine	F. H. Van Houten	480,443	Aug. 9	1117	279	60	805
Wood or other surfaces. Machine for ornamenting	C. M. Clarke	467,155	Jan. 19	1408	{ 359 } { 360 }	58	284
Wood. Process of and machine for bending and drying	R. P. Burkhardt	482,782	Sept. 20	1425	353	60	1639
Wood pulp. Apparatus for cutting wood into disks for use in making	H. Wigger	467,786	Jan. 26	2402	610	58	480
Wood-pulp drainer	G. M. Newhall and C. L. Hamilton	488,399	Dec. 20	1923	482	61	1737
Wood. Roller for graining	J. Shannon	466,377	Jan. 5	108	31	58	23
Wood-splitting machine	C. J. Dante	470,104	Mar. 1	689	169	58	1233
Wood surfaces. Method of and apparatus for graining	J. Shannon	471,698	Mar. 29	3156	805	58	1743
Wood to prevent decay. Treating	M. A. Luckenbach	473,705	Apr. 26	2710	682	59	563
Wood. Tool for ornamenting the surfaces of	C. M. Haynes	481,868	Aug. 30	3447	846	60	1299
Wood-trimming machine	C. Neracher. (Reissue)	11,286	Nov. 22	2651	692	61	1156
Wood-turning machine	A. Stoner and F. M. Pennebaker	476,696	June 7	703	{ 173 } { 173 }	59	1576
Wooden knobs. Machine for fluting	E. G. and W. Hess	474,383	May 10	807	211	59	804
Wooden pipe	A. M. Hawks	478,105	July 5	43	13	60	11
Wooden vessel	E. M. Reese	486,737	Nov. 22	2472	645	61	1120
Woodworkers. Work-holder and safety-guard for universal	J. C. Thom	481,923	Sept. 6	93	24	60	1353
Woodwork-joint	G. Brinkerhoff	475,997	May 31	3372	850	59	1345
Woodworking-machine	L. Luger	475,782	May 31	3014	764	59	1276
Woodworking-machine	J. H. Reed	467,629	Jan. 26	2153	{ 547 } { 548 }	58	433
Woodworking-machine	J. H. Reed	467,899	Jan. 26	2590	656	58	515
Woodworking-machine	F. Rich and N. Sondag	468,897	Feb. 16	1539	392	58	844
Woodworking-machine fence	G. W. Bugbee and F. Danner	480,902	Aug. 16	1839	457	60	963
Woodworking-machines. Feed-roller for	J. Davis	483,711	Oct. 4	281	70	61	59
Wool. Apparatus for removing vegetable matter from	L. Kern	469,788	Mar. 1	193	50	58	1138
Wool, &c. Apparatus for treating	G. L. P. Eyre and T. J. Hopkins	475,106	May 17	1958	496	59	1041
Wool-clipping machine	J. Howard and J. H. Geddis	471,425	Mar. 22	2764	705	58	1662
Wool-drier	J. R. and J. M. Mellor	470,582	Mar. 3	1475	384	58	1391
Wool. Extracting fat from	W. T. Cutter	482,995	Sept. 20	1754	443	60	1704
Wool or other material by the use of steam or other fluid. Apparatus for cleansing	R. J. Gatling	469,822	Mar. 1	254	65	58	1150
Wool-washing machine	W. T. Forbes	478,419	July 5	555	134	60	108
Wool-washing machine	F. G. and A. C. Sargent	468,453	Feb. 9	848	{ 214 } { 215 }	58	698
Wool-washing machine	F. G. and A. C. Sargent	480,283	Aug. 9	858	219	60	759
Woolen boot	W. H. Dodge and E. D. O. Smith	479,251	July 19	1830	459	60	383
Work-box	C. Weiss	479,728	Mar. 15	1694	437	58	1444
Work-box. Lady's	T. Harper	469,138	Feb. 16	1916	490	58	920
Work-holder and drill. Combined	J. A. Chabot and J. Jacobs	475,664	May 24	2826	715	59	1227
Work-holding device	L. Goddu	475,729	May 24	2933	744	59	1245

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Work-stand, desk, game-board, and table. Combined.	J. L. Isaacs	481,718	Oct. 18	1841	468	61	397
Worm and worm-shaft.	O. J. Beale	472,517	Apr. 12	102	206	59	165
Wort. Apparatus for the preparation of.	C. Rach	469,718	Mar. 1	72	21	58	1112
Wort. Method of and apparatus for producing.	G. Sobotka and A. Kliemetschek	470,902	Mar. 15	1963	502	58	1496
Woven fabric.	L. H. Marsden and J. H. Frost	484,537	Oct. 18	1564	398	61	340
Woven fabric.	I. McCallum	475,466	May 24	2519	642	59	1167
Woven fabric.	I. McCallum	480,855	Aug. 16	1764	441	60	949
Woven fabric.	A. Urbahn	474,883	May 17	1604	410	59	973
Woven fabric and weaving the same.	G. H. Harvey	472,216	Apr. 5	330	85	59	62
Woven fabric. Elastic.	M. Picot	484,977	Oct. 25	2292	591	61	500
Woven fabric. Figured.	A. and J. Morton	483,078	Sept. 20	1878	476	60	1731
Woven fabric. Tubular.	B. L. Stowe	486,620	Nov. 22	2291	597	61	1082
Woven fabric. Tubular.	B. L. Stowe	486,621	Nov. 22	2292	598	61	1082
Woven fabric. Tufted.	A. Bollentin	468,051	Feb. 2	217	53	58	567
Woven fabrics. Machine for finishing.	A. T. Clay	488,787	Dec. 27	2538	630	61	1875
Woven tufted fabric.	A. Bollentin	467,633	Jan. 26	2160	549	58	434
Wrapper.	J. J. Cochran	481,846	Aug. 30	3414	838	60	1293
Wrapping-machine	M. E. Brigham	478,396	July 5	518	{ 127 128 195 196 197 }	{ 60 60 60 60 60 }	{ 102 102 729 729 757 }
Wrapping-machine	C. R. Schilling	480,239	Aug. 2	773	{ 197 198 199 }	{ 60 60 60 }	{ 729 729 757 }
Wrapping-machine	S. D. Tripp	472,202	Apr. 5	303	79, 80	59	57
Wrecking-boat	A. McDougall	488,574	Dec. 27	2306	546	61	1810
Wrecking-frog.	W. H. Wilmore	471,927	Mar. 29	3508	896	58	1812
Wrecking-machine or stump-extractor	J. Cornelius	468,644	Feb. 9	1148	{ 292 293 }	{ 58 58 }	{ 757 757 }
Wrench:							
See Carriage-wrench.	Pipe and rod wrench.						
Chain-wrench.	Railway-track wrench.						
Flange-wrench.	Ratchet-wrench.						
Nut-wrench.	Rigid and ratchet wrench.						
Nut and bolt wrench.	Socket wrench.						
Nut or pipe wrench.	Wheel-wrench.						
Pipe-wrench.	Wire-twisting wrench.						
Pipe and nut wrench.							
Wrench	R. Belles	480,801	Aug. 16	1684	420	60	932
Wrench	H. Bornstein	479,698	July 26	2566	638	60	539
Wrench	P. Brolin	484,288	Oct. 11	1164	296	61	250
Wrench	W. E. Brooke	4-6,758	Nov. 22	2508	655	61	1127
Wrench	A. B. Carll	474,810	May 17	1487	380	59	950
Wrench	D. H. Carpenter	467,151	Jan. 19	1403	358	58	283
Wrench	D. H. Carpenter	486,764	Nov. 22	2517	657	61	1128
Wrench	D. H. Carpenter	487,087	Nov. 29	3081	791	61	1257
Wrench	H. P. Christensen and H. Nelson	478,405	July 5	535	130	60	105
Wrench	W. Church	474,987	May 17	1776	449	59	1005
Wrench	G. J. Cline	466,456	Jan. 5	237	61	58	45
Wrench	E. A. Cochran	481,389	Aug. 23	2661	652	60	1130
Wrench	S. Cook	485,152	Oct. 25	2557	657	61	555
Wrench	A. J. Curtis	486,697	Nov. 22	2417	630	61	1108
Wrench	P. G. Douglas	468,241	Feb. 2	500	122	58	623
Wrench	J. S. Erenitt	471,539	Mar. 29	2922	744	58	1701
Wrench	T. A. Ferguson	468,648	Feb. 9	1156	295	58	759
Wrench	C. C. Fields and W. S. Duvall	484,307	Oct. 11	1200	306	61	257
Wrench	L. L. Folk, J. W. Nairn, and L. H. Dempsey	483,803	Oct. 4	421	104	61	88
Wrench	P. Gendron	476,629	June 7	610	146	59	1558
Wrench	R. S. Gillespie and H. James	481,110	Aug. 16	2177	539	60	1027
Wrench	G. W. Ginger	471,855	Mar. 29	3411	870	58	1792
Wrench	J. H. Gregory	488,431	Dec. 20	1976	493	61	1747
Wrench	J. H. Guiley and J. E. Wright	482,245	Sept. 6	527	125	60	1437
Wrench	W. H. Haire	469,562	Feb. 23	2590	663	58	1056
Wrench	S. E. Hall	466,564	Jan. 5	410	{ 104 105 }	{ 58 58 }	{ 79 79 }
Wrench	H. Hammond. (Reissue)	11,277	Oct. 18	1933	491	61	418
Wrench	M. Horrigan	468,177	Feb. 2	410	101	58	604
Wrench	A. Hullinger	469,701	Mar. 1	47	15	58	1107
Wrench	L. C. Hurd	474,741	May 10	1374	348	59	913
Wrench	S. Hussey	475,450	May 24	2491	635	59	1161
Wrench	J. C. Johnson	483,222	Sept. 27	2112	535	60	1788
Wrench	F. B. Jordan	476,465	June 7	367	85	59	1508
Wrench	C. Leach	473,007	Apr. 19	1534	391	59	318
Wrench	J. A. Litel	483,461	Sept. 27	2483	625	60	1859
Wrench	A. K. Lovell	476,767	June 7	807	199	59	1598
Wrench	B. B. Lowe	474,477	May 10	955	246	59	831
Wrench	B. McGilvray	481,506	Aug. 23	2848	700	60	1168
Wrench	A. W. Miles and E. A. Commander	484,218	Oct. 11	1049	265	61	272
Wrench	W. Miller and W. S. Duvall	478,121	July 5	65	17	60	15
Wrench	F. Mossberg	4-2,021	Sept. 6	164	39	60	1367
Wrench	F. Mossberg	482,749	Sept. 20	1370	339	60	1628
Wrench	W. F. Parsons and A. Davis	467,381	Jan. 19	1748	446	58	348
Wrench	O. E. H. N. Reichling	485,657	Nov. 8	776	206	61	747
Wrench	E. W. Rider	477,228	June 21	1587	389	59	1719
Wrench	S. B. Rittenhouse	474,566	May 10	1103	282	59	861
Wrench	J. Ryan	476,079	May 31	3494	881	59	1372
Wrench	J. Ryan	482,198	Sept. 6	453	110	60	1424
Wrench	G. W. Scheid	4-6,300	Nov. 15	1790	470	61	971
Wrench	F. W. Simmons	476,693	June 7	700	171	59	1576
Wrench	J. B. Smith	473,026	Apr. 19	1567	399	59	325
Wrench	G. B. Stevenson	4-2,281	Sept. 6	529	140	60	1449
Wrench	J. J. Tomey	476,841	June 14	942	329	59	1638
Wrench	W. J. Walker	470,626	Mar. 8	1539	401	58	1404
Wrench	D. C. Wiest	488,158	Dec. 13	1526	383	61	1643
Wrench	J. A. Zander	473,048	Apr. 19	1602	408	59	330

Alphabetical list of inventions—Continued.

Invention.	Name.	No.	Date.	Monthly volume.		Official Gazette.	
				Spec.	Dr'g.	Vol.	Page.
Wrench and screw-driver. Combined	W. E. Brooke	486,759	Nov. 22	2510	655	61	1127
Wringer:							
See Clothes-wringer. Mop-wringer.							
Wringer gear-guard	L. Momburg and W. F. Dallmann ..	484,970	Oct. 25	2275	587	61	498
Wringing and mangling machine	W. Dore and J. P. Tapley	486,222	Nov. 15	1662	439 440	61	944
Wringing-machine	J. W. Finegan	480,457	Aug. 9	1149	288	60	811
Writing and drawing device	J. J. Pauls	478,129	July 5	73	19	60	17
Writing device	A. M. Nelson	488,945	Dec. 27	2793	689	61	1928
Writing. Device for holding and guiding the fingers in	A. D. Jolly	471,556	Mar. 29	2943	749	58	1705
Writing-pad	I. Smigel	471,293	Mar. 22	2561	650	58	1623
Wrist-plate	J. Barclay	473,810	Apr. 26	2864	719	59	594
Yard-stick holder	E. R. Northam	481,188	Aug. 23	2318	571	60	1068
Yarn-clearer	J. M. Weaver	477,031	June 14	1248	302	59	1700
Yarn from scutched flax. Manufacturing	J. V. Eves	487,875	Dec. 13	1055	264	61	1547
Yarn from waste. Manufacturing	D. E. Coe	466,457	Jan. 5	237	.....	58	45
Yarn-winding machines. Yarn-cleaning and fly-collecting device for	C. Häming	468,055	Feb. 2	223	54, 55	58	568
Yarns. Machine for printing	G. Marchetti and H. Crossley	471,561	Mar. 29	2949	751 752	58	1706
Yeast. Apparatus for and method of separating and assorting	G. Sobotka	471,689	Mar. 29	3142	801	58	1741
Yeast-cells. Separating	R. Allert	479,130	July 19	1641	410	60	347
Yeast. Making	J. Blumer and C. Schlagenhauser ..	474,943	May 17	1695	.....	59	991
Yeast. Manufacture of	J. Blumer and C. Schlagenhauser ..	474,942	May 17	1693	.....	59	991
Yeast or similar substances. Apparatus for the production of	A. Jorgensen and A. Bergh	467,993	Feb. 2	133	32	58	549
Yeast. Process of and apparatus for manufacturing pure	G. Guignard	471,335	Mar. 22	2618	664 665	58	1635
Yeast. Separating and assorting	G. Sobotka	471,688	Mar. 29	3140	800	58	1740
Yeast. Washing	A. Kliemetschek	470,361	Mar. 8	1146	293	58	1327
Yoke. Adjustable neck	J. B. Lineback	470,320	Mar. 8	1069	272	58	1314
Yoke-attaching device for vehicle-poles. Neck.	J. L. Cox	469,432	Feb. 23	2379	610	58	1016
Yoke. Draft	C. W. Snedeker	479,535	July 26	2317	579	60	493
Yoke. Neck	J. S. Brown	487,112	Nov. 29	3120	800	61	1265
Yoke. Neck	M. Gadberry	466,406	Jan. 5	147	40	58	30
Yoke. Neck	J. F. Kellogg	471,643	Mar. 29	3068	780	58	1727
Yoke. Neck	F. W. Kline and G. G. Thomas ..	487,277	Dec. 6	62	19	61	1334
Yoke. Neck	J. Mallon	474,749	May 10	1384	350	59	915
Yoke. Neck	L. W. Rothrock	481,825	Aug. 30	3386	830	60	1287
Yoke. Neck	G. H. Young	475,841	May 31	3128	792	59	1297
Yoke. Neck	J. Ziegler	481,996	Sept. 6	114	28	60	1357
Yucca fiber. Method of and apparatus for treating	J. C. Best and G. W. Anderson ..	467,493	Jan. 26	1925	492	58	392
Zinc-foil and manufacturing the same	A. Sichel ..	473,790	Apr. 26	2835	.....	59	588
Zinc-foil and manufacturing the same	A. Sichel. (Reissue.) ..	11,241	May 24	2956	.....	59	1250
Zinc from sulphate of zinc by electrolysis. Obtaining metallic	T. Lange	475,402	May 24	2414	616	59	1147
Zinc-furnace	O. Sumaghi	483,934	Oct. 4	612	155	61	126
Zinc-furnace	H. G. Tessmer	469,104	Feb. 16	1873	479	58	911
Zinc or spelter from ores. Reducing	C. James	478,110	July 5	48	.....	60	12
Zinc plates to their bed. Device for straining	E. S. Jones	478,607	July 12	838	206	60	182
Zinc. Producing metallic	P. C. Choate	473,186	Apr. 19	1844	464	59	373
Zinc. Reducing	C. James	482,438	Sept. 13	872	.....	60	1519
Zinc. Reducing	C. James	483,652	Oct. 4	200	.....	61	41
Zither	V. Bessier	477,493	June 21	2013	499	59	1861
Zither	C. Buckner	466,878	Jan. 12	936	240	58	187
Zither attachment	P. Stark and K. Gütter	480,750	Aug. 16	1603	402	60	917

ALPHABETICAL LIST OF DESIGNS.

Design.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
Advertising-coupon	G. H. Drew	21,584	May 31	59	1424
Advertising game-board	R. G. Martindale	21,679	July 5	60	150
Andiron	E. T. Schoonmaker	21,726	July 19	60	432
Badge	C. A. Ball	21,643	June 21	59	1912
Badge	C. A. Ball	21,644	June 21	59	1912
Badge	M. C. Barbero	21,585	May 31	59	1424
Badge	J. Best	21,859	Sept. 13	60	1606
Badge	W. F. Bowen	21,443	Apr. 5	59	152
Badge	N. S. Boynton	21,975	Nov. 8	61	878
Badge	W. Connolly and A. A. Sealy	21,885	Oct. 11	61	281
Badge	J. K. Davison	21,688	July 5	60	152
Badge	H. F. G. Fuchs	21,898	Oct. 18	61	419
Badge	E. Gash	21,758	Aug. 9	60	887
Badge	A. T. Hatch	21,875	Oct. 4	61	145
Badge	D. Heer	21,574	May 24	59	1252
Badge	C. F. Irons	21,512	May 3	59	784
Badge	W. K. Kubin	21,573	May 24	59	1252
Badge	E. L. Miller	21,899	Oct. 18	61	419
Badge	W. B. Munger	21,846	Sept. 6	60	1472
Badge	C. Pettibone	21,886	Oct. 11	61	281
Badge	R. A. Piaget	21,642	June 21	59	1912
Badge	R. F. Y. Pierce and O. W. Spratt	21,308	Jan. 19	58	280
Badge	L. J. Pitkin	22,038	Dec. 6	61	1471
Badge	G. B. Rand	21,790	Aug. 23	60	1182
Badge	L. Reichert	21,779	Aug. 16	60	1045
Badge	E. M. Requa	21,618	June 7	59	1601
Badge	E. H. Richards	21,640	June 21	59	1911
Badge	E. H. Richards	21,641	June 21	59	1911
Badge	J. F. Roche	21,704	July 12	60	291
Badge	W. P. Sackett	21,394	Mar. 8	58	1262
Badge	G. A. Schlechter	21,745	Aug. 2	60	730
Badge	G. A. Schlechter	21,866	Sept. 27	60	1879
Badge	M. C. Shafer	21,951	Nov. 1	61	717
Badge	J. L. Terhune	21,608	June 7	59	1600
Badge. Campaign-	H. W. Welles	21,814	Aug. 30	60	1320
Badge or charm	H. F. Creelins	21,368	Mar. 8	58	1262
Badge or medal	D. J. Cohen	21,411	Mar. 22	58	1561
Badge or similar article	G. H. Reinmangel	21,744	Aug. 2	60	731
Baker. Potato-	C. H. Beeman	21,597	May 31	59	1476
Baking-pan	G. B. Gifford	21,754	Aug. 2	60	1880
Balloon	T. B. Dixey	21,874	Sept. 27	60	1880
Banner	J. M. Joy	21,927	Oct. 25	61	560
Banner	J. W. MacNamara	21,373	Mar. 8	58	1262
Bar-pin	E. H. Croninger	22,073	Dec. 20	61	1783
Basin slabs. Standard for wash.	J. Totham	21,724	July 19	60	431
Bath-tub	E. Seyler	21,436	Mar. 29	58	1698
Bedstead	F. E. Wilcox	21,856	Sept. 13	60	1605
Bedsread or similar article	F. B. Heald	21,535	May 10	59	935
Bicycler's bag	S. B. Gilhuly	22,057	Dec. 13	61	1650
Bird-cage	J. H. Andrews	21,569	May 24	59	1252
Book-rest and holder for umbrellas, &c.	C. Pegler	22,010	Nov. 22	61	1159
Boot. Lady's	H. C. Richardson	21,954	Nov. 1	61	717
Bottle	G. W. Bean	21,553	May 24	59	1250
Bottle	J. P. Cherry	21,500	Apr. 20	59	624
Bottle	J. L. Dawes	21,412	Mar. 22	58	1561
Bottle	C. E. Gauline	21,390	Mar. 8	58	1262
Bottle	J. B. Grommes	21,826	Aug. 30	60	1322
Bottle	L. Kahn	21,669	June 28	59	2065
Bottle	B. I. Mott	21,711	July 12	60	232
Bottle	M. Oberfelder	21,509	Apr. 26	59	625
Bottle	M. A. Oliver	21,279	Jan. 5	58	1
Bottle	C. Richter	21,495	Apr. 19	59	458
Bottle	F. S. and F. B. Rockwood	22,058	Dec. 13	61	1650
Bottle	G. O. Sanboru	21,524	May 10	59	934
Bottle	O. G. Sercombe	21,375	Mar. 8	58	1262
Bottle	C. A. Tatnum	21,285	Jan. 5	58	1
Bottle	F. H. Thuemler	21,736	July 26	60	571
Bottle	G. K. West	21,278	Jan. 5	58	1
Bottle	M. A. Oliver	21,280	Jan. 5	58	1
Bottle. Nursing-	G. R. Schimmel	22,052	Dec. 6	61	1473
Bottle or flask	W. T. Murphy	22,085	Dec. 27	61	1941
Bottle. Pocket-	H. N. Fraser	21,728	July 19	60	432
Bowl	J. D. Bergen	21,681	July 5	60	150
Bowl. Sugar-	G. Wilkinson	21,755	Aug. 2	60	731
Bowl. Sugar-	H. Berry	21,921	Oct. 25	61	560
Box	H. Berry	21,922	Oct. 25	61	560
Box	M. J. Bogert	21,303	Jan. 19	58	280
Box	E. L. Bufton	21,796	Aug. 23	60	1183
Box	C. L. Dobrick	21,840	Sept. 6	60	1472
Box	W. C. Estes	21,289	Jan. 12	58	147
Box	W. C. Estes	21,762	Aug. 9	60	887

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Box	C. W. Meinecke	21,372	Mar. 8	58	1262
Box	L. Schwarz	21,955	Nov. 1	61	717
Box-cover	S. D. Lux	21,923	Oct. 25	61	560
Bracket-arm	A. W. Allen	22,055	Dec. 6	61	1473
Bread-pan	T. H. Murphy and P. M. Zoeggele	21,710	July 12	60	292
Breastpin	H. A. Pistorius	22,081	Dec. 27	61	1940
Bretzel	J. Pfenninger	21,450	Apr. 5	59	152
Brick or building-block	J. Crossley	21,631	June 21	59	1911
Brick or stone	F. Laplante	22,076	Dec. 20	61	1783
Bridle-bit frame	W. W. Hall	21,872	Sept. 27	60	1880
Brooch-pin	T. Tugby	21,759	Aug. 9	60	887
Broom-rack	P. E. Whitson and O. G. Nosker	21,708	July 12	60	291
Brush or hand-mirror. Back for a	H. A. Weihman	21,629	June 21	59	1910
Brushes, &c. Backs for	G. L. Crowell, Jr.	21,709	July 12	60	292
Brushes or similar articles. Backs of	C. C. Wientge	21,847	Sept. 6	60	1473
Bucket-ear	L. D. Berger	21,567	May 24	59	1251
Buckle	G. E. Adams	21,363	Feb. 23	58	952
Buckle	L. B. Prabhar	21,384	Mar. 8	58	1262
Buckle	L. B. Prabhar	21,392	Mar. 8	58	1262
Buckle	L. B. Prabhar	21,448	Apr. 5	59	152
Buckle	J. A. Trant	21,517	May 3	59	784
Buckle	U. F. Schaeffer	21,395	Mar. 8	58	1262
Buckle. Suspender	C. R. Harris	21,791	Aug. 23	60	1182
Building-block	E. H. Lewis	21,522	May 10	59	933
Burial-casket	J. D. Ripson	21,339	Feb. 9	58	658
Burial-casket	L. K. Smedes	21,582	May 24	59	1253
Bust of Columbus. Relief	E. H. Hirner	22,005	Nov. 22	61	1159
Button	A. A. Brunswick	21,449	Apr. 5	59	152
Button, &c.	A. A. Bushee	21,869	Sept. 27	60	1879
Button	L. Prange	{ 21,314 } to { 21,323 }	Jan. 26	58	390
Button	W. J. Van Keuren	21,843	Sept. 6	60	1472
Button. Campaign	W. S. How	21,815	Aug. 30	60	1320
Button. Campaign	R. Liebmann	21,729	July 19	60	432
Button. Cuff	J. A. Bidwell	21,902	Oct. 18	61	419
Button, &c. Cuff	E. T. Corby	21,586	May 31	59	1424
Button-hook	C. Wester	21,792	Aug. 23	60	1182
Calendar and inkstand holder	E. A. Hemphill	21,587	May 31	59	1424
Cane	T. W. Gardner	22,009	Nov. 22	61	1150
Cane-handle	F. S. Evans	21,784	Aug. 23	60	1181
Cane-handle	G. W. Scott	21,976	Nov. 8	61	879
Cane or umbrella handle	A. Rosenstein	{ 21,350 } to { 21,356 }	Feb. 16	58	810
Cane or umbrella handle	A. Rosenstein	21,361	Feb. 23	58	952
Cap	M. S. Brundage	21,712	July 12	60	292
Cape	A. Frank	22,041	Dec. 6	61	1471
Car body. Railway	R. I. Sloan and R. D. Gallagher	21,824	Aug. 30	60	1321
Car interiors. Ornamentation of	A. Rapp	21,996	Nov. 15	61	1011
Carpet	W. F. Brown	21,994	Nov. 15	61	1011
Carpet	P. C. Chambellan	21,829	Aug. 30	60	1322
Carpet	H. T. George	21,857	Sept. 13	60	1605
Carpet-stretcher	J. A. and M. A. Irwin	21,674	June 28	59	2066
Carriage-body	A. T. Demarest	21,773	Aug. 9	60	889
Carriage-body	C. H. Palmer, Jr.	21,935	Oct. 25	61	561
Carriage-step	W. R. Wilson	21,780	Aug. 16	60	1045
Castanet	G. W. Hull	21,953	Nov. 1	61	717
Chain. Watch	D. L. Fry	21,689	July 5	60	152
Chain. Watch	A. Rickert	21,426	Mar. 22	58	1561
Chain. Watch	A. Rickert	21,557	May 24	59	1250
Chair	A. Casiraghi	22,088	Dec. 27	61	1942
Chair	Z. Nuttall	21,849	Sept. 6	60	1473
Chair	A. Thonet	22,012	Nov. 22	61	1160
Chair	A. Thonet	22,022	Nov. 29	61	1308
Chair	A. Thonet	22,023	Nov. 29	61	1308
Chair	F. K. Ward	21,503	Apr. 26	59	624
Chandelier-pendant	M. A. Smail	21,543	May 17	59	1098
Cigar and match holder	H. R. H. Nicholas	21,991	Nov. 15	61	1010
Cigar-tray	G. H. Wilcox	21,670	June 28	59	2065
Clasp	S. Baxter	21,845	Sept. 6	60	1472
Clasp	J. A. Trant	21,400	Mar. 15	58	1420
Cloak	A. Popkin	21,828	Aug. 30	60	1322
Clock-case	A. Merritt and E. F. Ancaigne	22,011	Nov. 22	61	1159
Clutch-frame	H. W. Hill	21,767	Aug. 9	60	888
Coffee-mill box	C. Morgan and M. Redlinger, Jr.	21,619	June 7	59	1601
Coffin-handle	O. McCarthy	21,499	Apr. 26	59	624
Coffin-handle	O. McCarthy	21,775	Aug. 9	60	889
Coffin-pedestal	L. G. Kregel	21,757	Aug. 2	60	731
Coffin-plate	O. McCarthy	21,508	Apr. 26	59	625
Coffin-plate	O. McCarthy	21,774	Aug. 9	60	889
Coffin-trimmings	W. E. Stevens	{ 21,359 } to { 21,360 }	Feb. 23	58	952
Coin-operated machine-case	J. B. Lighton	22,080	Dec. 20	61	1784
Collar. Dog	T. W. Bryant	21,344	Feb. 16	58	800
Columns. Casing for urania	L. Schupmann	21,865	Sept. 27	60	1879
Comb-case	T. J. Whitney	21,456	Apr. 12	59	292
Confection	D. E. Mapother	21,760	Aug. 9	60	887
Corkscrew	C. Puddfoot	21,761	Aug. 9	60	887
Cornice	A. Carlewitz	21,579	May 24	59	1253
Cornice	A. Carlewitz	21,560	May 24	59	1253
Cornice	A. Carlewitz	21,623	June 21	59	1910
Cornice	A. Carlewitz	21,624	June 21	59	1910
Cornice	A. Carlewitz	21,731	July 19	60	432

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Corset.....	S. Bryant.....	21,544	May 17	59	1099
Corset.....	D. Kops.....	21,978	Nov. 8	61	879
Corset.....	D. H. Warner.....	21,883	Oct. 4	61	146
Corset.....	D. H. Warner.....	21,884	Oct. 4	61	146
Couch, lounge, or sofa.....	R. S. Wright.....	21,362	Feb. 23	58	952
Counter wall-fixture.....	W. C. Hnss.....	21,907	Oct. 18	61	420
Counter wall-fixture.....	W. C. Hnss.....	21,979	Nov. 8	61	879
Cracker, Teething.....	W. L. Johnson.....	21,337	Feb. 9	58	658
Cream-skimmer.....	F. K. Ward.....	21,418	Mar. 22	58	1561
Crib or cradle body.....	F. C. Hannahs.....	21,530	May 10	59	934
Crib or cradle body.....	F. C. Hannahs.....	21,531	May 10	59	935
Cribbage-board.....	G. U. Wills.....	21,376	Mar. 8	58	1262
Cnff-holder stand.....	H. C. Frank.....	21,876	Oct. 4	61	145
Cup.....	C. E. Haviland.....	21,686	July 5	60	151
Curtain-pole.....	C. Hussey.....	22,078	Dec. 20	61	1783
Curtain-pole bracket.....	C. W. Smith.....	21,930	Oct. 25	61	561
Curtain-pole bracket.....	C. W. Smith.....	21,931	Oct. 25	61	561
Curtain-pole bracket.....	C. W. Smith.....	21,932	Oct. 25	61	561
Curtain-roller bracket.....	M. J. Matthews.....	21,929	Oct. 25	61	561
Cuspidor.....	E. Gérard.....	21,324	Feb. 9	58	526
Cuspidor.....	G. Semler.....	21,358	Feb. 23	58	952
Cutlery-handle.....	H. P. Fairchild.....	21,413	Mar. 22	58	1561
Decorative fabric.....	S. M. Schwab, Jr.....	21,734	July 26	60	570
Decorative fabric.....	S. M. Schwab, Jr.....	21,735	July 26	60	570
Dental cabinet.....	J. O. Keller.....	21,666	June 28	59	2065
Dental punch.....	C. E. Blake, Sr.....	21,771	Aug. 9	60	888
Desk-railing.....	A. C. Hough.....	22,024	Nov. 29	61	1308
Dial.....	A. L. Billings.....	22,054	Dec. 6	61	1473
Dial for clocks and watches.....	F. D. Longenhelt.....	21,290	Jan. 12	58	147
Dilator. Rectal.....	F. E. Young.....	21,551	May 17	59	1099
Dish.....	E. Gérard.....	21,989	Nov. 15	61	1010
Dish.....	C. E. Haviland.....	21,381	Mar. 8	58	1262
Dish.....	A. A. Lanternier.....	21,388	Mar. 8	58	1262
Dish.....	E. Pouyat.....	21,406	Mar. 15	58	1420
Dish.....	J. Slater.....	21,309	Jan. 19	58	280
Dish.....	C. H. Treat and A. B. Banghart.....	21,583	May 24	59	1253
Dish. Cover.....	C. E. Haviland.....	21,687	July 5	60	151
Dishes. Ornamentation of.....	E. Gérard.....	21,668	June 28	59	2065
Dress. Dancing.....	M. L. Fuller.....	21,458	Apr. 12	59	292
Dress. Dancing.....	M. L. Fuller.....	21,526	May 10	59	934
Dress. Dancing.....	M. L. Fuller.....	21,527	May 10	59	934
Dress. Dancing.....	E. C. Hoffman.....	21,609	June 7	59	1600
Dress-shield.....	I. B. Kleinert.....	21,310	Jan. 26	58	390
Dress-shield.....	A. P. and H. P. Rindskopf.....	21,662	June 28	59	2064
Drip-cup.....	H. A. Runkle.....	21,590	May 31	59	1425
Dynamo-frame. Electric.....	G. B. Fraley.....	21,906	Oct. 18	61	420
Easel.....	T. Hummel, Jr.....	21,665	June 28	59	2064
Edging.....	W. H. Jenkins, J. and J. Grist.....	21,276	Jan. 5	58	1
Electric-machine frame.....	A. Schmid.....	21,416	Mar. 22	58	1561
Electric-motor frame.....	B. D. Southard.....	21,981	Nov. 8	61	880
Electric-motor frame.....	P. Wuest, Jr.....	21,630	June 21	59	1910
Electric or other lights. Globe for.....	F. Hornmann.....	21,391	Mar. 8	58	1262
Engine-frame.....	D. Best.....	21,545	May 17	59	1099
Engine-frame.....	D. Best.....	21,887	Oct. 11	61	281
Envelope.....	F. Fyles.....	21,277	Jan. 9	58	1
Escutcheon-plate.....	M. Schwendner.....	22,025	Nov. 29	61	1308
Ewer.....	C. A. May.....	21,591	May 31	59	1425
Ewer or jug.....	D. F. Haynes.....	{ 21,306 } { 21,307 }	Jan. 19	58	280
Fabric.....	A. Scheffner, Jr.....	21,343	Feb. 16	58	809
Fabric.....	E. Stumpf.....	21,342	Feb. 16	58	809
Fabrics. Ornamentation of.....	H. Sturm.....	21,795	Aug. 23	60	1183
Fan.....	M. Carranza.....	22,072	Dec. 20	61	1783
Finger-ring.....	J. A. Dawley.....	21,691	July 5	60	152
Finger-ring.....	J. H. Fink.....	21,926	Oct. 25	61	560
Finger-ring.....	G. Linde.....	21,371	Mar. 8	58	1262
Finger-ring.....	P. Verpillier.....	21,570	May 24	59	1252
Fire-alarm box. Auxiliary.....	J. Sachs.....	22,090	Dec. 27	61	1942
Fireplace-front.....	W. E. Fitch.....	21,444	Apr. 5	59	152
Fireplace-front.....	R. M. Hovey.....	21,725	July 19	60	432
Fireplace-heater.....	J. J. Richardson.....	21,515	May 3	59	784
Fishing-reel.....	A. B. Hendryx.....	21,546	May 17	59	1099
Flag.....	J. W. MacNamara.....	21,788	Aug. 23	60	1182
Flask.....	I. N. Hannold.....	21,382	Mar. 8	58	1262
Floral lapel ornament.....	H. F. G. Fuchs.....	21,690	July 5	60	152
Fringe.....	J. Loeb.....	21,661	June 28	59	2064
Fringe.....	A. C. Maurer.....	22,049	Dec. 6	61	1472
Fur trimming.....	A. Hart.....	21,547	May 17	59	1099
Furnace.....	W. L. Culver.....	21,467	Apr. 19	59	455
Galloon.....	C. Weinberg.....	21,516	May 3	59	784
Game-board.....	M. E. Cameron.....	21,880	Oct. 4	61	146
Game-board.....	S. F. Redheffer.....	21,415	Mar. 22	58	1561
Game-board.....	A. M. Warner.....	21,401	Mar. 15	58	1420
Garment.....	E. Young.....	21,564	May 24	59	1251
Gas-retorts. Mouth-piece for.....	C. L. Rowland.....	21,435	Mar. 29	58	1698
Gate.....	H. R. Van Eps.....	21,502	Apr. 26	59	624
Gimp.....	I. H. Leiter.....	21,532	May 10	59	935
Glass dish.....	B. Bennett and H. S. McKee.....	21,620	June 14	59	1756
Glass dishes. Ornamentation of.....	W. C. Anderson.....	21,364	Mar. 8	58	1262
Glass vessel.....	D. E. Mapother.....	22,075	Dec. 20	61	1783
Glass vessel.....	J. Proeger.....	22,001	Nov. 22	61	1158
Glass vessels. Ornamentation of.....	T. G. Hawkes.....	21,705	July 12	60	291
Glass vessels. Ornamentation of.....	L. A. Rose.....	21,727	July 19	60	432
Glassware. Ornamentation of.....	J. S. O'Connor.....	21,424	Mar. 22	58	1561

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Glassware. Ornamentation of	H. Siegel	21,333	Feb. 2	58	526
Glassware. Ornamentation of	W. A. Wood	21,466	Apr. 12	59	293
Glove	J. Kayser	21,918	Oct. 25	61	559
Hall-rack	J. M. Winteringer	21,282	Jan. 5	58	1
Hammock	I. E. Palmer	21,434	Mar. 29	58	1698
Handle for button-hooks, &c	H. P. Fairchild	{ 21,403 21,404 }	Mar. 15	58	1420
Handle for canes	W. Harvey and E. Osborn	22,083	Dec. 27	61	1941
Handle for canes, &c	H. B. Snyder	22,069	Dec. 20	61	17-2
Handle for canes, &c	H. B. Snyder	22,070	Dec. 20	61	1782
Handle for cutlery, &c	W. W. Hayden	21,809	Aug. 30	60	1320
Handle for cutlery, &c	W. W. Hayden	21,810	Aug. 30	60	1320
Handle for cutlery, &c	W. W. Hayden	21,811	Aug. 30	60	1320
Handle for cutlery, &c	W. W. Hayden	21,812	Aug. 30	60	1320
Handle for spoons, &c	W. A. Bigler	22,035	Dec. 6	61	1471
Handle for spoons, &c	A. F. Jackson	22,061	Dec. 20	61	1781
Handle for spoons, &c	A. F. Jackson	22,062	Dec. 20	61	1781
Handle for spoons, &c	A. F. Jackson	22,063	Dec. 20	61	1781
Handle for spoons, &c	A. F. Jackson	22,064	Dec. 20	61	1781
Handle for spoons, &c	A. F. Jackson	22,065	Dec. 20	61	1781
Handle for spoons, &c	A. F. Jackson	22,066	Dec. 20	61	1782
Handle for spoons, &c	A. F. Jackson	22,067	Dec. 29	61	1782
Handle for spoons, &c	A. F. Jackson	22,068	Dec. 20	61	1782
Handle for spoons, &c	J. Larson and J. M. Van Slyke	21,854	Sept. 13	60	1605
Handle for spoons, &c	J. Larson and J. M. Van Slyke	21,855	Sept. 13	60	1605
Handle for spoons, &c	J. W. Maillot	21,837	Sept. 6	60	1471
Handle for spoons, &c	A. H. Ullrich	21,919	Oct. 25	61	559
Handle for spoons, &c	C. C. Wientge	21,838	Sept. 6	60	1471
Handle for spoons, &c	G. Wilkinson	21,839	Sept. 6	60	1471
Handle for swords or the like	G. R. Wixon	22,008	Nov. 22	61	1159
Harness-snap	E. L. Howe	21,398	Mar. 15	58	1420
Hat and towel rack	J. Danner	21,407	Mar. 15	58	1420
Hat or cap	M. Neugass	21,325	Feb. 2	58	526
Hat-rack	J. Honecker	21,781	Aug. 23	60	1181
Heater-casing. Electric	M. W. Dewey	22,017	Nov. 22	61	1160
Heater, water, or steam pipe	W. Wilkinson	21,561	May 24	59	1251
Heel-protector	F. J. Herrick	21,888	Oct. 11	61	281
Heel-protector	F. J. Herrick	21,889	Oct. 11	61	281
Hinge	S. L. Stiles	21,558	May 24	59	1250
Horn. Campaign	H. L. Millis	21,789	Aug. 23	60	1182
Hose-reel spool	T. V. Forster	21,692	June 14	59	1757
Hosiery	F. Oliver	21,326	Feb. 2	58	526
Hub-band	J. G. English	21,625	June 21	59	1910
Indicator-body	W. D. Kain	21,523	May 10	59	934
Inkstand	H. N. Feder	22,084	Dec. 27	61	1941
Inkstand	W. Rodiger	22,003	Nov. 22	61	1158
Inkstand	W. Rodiger	22,004	Nov. 22	61	1158
Inkstand	W. Roeher	21,387	Mar. 8	58	1262
Inkstand	H. W. Schneider	21,990	Nov. 15	61	1010
Insulator-bracket	C. Wirt	{ 21,377 to 21,380 }	Mar. 8	58	1262
Insulator-bracket	C. Wirt	21,439	Mar. 29	58	1698
Insulator-bracket	C. Wirt	21,454	Apr. 12	59	292
Insulator-bracket	C. Wirt	21,455	Apr. 12	59	292
Jar	F. M. Underhill	21,612	June 7	59	1601
Jar	F. K. Ward	21,464	Apr. 12	59	293
Jar or ointment-pot	F. M. Underhill	21,628	June 21	59	1910
Jar-stopper	F. K. Ward	21,465	Apr. 12	59	293
Jug. Sirup	T. Haviland	22,028	Dec. 6	61	1469
Key-tag	C. McIntosh	21,338	Feb. 9	58	658
Knife-handle	F. J. Kaldenberg	21,693	July 5	60	152
Knife-handle	G. W. Korn	21,766	Aug. 9	60	888
Knife-handle	G. W. Korn	21,867	Sept. 27	60	1879
Knife-handle	H. A. Weihman	21,785	Aug. 23	60	1181
Knob and lock escutcheon	R. W. E. Christesen	21,706	July 12	60	291
Knob. Door	R. W. E. Christesen	21,769	Aug. 9	60	888
Lamp	F. Yokel	21,871	Sept. 27	60	1879
Lamp-bracket	A. Koehn	21,818	Aug. 30	60	1320
Lamp-burner	W. C. Homan	21,521	May 10	59	933
Lamp-burner	W. C. Homan	21,534	May 10	59	935
Lamp-burner	F. Rhind	21,770	Aug. 9	60	888
Lamp. Carriage	M. L. De Voursney	21,778	Aug. 16	60	1045
Lamp-chimney	G. W. Blair	21,616	June 7	59	1601
Lamp-chimney	G. W. Blair	21,617	June 7	59	1601
Lamp-chimney	J. H. La Ment	21,556	May 24	59	1250
Lamp-chimney	J. E. Lippincott	21,983	Nov. 8	61	880
Lamp. Coach	W. R. Demarest and H. Van Herck	21,672	June 28	59	2065
Lamp-fount	W. C. Homan	21,429	Mar. 29	58	1698
Lamp-fount holder	F. Yokel	21,723	July 19	60	431
Lamp frame. Electric	J. E. Gaston	21,701	July 12	60	290
Lamp globe or shade	J. Webb	21,819	Aug. 30	60	1321
Lamp-shade	H. Holenstein	21,702	July 12	60	291
Lamp-shade	W. S. McLewee	21,414	Mar. 22	58	1561
Lamp-shade	W. S. McLewee	21,577	May 24	59	1252
Lamp-shade	W. S. McLewee	21,581	May 24	59	1253
Lamp-shade	W. S. McLewee	21,588	May 31	59	1425
Lamp-standard	A. Koehn	21,820	Aug. 30	60	1321
Lantern	A. W. Paull	21,732	July 26	60	570
Lantern	F. K. Wright	21,421	Mar. 22	58	1561
Lantern-body	J. P. Buchholtz	21,518	May 3	59	74
Lathe-bed	C. M. Conradson	21,798	Aug. 23	60	1183
Lathe-bed	C. M. Conradson	21,799	Aug. 23	60	1183
Leggiti	S. Borchardt	21,827	Aug. 30	60	1322

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Lens for illuminating-tiles, &c.	J. Jacobs.	21,861	Sept. 20	60	1746
Locket.	L. J. Roehr	22,074	Dec. 20	61	1783
Match and cigarette holder.	C. Graff.	21,468	Apr. 19	59	455
Match-box.	W. W. Hayden	21,611	June 7	59	1600
Match-box.	W. W. Hayden	21,635	June 21	59	1911
Match-box.	W. W. Hayden	21,636	June 21	59	1911
Match-box.	W. W. Hayden	21,637	June 21	59	1911
Match-box.	W. W. Hayden	21,638	June 21	59	1911
Match-box.	W. W. Hayden	21,639	June 21	59	1911
Match-box.	L. F. Hurd.	21,890	Oct. 11	61	281
Match-box.	L. F. Hurd.	21,891	Oct. 11	61	281
Match-box.	L. F. Hurd.	21,892	Oct. 11	61	282
Match-box.	L. F. Hurd.	21,893	Oct. 11	61	282
Match-box.	C. Osborne	21,768	Aug. 9	60	888
Match-box.	S. Zinn.	21,924	Oct. 25	61	560
Match-stand.	O. Strom.	21,511	May 3	59	783
Measuring-instruments. Case for electrical.	E. Weston	{ 21,445 } { 21,446 }	Apr. 5	59	152
Meat-cutters. Bracket for.	A. A. Page.	21,386	Mar. 8	58	1262
Medal.	E. F. Hopkins	22,037	Dec. 6	61	1471
Medal.	A. O. Quinby and T. H. Bates.	21,703	July 12	60	291
Memorial shield.	W. Mayer.	21,862	Sept. 20	60	1746
Metal border.	L. C. Hiller	21,697	July 5	60	153
Metal border.	L. C. Hiller	21,698	July 5	60	153
Metal border.	C. Osborne	21,848	Sept. 6	60	1473
Metal. Ornamentation of.	J. J. Sweeney	21,437	Mar. 29	58	1698
Metallic box.	H. A. Weihman.	21,473	Apr. 19	59	455
Milk-mng.	F. K. Ward.	21,419	Mar. 22	58	1561
Monument.	K. L. Lehmann	21,956	Nov. 1	61	718
Monument.	W. H. Perry	21,410	Mar. 15	58	1420
Monument.	W. H. Perry	{ 21,432 } { 21,433 }	Mar. 29	58	1698
Monument.	W. H. Perry	21,451	Apr. 5	59	153
Monument.	W. H. Perry	21,474	Apr. 19	59	455
Monument.	W. H. Perry	21,475	Apr. 19	59	456
Monument.	W. H. Perry	21,536	May 10	59	935
Monument.	W. H. Perry	21,571	May 24	59	1252
Napped fabric.	A. C. Ohle.	21,999	Nov. 22	61	1158
Necktie.	W. M. Griffith	21,977	Nov. 8	61	879
Needle-holder.	W. Schott.	21,417	Mar. 22	58	1561
Needle-threader frame.	P. Slensby	21,600	May 31	59	1426
Oil-can.	W. C. Hine	21,984	Nov. 8	61	890
Oiler.	A. L. Fisher	21,671	June 28	59	2065
Organ-case.	F. W. Hedgeland	21,349	Feb. 16	58	810
Organ-case top.	O. E. Brandt	21,881	Oct. 4	61	146
Organ-case top.	O. E. Brandt	21,882	Oct. 4	61	146
Padlock-case.	E. A. Judd	21,821	Aug. 30	60	1321
Pail cover. Dinner.	C. E. Bertels	21,366	Mar. 8	58	1262
Pan-handle.	A. A. McLeod.	21,614	June 7	59	1601
Paper-weight.	L. J. Heffernan.	21,863	Sept. 20	60	1746
Paper-weight.	W. Lanyon, Jr.	21,497	Apr. 26	59	624
Paper-weight.	G. L. Reenstierna.	22,002	Nov. 22	61	1158
Pattern for printed fabric.	S. M. Schwab, Jr.	21,858	Sept. 13	60	1606
Pedestal.	A. J. Windmayer	21,492	Apr. 19	59	458
Penholder.	J. Crawford	21,538	May 17	59	1252
Pencil-case.	C. S. Freer	21,572	May 24	59	1252
Pencil-sharpener.	S. A. Davis	21,864	Sept. 20	60	1746
Perfumery-holder.	J. Markell	21,925	Oct. 25	61	500
Perfumery-holder.	F. E. Warren, Jr.	21,973	Nov. 8	61	878
Piano-case.	J. W. Pangborn	22,089	Dec. 27	61	1942
Piano-case.	W. Strich and P. M. Zeidler.	22,079	Dec. 20	61	1784
Pianofortes. Casing for upright.	W. F. Decker	21,995	Nov. 15	61	1011
Piano-pedal.	A. H. Reed	21,537	May 10	59	935
Picture-frame.	E. C. Brown.	21,610	June 7	59	1600
Picture-frame.	C. O. Held	21,293	Jan. 12	58	147
Picture-frame.	T. W. Norman	21,626	June 21	59	1910
Picture-frame.	A. Selter	21,733	July 26	60	570
Picture-frame bracket.	L. Wolfsky	21,452	Apr. 5	59	153
Picture-hook.	G. W. Tucker.	21,370	Sept. 27	60	1879
Pillow-block standard.	H. W. Hill	21,613	June 7	59	1601
Pin.	J. A. Bidwell	21,645	June 21	59	1912
Pincushion or sachet.	H. L. Cooper.	22,050	Dec. 6	61	1473
Pin-package.	G. A. Driggs	21,287	Jan. 12	58	147
Pistol-cheek.	J. H. Wesson	21,822	Aug. 30	60	1321
Pistol-cheek.	D. B. and J. H. Wesson.	21,823	Aug. 30	60	1321
Planers. Cutter-head hood for.	J. Roberts	21,850	Sept. 6	60	1473
Plastron or waist.	A. Frank	22,040	Dec. 6	61	1471
Plate.	C. E. Haviland	21,682	July 5	60	150
Plate.	C. E. Haviland	21,683	July 5	60	151
Plate.	C. E. Haviland	21,684	July 5	60	151
Plate or similar article.	F. Guilleaume.	21,476	Apr. 19	59	456
Plate. Reception.	E. W. Abbot.	21,498	Apr. 26	59	624
Plate. Sandwich.	C. E. Haviland	21,685	July 5	60	151
Plates. Condiment-holder for.	F. C. Griffith	21,539	May 17	59	1098
Pocketbook.	J. Henkel	21,542	May 17	59	1098
Pockethook-flaps, &c. Corner for.	J. N. Provenzano	21,471	Apr. 19	59	455
Pocketbook or purse.	M. Scheuer	22,039	Dec. 6	61	1471
Portière or curtain.	T. H. Bartmann	21,389	Mar. 8	58	1262
Postal-card.	C. W. Girsch and C. F. Roehsler	21,950	Nov. 1	61	717
Potato-digger fork.	H. O. Putnam	21,934	Oct. 25	61	561
Printed fabric.	C. W. Brown	21,541	May 17	59	1098
Purse or bag frame.	A. Goertz	21,397	Mar. 15	58	1420
Purse or pocketbook.	M. Scheuer	21,974	Nov. 8	61	878
Radiator.	H. J. Bell	21,986	Nov. 8	61	880

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Railing	W. C. Hanna, Jr.	21,980	Nov. 8	61	879
Range	H. C. Bascom	21,599	May 31	59	1426
Razor-handle	J. R. Torrey	21,634	June 21	59	1911
Roofing-plate	G. H. Babcock	21,367	Mar. 8	58	1262
Roofing-plate	J. L. Faulhaber	21,313	Jan. 26	58	390
Roofing-tile	G. H. Babcock	21,772	Aug. 9	60	889
Rubber mat	H. E. Spadone	21,730	July 19	60	432
Rubber mat	J. J. Voorhees	21,707	July 12	60	231
Ruffling	A. Cohen	21,993	Nov. 15	61	1010
Ruffling and ruching	J. Wightman	21,562	May 24	59	1251
Ruffling and ruching	J. Wightman	21,563	May 24	59	1251
Ruffling or ruching	C. G. Hill	21,447	Apr. 5	59	152
Ruffling or ruching	A. Back	21,493	Apr. 19	59	458
Rug	T. L. Lawton	21,904	Oct. 18	61	419
Rug	T. L. Lawton	21,905	Oct. 18	61	420
Rug	A. Petzold	21,294	Jan. 12	58	147
Sachet or pincushion	W. H. Plumb	21,490	Apr. 19	59	457
Sad iron	J. J. Brooks	21,593	May 31	59	1425
Sash-pulley case	S. Palmer	22,026	Nov. 29	61	1308
Scarf-pin	J. G. Brokaw	22,036	Dec. 6	61	1471
Scrubber-holder	M. H. Grubb	21,405	Mar. 15	58	1320
Shade-roller bracket	S. J. Meeker	21,627	June 21	59	1910
Shade. Window	W. F. Patterson	22,087	Dec. 27	61	1942
Sheet	F. S. Pinkus	22,051	Dec. 6	61	1473
Sheet metal. Ornamentation of	L. Kahn	21,696	July 5	60	153
Shelf-bracket or wall-piece	B. Bark	21,305	Jan. 19	58	220
Shepherd's crook	A. L. Babcock	21,816	Aug. 30	60	1320
Shirt. Campaign	J. Schloss	21,664	June 28	59	2064
Shirt envelope or holder	L. Tim	21,663	June 28	59	2064
Shoe	N. Lowenthal	21,752	Aug. 2	60	731
Shoe-shaper plate	J. W. Skinner	21,694	July 5	60	152
Show-case	F. B. Baldwin	21,763	Aug. 9	60	888
Siding-plate	W. C. Berger	21,428	Mar. 29	58	1698
Siding-plate	P. A. Deslauriers	21,825	Aug. 30	60	1321
Siding-plate	P. A. Deslauriers	22,091	Dec. 27	61	1942
Sign	I. S. Richardson	21,336	Feb. 2	58	526
Sign	H. Traun	22,006	Nov. 22	61	1159
Sign. Barber's	F. Svoboda and C. Hofmann	21,782	Aug. 23	60	1181
Sign-board	W. Goessling	22,053	Dec. 6	61	1473
Silversmith's stock	A. Weber	21,396	Mar. 8	58	1262
Silversmith's stock	A. Weber	21,510	Apr. 26	59	625
Sink-trap	W. H. Graham	21,528	May 10	59	934
Sink-trap	W. H. Graham	21,529	May 10	59	934
Sink-trap	H. C. Montgomery	21,776	Aug. 9	60	889
Sink-trap	H. C. Montgomery	21,873	Sept. 27	60	1880
Snap-hook	J. G. Dexheimer	21,982	Nov. 8	61	880
Snap-hook	J. W. Harris	21,399	Mar. 15	58	1420
Souvenir medal	W. J. McKee	21,425	Mar. 22	58	1561
Sponge-cup	J. G. Bainbridge	21,589	May 31	59	1425
Spoon	R. E. Acton	21,835	Sept. 6	60	1471
Spoon, &c	C. C. Adams	21,460	Apr. 12	59	293
Spoon	J. C. Badger	21,777	Aug. 16	60	1045
Spoon	T. H. Bates and A. O. Quimby	21,952	Nov. 1	61	717
Spoon	E. C. Bernheim	22,082	Dec. 27	61	1941
Spoon	W. W. Berry	21,699	July 12	60	290
Spoon	E. M. Black	21,920	Oct. 25	61	559
Spoon	C. S. Champion	21,714	July 19	60	431
Spoon	T. C. Combes	21,900	Oct. 18	61	419
Spoon, &c	G. L. Crowell, Jr.	21,601	June 7	59	1599
Spoon, &c	G. L. Crowell, Jr.	21,700	July 12	60	290
Spoon	F. P. D'Arcy	22,029	Dec. 6	61	1470
Spoon	N. G. Davis	21,312	Jan. 26	58	390
Spoon	E. N. Denison	21,422	Mar. 22	58	1561
Spoon	A. H. Faucher	21,836	Sept. 6	60	1471
Spoon, &c	P. Farnham	21,988	Nov. 15	61	1009
Spoon	H. J. Heinz	21,895	Oct. 11	61	282
Spoon	J. T. Henderson	21,233	Jan. 5	58	1
Spoon	W. A. Henderson	21,738	Aug. 2	60	730
Spoon, &c	H. W. Hirschfeld	21,383	Mar. 8	58	1262
Spoon	W. F. Holbrook	21,496	Apr. 26	59	624
Spoon	L. Hollander	21,656	June 28	59	2063
Spoon	F. F. Horn	21,716	July 19	60	431
Spoon	L. R. Horton	21,461	Apr. 12	59	292
Spoon	H. B. Houston	21,715	July 19	60	431
Spoon	J. A. Hughes	21,783	Aug. 23	60	1181
Spoon, &c	A. F. Jackson	21,298 to 21,302	Jan. 19	58	280
Spoon, &c	A. F. Jackson	21,513	May 3	59	781
Spoon, &c	W. A. Jameson	21,555	May 24	59	1250
Spoon, &c	W. A. Jameson	21,632	June 21	59	1911
Spoon	W. H. Jamouneau	21,296	Jan. 12	58	147
Spoon	B. S. Josselyn	21,469	Apr. 19	59	455
Spoon	B. S. Josselyn	21,519	May 10	59	933
Spoon	F. E. Ladd	21,655	June 28	59	2063
Spoon	S. B. Leonardi	21,348	Feb. 16	58	809
Spoon	S. I. Logan	21,304	Jan. 19	58	280
Spoon	A. Ludwig	21,879	Oct. 4	61	146
Spoon, &c	J. W. Maillot	21,470	Apr. 19	59	455
Spoon	B. Meyer	21,739	Aug. 2	60	730
Spoon	H. M. Moses	21,987	Nov. 15	61	1009
Spoon	D. I. Murray	21,595	May 31	59	1425
Spoon	S. F. Myers	21,462	Apr. 12	59	293
Spoon	T. B. Myers	21,894	Oct. 11	61	282

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Spoon, &c	C. B. Peets	21,385	Mar. 8	58	1262
Spoon	J. S. Rathbone	22,030	Dec. 6	61	1470
Spoon	J. S. Rathbone	22,031	Dec. 6	61	1470
Spoon	E. I. Richards	21,868	Sept. 27	60	1879
Spoon, &c	C. E. Richardson	21,602	June 7	59	1599
Spoon	F. A. and B. F. Robinson	21,374	Mar. 8	58	1262
Spoon	E. H. Rosenblatt	22,032	Dec. 6	61	1470
Spoon, &c	G. U. Roulet	22,059	Dec. 20	61	1471
Spoon	W. W. Rudisill	21,284	Jan. 5	58	1
Spoon	G. A. Schlechter	22,033	Dec. 6	61	1470
Spoon	J. C. Schmidt	21,540	May 17	59	1098
Spoon	E. W. Shannon	21,472	Apr. 19	59	455
Spoon	W. Shaw	21,657	June 28	59	2063
Spoon, &c	W. C. Sommer	22,034	Dec. 6	61	1470
Spoon	D. Southworth	21,463	Apr. 12	59	293
Spoon, &c	G. B. Stocking	22,060	Dec. 20	61	1471
Spoon	O. Supe	21,740	Aug. 2	60	730
Spoon	G. P. Tilton	21,357	Feb. 16	58	810
Spoon, &c	G. P. Tilton	21,566	May 24	59	1251
Spoon	G. P. Tilton	21,742	Aug. 2	60	730
Spoon	J. M. Van Slyke	21,717	July 19	60	431
Spoon	J. Verschuur	21,550	May 17	59	1099
Spoon	H. L. Wallace	21,741	Aug. 2	60	730
Spoon, &c	O. Wettstein	21,334	Feb. 2	58	52
Spoon, &c	F. M. Whiting	21,559	May 24	59	1250
Spoon	C. C. Wientge	21,340	Feb. 9	58	658
Spoon, &c	C. C. Wientge	21,441	Mar. 29	58	1698
Spoon	G. Wilkinson	21,603	June 7	59	1600
Spoon	G. Wilkinson	21,604	June 7	59	1600
Spoon	G. Wilkinson	21,605	June 7	59	1600
Spoon	H. L. Wright	21,737	July 26	60	571
Spoon or fork handle	H. I. Clulee	21,692	July 5	60	152
Spoon or fork handle	G. W. Shiebler	21,633	June 21	59	1911
Spoon or similar article	G. L. Crowell	21,560	May 24	59	1210
Spoon or similar article	E. T. Fenwick	21,554	May 24	59	1250
Spoon or similar article	E. T. Fenwick	21,565	May 24	59	1251
Spoon or similar article	F. N. Osborne	21,596	May 31	59	1425
Spoon. Souvenir	B. S. Josselyn	21,347	Feb. 16	58	809
Spoon. Souvenir	A. H. Peiffer	21,409	Mar. 15	58	1420
Spoon. Souvenir	C. H. Ways	21,402	Mar. 15	58	1420
Statue	C. Holloway	21,787	Aug. 23	60	1181
Statue	J. W. Meese	21,533	May 10	59	935
Statuette	C. M. Smith	21,680	July 5	60	150
Stool. Piano	L. H. Marston	21,667	June 28	59	2065
Stool. Piano	M. Tonk	21,695	July 5	60	153
Stove	F. A. Magee	21,713	July 12	60	292
Stove	E. A. Thissell and W. H. Wilder	21,896	Oct. 11	61	282
Stove-board	A. Lehnhardt	21,808	Aug. 30	60	1320
Stove. Cooking	H. C. Bascom and F. Ritchie	21,897	Oct. 11	61	282
Stove. Cooking	G. H. Holland	21,804	Aug. 30	60	1319
Stove. Cooking	G. H. Holland	21,805	Aug. 30	60	1319
Stove. Cooking	G. H. Holland	21,806	Aug. 30	60	1319
Stove. Cooking	G. H. Holland	21,807	Aug. 30	60	1320
Stove. Cooking	F. Ritchie	21,520	May 10	59	933
Stove. Cooking	F. Ritchie	21,615	June 7	59	1601
Stove. Cooking	F. Ritchie	21,654	June 21	59	1913
Stove-door	C. R. McAdams	21,514	May 3	59	784
Stove. Dwarf parlor	H. C. Bascom and R. Galbraith	21,598	May 31	59	1426
Stove. Gas	L. Kahn	21,311	Jan. 26	58	390
Stove. Gas	L. Kahn	21,332	Feb. 2	58	526
Stove. Hall	W. J. Copp	21,345	Feb. 16	58	809
Stove. Heating	W. N. Moore	21,801	Aug. 23	60	1183
Stove. Heating	T. I. Rankin	21,393	Mar. 8	58	1262
Stove. Heating	C. F. Walther	21,440	Mar. 29	58	1698
Stove. Lamp	C. H. Boeck	21,427	Mar. 29	58	1698
Stove. Oil	I. Block	21,650	June 21	59	1912
Stove. Oil heating	M. G. Benedict	21,853	Sept. 6	60	1474
Stove. Oil or gas	C. H. Boeck	21,365	Mar. 8	58	1262
Stove. Oil or gas	E. A. Thissell and W. H. Wilder	21,852	Sept. 6	60	1474
Stove. Oil or gas	E. A. Thissell and W. H. Wilder	21,985	Nov. 8	61	880
Stove. Oil or gas	A. C. West	22,016	Nov. 22	61	1160
Stove or range	O. G. Thomas	21,851	Sept. 6	60	1473
Stove. Vapor	L. Stockstrom	21,651	June 21	59	1913
Stove. Vapor	L. Stockstrom	21,652	June 21	59	1913
Stove. Vapor	L. Stockstrom	21,653	June 21	59	1913
Stoves. Ornamental top for	D. M. Ireland	21,501	Apr. 26	59	624
Stud. Screw	J. Turner	21,673	June 28	59	2066
Suspender-ring	F. W. Shillito	21,860	Sept. 20	60	1746
Swab-cup	S. R. Willet	22,086	Dec. 27	61	1941
Table	F. Koenig	22,013	Nov. 22	61	1160
Table	F. Koenig	22,014	Nov. 22	61	1160
Table	F. Koenig	22,015	Nov. 22	61	1160
Table	Z. Nuttall	21,802	Aug. 30	60	1319
Table	Z. Nuttall	21,803	Aug. 30	60	1319
Table-cloth	F. S. Pinkus	21,928	Oct. 25	61	561
Table-cover	E. Poole	{ 21,327 to 21,329 }	Feb. 2	58	526
Table-cover or curtain	E. Poole	21,335	Feb. 2	58	526
Table-top	F. Yokel	21,792	July 19	60	431
Table-top	F. Yokel	21,750	Aug. 2	60	731
Table-top	F. Yokel	21,751	Aug. 2	60	731
Table-vessel	C. V. H. Imschmied	21,878	Oct. 4	61	145
Tailor's gage	I. Geraci	21,568	May 24	59	1251

Alphabetical list of designs—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Tape	C. Sisson	21,292	Jan. 12	58	147
Tape	C. Sisson	22,027	Nov. 29	61	1308
Tape	G. N. Steere	21,903	Oct. 18	61	419
Tea and coffee pot	A. F. Jackson	21,291	Jan. 12	58	147
Tea or coffee pot	A. F. Jackson	21,297	Jan. 12	58	147
Tea or coffee pot	A. F. Jackson	21,331	Feb. 2	58	526
Textile fabric	A. G. Thyng	21,525	May 10	59	934
Textile fabric	A. G. Thyng	21,998	Nov. 22	61	1157
Thimble	F. G. Crabb	22,000	Nov. 22	61	1158
Thimble	E. S. Simons	21,746	Aug. 2	60	730
Thimble	H. A. Weihman	21,747	Aug. 2	60	730
Thimble	H. A. Weihman	21,844	Sept. 6	60	1472
Thimble	W. A. Wood	21,901	Oct. 18	61	419
Tile. Lining	C. Curtis and N. M. Jones	22,077	Dec. 20	61	1783
Tobacco-pipe diaphragm	E. Houtain	21,552	May 17	59	1099
Tobacco plug	W. W. Wood	21,992	Nov. 15	61	1010
Tongue-cap	M. J. Johnson	21,459	Apr. 12	59	292
Top. Spinning	A. J. Huntoon	21,752	Aug. 2	60	731
Toy gun	E. R. Ives	21,431	Mar. 29	58	1698
Toy money-bank	D. Cooke	21,457	Apr. 12	59	292
Toy rattle	J. A. Crandall	21,764	Aug. 9	60	888
Toy rattle	J. A. Crandall	21,765	Aug. 9	60	888
Toy savings-bank	C. G. Shepard and P. Adams	21,594	May 31	59	1425
Toy whistle	T. A. Myers	21,408	Mar. 15	58	1420
Tray or receptacle	A. Ludwig	21,621	June 14	59	1757
Trimming	A. S. Ellison	21,793	Aug. 23	60	1182
Trimming	J. Hartenstein	21,660	June 23	59	2064
Trimming	F. O. Heinig	21,743	Aug. 2	60	730
Trimming	F. O. Heinig	22,044	Dec. 6	61	1472
Trimming	M. Lazarus	21,649	June 21	59	1912
Trimming	C. Lexow	21,830	Sept. 6	60	1470
Trimming	E. Robinson	21,659	June 28	59	2064
Trimming	E. Robinson	22,045	Dec. 6	61	1472
Trimming	E. Robinson	22,046	Dec. 6	61	1472
Trimming	E. Robinson	22,047	Dec. 6	61	1472
Trimming	H. M. Sacks	21,832	Sept. 6	60	1470
Trimming	H. M. Sacks	21,833	Sept. 6	60	1471
Trimming	J. W. Schloss	21,648	June 21	59	1912
Trimming	J. W. Schloss	21,831	Sept. 6	60	1470
Trimming	I. A. Schwarz	21,646	June 21	59	1912
Trimming	I. A. Schwarz	21,647	June 21	59	1912
Trimming	L. Tisch	21,834	Sept. 6	60	1471
Trimming. Dress	T. Adams	21,504	Apr. 26	59	625
Trimming. Dress	T. Adams	21,505	Apr. 26	59	625
Trimming. Dress	T. Adams	21,506	Apr. 26	59	625
Trimming. Dress	T. Adams	21,507	Apr. 26	59	625
Trimming. Dress	B. Lipper	21,575	May 24	59	1252
Trimming. Dress	B. Lipper	21,576	May 24	59	1252
Trimming. Dress	B. Lipper	21,658	June 28	59	2063
Trimming. Dress	B. Lipper	21,675	July 5	60	150
Trimming. Dress	B. Lipper	21,676	July 5	60	150
Trimming. Dress	B. Lipper	22,071	Dec. 20	61	1782
Trimming. Dress	B. Lipper and A. A. Courts	21,341	Feb. 16	58	809
Trimming. Dress	B. Lipper and A. A. Courts	21,677	July 5	60	150
Trimming. Dress	H. W. Schloss	21,794	Aug. 23	60	1182
Trimming. Dress	J. W. Schloss	22,048	Dec. 6	61	1472
Trimming. Dress	I. A. Schwarz	21,578	May 24	59	1252
Trimming or fringe	A. A. Frankl	21,678	July 5	60	150
Trumpet	A. Schoenhut	21,841	Sept. 6	60	1472
Trumpet	A. Schoenhut	21,842	Sept. 6	60	1472
Type. Font of	G. F. Giesecke	21,330	Feb. 2	58	526
Type. Font of printing	H. Ihlenburg	21,430	Mar. 29	58	1698
Type. Font of printing	H. Ihlenburg	21,606	June 7	59	1600
Type. Font of printing	H. Ihlenburg	21,607	June 7	59	1600
Type. Font of printing	H. Ihlenburg	22,019	Nov. 29	61	1307
Type. Font of printing	H. Ihlenburg	22,020	Nov. 29	61	1307
Type. Font of printing	H. Ihlenburg	22,021	Nov. 29	61	1308
Type ornaments. Font of	H. Ihlenburg	22,007	Nov. 22	61	1159
Urinal	E. Hammann	21,957	Nov. 1	61	718
Valve for basins and bath-tubs	W. H. Graham	21,933	Oct. 25	61	561
Vase	F. Guilleaume	21,477	Apr. 19	59	456
Vase, &c.	S. Starkey	21,877	Oct. 4	61	145
Vase or similar article	F. Guilleaume	21,491	Apr. 19	59	458
Vase or similar article	F. Guilleaume	21,494	Apr. 19	59	458
Vehicle-body	W. B. Griffin	21,453	Apr. 12	59	292
Veil	S. Oppenheimer	22,042	Dec. 6	61	1472
Veil	S. Oppenheimer	22,043	Dec. 6	61	1472
Vending-machines. Casing for coin-actuated	R. H. Little	21,786	Aug. 23	60	1181
Ventilator grate	G. N. Joss	21,800	Aug. 23	60	1183
Wagon-body	L. Doyle	21,756	Aug. 2	60	731
Wagon-body	F. K. Ward	21,420	Mar. 22	58	1561
Wall-fixture for counters	{ 21,369 } { 21,370 }	{ 21,369 } { 21,370 }	Mar. 8	58	1262
Wall-paper	C. Booze	21,908	Oct. 25	61	558
Wall-paper	C. Booze	21,909	Oct. 25	61	558
Wall-paper	C. Booze	21,910	Oct. 25	61	558
Wall-paper	C. Booze	21,911	Oct. 25	61	558
Wall-paper	C. Booze	21,912	Oct. 25	61	558
Wall-paper	C. Booze	21,913	Oct. 25	61	558
Wall-paper	C. Booze	21,914	Oct. 25	61	558
Wall-paper	C. Booze	21,915	Oct. 25	61	559
Wall-paper	C. Booze	21,916	Oct. 25	61	559
Wall-paper	C. Booze	21,917	Oct. 25	61	559
Wall-paper	C. Booze	21,936	Nov. 1	61	714

Alphabetical list of designs—Continued.

Design	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Wall-paper	C. Booze	21,937	Nov. 1	61	715
Wall-paper	C. Booze	21,938	Nov. 1	61	715
Wall-paper	C. Booze	21,939	Nov. 1	61	715
Wall-paper	C. Booze	21,940	Nov. 1	61	715
Wall-paper	C. Booze	21,941	Nov. 1	61	715
Wall-paper	C. Booze	21,942	Nov. 1	61	715
Wall-paper	C. Booze	21,943	Nov. 1	61	716
Wall-paper	C. Booze	21,944	Nov. 1	61	716
Wall-paper	C. Booze	21,945	Nov. 1	61	716
Wall-paper	C. Booze	21,946	Nov. 1	61	716
Wall-paper	C. Booze	21,947	Nov. 1	61	716
Wall-paper	C. Booze	21,948	Nov. 1	61	716
Wall-paper	C. Booze	21,949	Nov. 1	61	716
Wall-paper	C. Booze	21,958	Nov. 8	61	876
Wall-paper	C. Booze	21,959	Nov. 8	61	876
Wall-paper	C. Booze	21,960	Nov. 8	61	876
Wall-paper	C. Booze	21,961	Nov. 8	61	876
Wall-paper	C. Booze	21,962	Nov. 8	61	876
Wall-paper	C. Booze	21,963	Nov. 8	61	876
Wall-paper	C. Booze	21,964	Nov. 8	61	877
Wall-paper	C. Booze	21,965	Nov. 8	61	877
Wall-paper	C. Booze	21,966	Nov. 8	61	877
Wall-paper	C. Booze	21,967	Nov. 8	61	877
Wall-paper	C. Booze	21,968	Nov. 8	61	877
Wall-paper	C. Booze	21,969	Nov. 8	61	877
Wall-paper	C. Booze	21,970	Nov. 8	61	878
Wall-paper	C. Booze	21,971	Nov. 8	61	878
Wall-paper	C. Booze	21,972	Nov. 8	61	878
Wall-paper	C. Booze	22,018	Nov. 29	61	1307
Washing-machine tub	S. Sadler	21,997	Nov. 15	61	1011
Watch-bridge	E. C. Fitch	21,423	Mar. 22	58	1561
Watchcase	T. Benfield	21,478	Apr. 19	59	456
Watchcase	T. Benfield	21,479	Apr. 19	59	456
Watchcase	T. Benfield	21,480	Apr. 19	59	456
Watchcase	T. Benfield	21,481	Apr. 19	59	456
Watchcase	T. Benfield	21,482	Apr. 19	59	456
Watchcase	T. Benfield	21,483	Apr. 19	59	457
Watchcase	T. Benfield	21,484	Apr. 19	59	457
Watchcase	T. Benfield	21,485	Apr. 19	59	457
Watchcase	T. Benfield	21,486	Apr. 19	59	457
Watchcase	T. Benfield	21,487	Apr. 19	59	457
Watchcase	T. Benfield	21,488	Apr. 19	59	457
Watchcase	T. Benfield	21,489	Apr. 19	59	457
Watchcase	C. L. Depollier	21,721	July 19	60	431
Watchcase	J. C. Dueber	21,288	Jan. 12	58	147
Watchcase	J. C. Dueber	21,295	Jan. 12	58	149
Watchcase	J. C. Dueber	21,346	Feb. 16	58	801
Watchcase	J. C. Dueber	21,548	May 17	59	1099
Watchcase	J. C. Dueber	21,549	May 17	59	1099
Watchcase	J. C. Dueber	21,719	July 19	60	431
Watchcase	J. C. Dueber	21,720	July 19	60	431
Watchcase	J. C. Dueber	21,797	Aug. 23	60	1183
Watchcase	J. C. Dueber	21,813	Aug. 30	60	1320
Watchcase	J. C. Dueber	22,056	Dec. 13	61	1650
Watchcase	H. Hoffa	21,748	Aug. 2	60	730
Watch-charm	J. A. Dawley	21,718	July 19	60	431
Watch-charm	F. W. Roe	21,281	Jan. 5	58	8
Watch-charm	F. P. Sparmaker	21,749	Aug. 2	60	731
Water-closet seat and back	H. Sievert	21,438	Mar. 29	58	1691
Water-wheel casing	A. P. Brayton, Jr.	21,286	Jan. 5	58	8
Whip	J. Pomery	21,817	Aug. 30	60	1320
Wick-tube and burner-plate	W. H. Clemes	21,442	Mar. 29	58	1697
Wire-stretcher shank	A. Westmeyer	21,592	May 31	59	1425
Zither	J. B. Judkins	21,275	Jan. 5	58	1

ALPHABETICAL LIST OF TRADE-MARKS.

Title.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
Absorbent pads	I. D. Allen & Co	21,577	Aug. 9	60	890
Agricultural implements, including scythes, hay-knives, and reaping-hooks.	Firm of I. Nash	20,822	Mar. 8	58	1262
Albums and scrap-books. Photograph and autograph	Koch Sons & Company	22,007	Nov. 22	61	1161
Alcohol. Mint	E. de Rieqlès et Cie	21,900	Nov. 1	61	719
Ale	S. F. Burns	21,867	Oct. 18	61	421
Ale	Singer & Wheeler	21,710	Aug. 30	60	1324
Ale and beer	G. W. Wiedenmayer	21,695	Aug. 30	60	1323
Ale and stout	Robert Smith India Pale Ale Brew- ing Company	20,607	Jan. 12	58	148
Ale and stout	Robert Smith India Pale Ale Brew- ing Company	21,043	Apr. 26	59	627
Ale. Ginger	Chicago Consolidated Bottling Com- pany	22,124	Dec. 6	61	1476
Ale. Ginger	J. Heinzerling	22,227	Dec. 20	61	1788
Ale, porter, and stout	Anderson Brewing Company	21,556	Aug. 2	60	734
Alloy	Frictionless Metal Company	20,952	Apr. 5	59	156
Aluminum and its alloys	G. A. Tompkins	20,853	Mar. 15	58	1420
Ammonia-alum	N. Waterbury	21,574	Aug. 9	60	890
Anæsthetic for dentists' use. Liquid	G. M. Miller	22,109	Dec. 6	61	1475
Anæsthetic in liquid form. Local	C. A. Thatcher	21,045	Apr. 26	59	628
Anæsthetic for painless extraction of teeth. Local	Howe & Dills	21,230	May 31	59	1429
Analgesic preparations	E. R. Smith	21,715	Aug. 30	60	1324
Animal-shoes	Bryden Horse Shoe Company	21,866	Oct. 18	61	421
Antipyretic	G. E. Dixon	21,841	Oct. 4	61	149
Antipyretics and antineuralgics	Lehn & Fink	22,264	Dec. 27	61	1946
Antipyretics and sedatives	Chas. Truax, Greene & Company	21,399	July 5	60	154
Antiseptic and disinfecting compounds	Septicide Manufacturing Company	20,713	Feb. 16	58	810
Antiseptic for the prevention of gonorrhea, syphilis, and all contagious venereal diseases.	J. B. Sawyer and M. L. Moore	21,065	May 3	59	785
Antiseptics	Allaire, Woodward & Company	22,263	Dec. 27	61	1946
Antiseptics	Charles Truax, Greene & Company	20,637	Jan. 26	58	390
Antiseptics	Charles Truax, Greene & Company	21,388	June 28	59	2069
Antiseptics	Clinton Pharmaceutical Company	21,228	May 31	59	1429
Antiseptics	S. G. Plumb	21,452	July 12	60	294
Antiseptics	J. M. Stevens	20,963	Apr. 12	59	224
Antiseptics and deodorants. Fluid	O. A. Beckmann	20,665	Feb. 2	58	526
Antiseptics and disinfectants	Schering & Glatz	22,265	Dec. 27	61	1946
Apparel. Certain under and outer wearing	J. H. Norcross	22,092	Nov. 29	61	1311
Apparel, outer and under wear, bedding, and the materials of which they are made. Wearing	Dr. Jaeger's Sanitary Woolen Sys- tem Company	21,497	July 19	60	435
Apparel, outer and under wear, bedding, and the materials of which they are made. Wearing	Dr. Jaeger's Sanitary Woolen Sys- tem Company	21,498	July 19	60	435
Apparel, outer and under wear, bedding, and the materials of which they are made. Wearing	Dr. Jaeger's Sanitary Woolen Sys- tem Company	21,499	July 19	60	435
Apparel, outer and under wear, bedding, and the materials of which they are made. Wearing	Dr. Jaeger's Sanitary Woolen Sys- tem Company	21,639	Aug. 16	60	1049
Apples	Robyn Bros	20,914	Mar. 29	58	1698
Armpit-shields	Brooklyn Shield Co	20,911	Mar. 29	58	1698
Armpit-shields	Brooklyn Shield Co	20,970	Apr. 12	59	295
Asphalt	E. G. Church	21,379	June 28	59	2069
Atomizers	J. E. Shaw	20,667	Feb. 2	58	526
Baking and roasting pans	J. W. Oblinger	22,051	Nov. 22	61	1164
Baking-powder	C. Amann	21,576	Aug. 9	60	890
Baking-powder	Atwood & Steele	21,384	June 28	59	2069
Baking-powder	Calumet Baking Powder Company	21,792	Sept. 27	60	1882
Baking-powder	C. R. Groff	21,023	Apr. 26	59	626
Baking-powder	Indianapolis Drug Co	20,593	Jan. 12	58	148
Baking-powder	D. J. O'Connor	22,135	Dec. 6	61	1477
Baking-powder	T. Palmer	22,166	Dec. 13	61	1652
Baking-powder	Potter Parlin Company	21,550	Aug. 9	60	891
Baking-powder	C. Mohr & Son	20,821	Mar. 8	58	1262
Baking-powder	A. W. Ruhl	22,027	Nov. 22	61	1162
Baking-powder	A. W. Ruhl	22,028	Nov. 22	61	1163
Baking-powder	A. W. Ruhl	22,165	Dec. 13	61	1652
Baking-powder	Thomson & Taylor Spice Company	20,900	Mar. 29	58	1698
Baking-powder	Virginia Chemical and Manufactur- ing Company	20,724	Feb. 16	58	810
Baking-powders	Virginia Chemical & Manufacturing Company	21,094	May 10	59	937
Baking-powder and yeast	J. E. Blackburn	21,419	July 5	60	155
Balsam, catarrh-snuff, and ointment	J. C. Covert	20,643	Jan. 26	58	390
Banana fruits. Flour made from	T. W. Beebe	20,545	Jan. 5	58	2
Barbers' chairs	E. A. Kochs	20,573	Jan. 12	58	148
Barytes. Powdered	Gabriel & Schall	20,789	Mar. 1	58	1098
Bath-tubs	G. Booth	21,806	Oct. 4	61	147
Battery compounds	Wright Universal Electric Com- pany	21,611	Aug. 16	60	1046
Batting or bats of cotton	J. Page & Son	21,262	June 7	59	1603
Beds. Spring	Atlas Tack Corporation	22,222	Dec. 20	61	1788
Bedsteads and wire mattresses. Metallic	S. Wilkes	21,726	Sept. 6	60	1475

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Beef. Liquid extract of.	E. Avila	20,997	Apr. 19	59	460
Beer.	Conrad Seipp Brewing Company	21,638	Aug. 16	60	1049
Beer.	W. Forster	21,858	Oct. 11	61	283
Beer.	W. Forster	21,859	Oct. 11	61	283
Beer.	Frank Fehr Brewing Company	21,526	July 26	60	573
Beer.	Hagemann Brewing Company	21,739	Sept. 13	60	1607
Beer.	John Kress Brewing Company	20,881	Mar. 22	58	1562
Beer.	Kersten & v. N. Rosenegk	21,002	Apr. 19	59	461
Beer.	C. A. Lammers	21,527	July 26	60	573
Beer.	McAvoy Brewing Company	21,786	Sept. 27	60	1881
Beer.	Welde & Thomas	21,223	May 31	59	1426
Beer extract. Root.	W. C. Haslage	20,734	Feb. 16	58	810
Beer. Lager.	Anheuser-Busch Brewing Association.	20,688	Feb. 9	58	658
Beer. Lager.	Bartholomay Brewery Company	22,254	Dec. 27	61	1945
Beer. Lager.	E. Benswanger	21,985	Nov. 15	61	1013
Beer. Lager.	Eberhardt & Ober Brewing Company.	21,881	Oct. 18	61	492
Beer. Lager.	Eigenbrot Brewing Company	21,776	Sept. 27	60	1881
Beer. Lager.	Fred Krug Brewing Company	21,620	Aug. 16	60	1047
Beer. Lager.	John Kress Brewing Company	20,834	Mar. 15	58	1420
Beer. Lager.	John Kress Brewing Company	20,800	Mar. 22	58	1562
Beer. Lager.	Long Island Brewery	20,615	Jan. 19	58	280
Beer. Lager.	Long Island Brewery	21,680	Aug. 23	60	1187
Beer. Lager.	Long Island Brewery	21,681	Aug. 23	60	1187
Beer. Lager.	Long Island Brewery	21,789	Sept. 27	60	1882
Beer. Lager.	National Brewing Company of Baltimore County, Maryland.	21,772	Sept. 29	60	1748
Beer. Lager.	F. A. Poth Brewing Company	21,692	Aug. 30	60	1323
Beer. Lager.	Peter Schoenhofen Brewing Company.	21,279	June 7	59	1604
Beer. Lager.	Ruff Brewing Company	22,170	Dec. 13	61	1653
Beer. Lager.	F. & M. Schaefer Brewing Company.	21,004	Apr. 19	59	461
Beer. Lager.	C. Schmidt & Sons	22,078	Nov. 29	61	1310
Beer. Lager.	C. Schmidt & Sons	22,079	Nov. 29	61	1310
Beer. Lager.	Senn & Ackermann	21,951	Nov. 8	61	882
Beer. Lager.	Virginia Brewing Company	21,398	June 28	59	2070
Beer. Lager.	G. Walter	22,077	Nov. 29	61	1310
Beer, porter, and ale. Bottled lager.	Pooley & Vivó	20,702	Feb. 9	58	658
Beer-preservative.	A. Boake, Roberts & Co.	21,782	Sept. 27	60	1881
Beer. Root.	F. Van Hagg & Co.	20,562	Jan. 5	58	2
Beers. Lager and other.	Elfredth & Ott	21,719	Sept. 6	60	1475
Belting, belt, lace, picker, hame-string, and leggin leather, picker-straps, hame-strings, and cut lacings. Leather	Page Belting Company	20,833	Mar. 15	58	1420
Belting for machinery. Leather	C. A. Schieren & Co.	20,915	Mar. 29	58	1698
Belting, hose, and packing. Rubber	Revere Rubber Company	20,848	Mar. 15	58	1420
Belting. Machine.	F. Reddaway & Co.	21,538	Aug. 2	60	732
Belting. Ribbon and dress.	A. & S. Blumenthal	20,885	Mar. 22	58	1562
Belting. Rubber	Stephen Ballard Rubber Co.	20,855	Mar. 22	58	1562
Belting. Woven machine.	F. Reddaway & Co.	21,346	June 21	59	1917
Beverage. Aerated phosphated.	J. T. Bright and W. D. Howe	21,197	May 24	59	1256
Beverages or nutrient beverages of fermented milk. Fermented	American Milk and Kumyss Company.	20,979	Apr. 19	59	459
Bicycle saddles or seats	Bretz & Curtis Manufacturing Company.	21,101	May 10	59	937
Bicycles.	Buffalo Wheel Company	21,458	July 19	60	433
Bicycles.	Coventry Machinists' Company	21,201	May 24	59	1256
Bicycles.	Sercombe-Bolte Manufacturing Company.	21,014	Apr. 19	59	461
Bicycles.	Smith Wheel Manufacturing Co.	20,893	Mar. 22	58	1562
Bicycles.	D. L. Whittier	20,883	Mar. 22	58	1562
Bicycles.	D. L. Whittier	20,884	Mar. 22	58	1562
Bicycles and tricycles.	Quadrant Cycle Co.	21,066	May 3	59	785
Bicycles, bicycle-tires, and sundries.	P. H. Sercombe	20,588	Jan. 12	58	148
Bicycles made partly of wood	Bradshaw Manufacturing Company.	21,068	May 3	59	785
Bicycles. Safety.	Henry Sears Company	22,223	Dec. 20	61	1788
Bicycles, tricycles, and other velocipedes and parts of the same	C. H. Pugh	20,839	Mar. 15	58	1420
Bicycles, velocipedes, and accessory articles	McIntosh-Huntington Company	20,574	Jan. 12	58	148
Bicycles, velocipedes, and accessory articles	McIntosh-Huntington Company	21,873	Oct. 18	61	421
Bindings. Dress.	Beeman & McCarthy Company	21,521	July 26	60	573
Biscuits, crackers, wafers, cakes, and similar articles	Hitchner & Co.	21,608	Aug. 16	60	1046
Bitters	F. H. Binder	22,258	Dec. 27	61	1946
Bitters	R. P. Burwell	21,637	Aug. 16	60	1049
Bitters	A. R. Costa	20,548	Jan. 5	58	2
Bitters	C. Kruegelbach	20,909	Mar. 29	58	1698
Bitters and a compound of sarsaparilla and potash. Stomach.	Renz & Henry	21,263	June 7	59	1603
Bitters. Peach.	H. Klas	20,899	Mar. 29	58	1698
Bitters. Stomach.	A. H. F. Gollatz	20,897	Mar. 29	58	1698
Blackening and other dressing for shoes and leather.	Ulmer Manufacturing Co.	21,247	May 31	29	1430
Blackening for shoes. Waterproof liquid	Price & Walters	22,023	Nov. 22	61	1162
Blackening. Shoe.	Reliance Manufacturing Company	22,207	Dec. 20	61	1787
Bladders. Pig and hog	J. Hedges	22,272	Dec. 27	61	1946
Blankets. Antiseptic	Johnson & Johnson	20,576	Jan. 12	58	148
Blankets. Woolen bed, horse, and wrapper	T. Kelly & Co.	20,871	Mar. 22	58	1562
Blood-cleanser and an oil	Red Wolf (Oh-Kow-Bi-Ho).	20,591	Jan. 12	58	148
Blue in balls. Wash.	Heller & Merz Company	21,129	May 17	59	1101
Blue. Laundry.	Reckitt & Sons.	20,641	Jan. 26	58	390
Blue. Washing.	P. Diamond	21,903	Nov. 1	61	719
Blue. Washing.	P. Diamond	22,136	Dec. 6	61	1477
Blue. Washing.	I. Lewinson	21,948	Nov. 8	61	882
Bolts for carriages, machines, plows, &c	Upson Nut Company.	20,628	Jan. 19	58	280
Bolts, nuts, rivets, and screws	J. H. Steinbergh & Son	22,177	Dec. 13	61	1654
Books. Account.	R. R. Barton	21,491	July 19	60	435

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Books, magazines, and periodicals	B. Stein & Co	22,223	Dec. 27	61	1943
Books of fiction, history, biography, travels, and poetry	Butler Brothers	20,904	Mar. 23	58	1696
Books, pamphlets, and periodicals	A. C. Northrop	22,008	Nov. 22	61	1161
Boot and shoe polish	A. B. Austin	20,978	Apr. 19	59	459
Boots and shoes	J. Chambers	21,102	May 10	59	937
Boots and shoes	B. A. Corbin & Son	21,226	May 31	59	1429
Boots and shoes	Heywood Boot and Shoe Company	20,861	Mar. 22	58	1562
Boots and shoes	Johnston & Murphy	21,207	May 31	59	1427
Boots and shoes	Munroe, Packard & Linscott	22,157	Dec. 13	61	1651
Boots and shoes	Peters Shoe Company	20,737	Feb. 16	58	810
Boots and shoes	I. Pronty & Co.	21,394	June 28	59	2070
Boots and shoes	Smith Bros.	21,815	Oct. 4	61	147
Boots and shoes	Wertheimer, Swarts & Co.	20,680	Feb. 2	58	526
Boots and shoes	T. A. Wicher & Co.	21,838	Oct. 4	61	149
Boots and shoes	Rice & Hutchins	21,562	Aug. 2	60	734
Boots and shoes and leather for the same	Rice & Hutchins	20,962	Apr. 12	59	294
Boots and shoes and leather for the uppers of boots and shoes	F. Bryant	22,093	Nov. 29	61	1312
Boots and shoes. Leather	Guthmann, Carpenter & Telling	20,920	Apr. 5	59	154
Boots and shoes. Leather	Solid Oak Shoe Co.	21,645	Aug. 16	60	1049
Boots and shoes made of leather	Giesecke Boot and Shoe Manufacturing Company.	21,413	July 5	60	155
Boots and shoes of all kinds	C. A. Raymond	21,636	Aug. 16	60	1048
Boots and shoes. Machine for attaching buttons to	Heaton-Peninsular Button Fastener Company.	20,553	Jan. 5	58	2
Boots, shoes, and foot-wear made of leather and cloth	G. W. Herrick & Co.	20,781	Mar. 1	58	1098
Boots, shoes, and slippers	E. C. Burt & Co.	21,975	Nov. 15	61	1012
Boots, shoes, and slippers	Rice & Hutchins	20,580	Jan. 12	58	148
Boots, shoes, and slippers	Rice & Hutchins	20,581	Jan. 12	58	148
Boots, shoes, slippers, rubbers, sandals, and analogous foot-wear.	N. Koch & Co.	22,189	Dec. 20	61	1786
Bottles	A. G. Smalley	22,156	Dec. 13	61	1651
Bottles. Glass	Whithall, Tatum & Co.	20,792	Mar. 1	58	1098
Boxes, bottles, atomizers, tubes, and distributors for dispensing powders, liquids, and semi-liquids.	McKesson & Robbins	21,905	Nov. 1	61	719
Boxes, bottles, tubes, atomizers, and powder-distributors used for dispensing powders, liquids, and semi-liquids.	McKesson & Robbins	21,072	May 3	59	786
Boxes, bottles, tubes, atomizers, and powder-distributors used for dispensing powders, liquids, and semi-liquids.	McKesson & Robbins	21,530	July 26	60	573
Braces and hose-holders	A. Breeze	21,968	Nov. 8	61	884
Braid	J. W. Goddard & Sons	20,655	Jan. 26	58	390
Braids	J. W. Goddard & Sons	20,602	Jan. 12	58	148
Braids, cords, and bindings	Blank & Co.	22,089	Nov. 29	61	1311
Braidings and trimmings for wearing-apparel	J. Hallworth & Son	21,260	June 7	59	1603
Brandy	J. Beck & Co.	20,732	Feb. 16	58	810
Brandy	E. R. Martin & Co.	20,561	Jan. 5	58	2
Brandy. Norwegian	J. B. Lysholm	21,501	July 19	60	436
Brandy. Norwegian	J. B. Lysholm	21,502	July 19	60	436
Bread	J. D. Hennessy	21,444	July 12	60	294
Bread	F. Hubert	20,862	Mar. 22	58	1562
Bread, biscuits, cakes, and crackers	W. J. Meikleham	21,861	Oct. 11	61	223
Brewing purposes. Corn products used for	B. G. Hudnut	21,714	Aug. 30	60	1324
Brick	W. W. Sherwin	20,711	Feb. 9	58	658
Bricks or blocks. Enameled and buff building	J. Crossley	21,728	Sept. 6	60	1476
Bronzing liquid or gold paint	W. H. Wythe & Co.	21,929	Nov. 1	61	720
Brushes. Paint	Rennous, Kleinle & Co.	20,589	Jan. 12	58	148
Brushes. Paint	Rennous, Kleinle & Co.	20,590	Jan. 12	58	148
Buckwheat, Graham flour, cornmeal, rolled oats, and similar manufactured cereals.	F. L. Thornton	21,823	Oct. 4	61	148
Buggies. Top	C. H. Palmer, Jr.	21,837	Oct. 4	61	149
Building and roofing purposes. Damp course cloth for	R. Alexander	20,775	Mar. 1	58	1098
Butter	J. Newman	20,865	Mar. 22	58	1562
Butter and cheese	F. M. Peck	22,168	Dec. 13	61	1653
Butter and eggs	J. C. Mahr & Sons	21,290	June 14	59	1758
Buttons and beads	F. Baptesse & Cie.	21,086	May 10	59	936
Buttons, braids, bindings, and buckles	E. W. Bloomingdale	20,982	Apr. 19	59	459
Buttons. Collar	F. D. Williams	21,971	Nov. 15	61	1012
Buttons. Pearl	Usine J. Cleret	21,414	July 5	60	155
Calculations and recording the results. Machines for making	Calculagraph Company	21,747	Sept. 13	60	1608
Calendars and paper-weights	A. D. Palmer	22,152	Dec. 13	61	1651
Calf-skins	Shaw & Co.	20,720	Feb. 16	58	810
Calf-skins, goat-skins, sole-leather, and sheep-skins	Shaw Leather Company	21,974	Nov. 15	61	1012
Camphor	Gribble & Nash	21,956	Nov. 8	61	883
Can-openers	A. F. Meisselbach & Bro.	21,082	May 10	59	936
Candies	Candy Bros.	22,191	Dec. 20	61	1786
Candies	Chandler & Rudd Company	21,017	Apr. 19	59	462
Candies	W. H. Weeks	21,743	Sept. 13	60	1608
Candies, licorice, and chewing-gum	Hall & Hayward Company	21,194	May 24	59	1256
Candy, chocolate, and cocoa for confectioners' use	Ode & Gerbereux	21,774	Sept. 20	60	1748
Candy of all kinds. Manufactured	Hall & Hayward Company	20,843	Mar. 15	58	1420
Canned and preserved fish	C. P. Upshur	20,795	Mar. 1	58	1098
Canned and preserved fish	C. P. Upshur	21,805	Sept. 27	60	1882
Canned fish, fruits, and vegetables	C. L. Benson	21,856	Oct. 11	61	283
Canned fish, fruits, and vegetables	Winter Bros.	21,378	June 28	59	2068
Canned fish, fruits, vegetables, and dried fruits	C. M. Webber & Company	21,343	June 21	59	1916
Canned fish, fruits, vegetables, soups, and milk	W. B. Timms	21,804	Sept. 27	60	1882
Canned fruits and vegetables	Assau, Baines Company	21,943	Nov. 8	61	882
Canned fruits and vegetables	Bloomington Canning Company	22,082	Nov. 29	61	1311
Canned fruits and vegetables	Martin Wagner Company	20,846	Mar. 15	58	1420
Canned fruits, fish, meats, and vegetables	A. J. Wenham's Sons	21,800	Sept. 27	60	1882
Canned fruits, vegetables, fish, and meats, and bottled catsups, sauces, pickles, and olives.	Rockwood Brothers	21,092	May 10	59	937
Canned fruits, vegetables, fish, and meats, catsups, pickles, sauces, and olives.	Rockwood Brothers	21,091	May 10	59	936
Canned meats, extract of beef, and soups	Libby, McNeill & Libby	20,794	Mar. 1	58	1098

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Canned or preserved fruits, vegetables, soups, oysters, cat-soup, and sauces.	Anderson Preserving Company	20,980	Apr. 19	59	459
Canned oysters.	Fait & Winebrenner	22,084	Nov. 29	61	1311
Canned oysters, fruits, and vegetables	H. J. McGrath	20,666	Feb. 2	58	526
Canned oysters, fruits, and vegetables	H. J. McGrath	21,144	May 17	59	1101
Canned salmon.	Taylor, Young & Co	21,495	July 19	60	435
Canned soup	Van Camp Packing Company	21,752	Sept. 13	60	1608
Canned, sweetened, and evaporated cream.	St. Charles Evaporated Cream Company.	20,719	Feb. 16	58	810
Canned tomatoes	A. A. and G. W. Charles	20,886	Mar. 22	58	1562
Canned tomatoes	Van Camp Packing Company	21,753	Sept. 13	60	1608
Canned vegetables and fish.	Seeman Brothers	20,942	Apr. 5	59	155
Canned vegetables and fruits.	Bloomington Canning Company	22,132	Dec. 6	61	1477
Canned vegetables and fruits.	Oakford & Fahuestock	21,340	June 21	59	1916
Canned vegetables and fruits.	Strassheim & Jaeger	21,174	May 24	59	1234
Capsules filled with medicine	J. R. Planten	22,040	Nov. 22	61	1163
Capsules for medicinal use	H. H. Blood	21,851	Oct. 4	61	150
Capsules for medicine	J. R. Planten	22,045	Nov. 22	61	1164
Capsules for medicine	J. R. Planten	22,046	Nov. 22	61	1164
Capsules. Gelatine	J. W. Gedney	21,434	July 12	60	293
Car couplings	Standard Car Coupling Company	20,710	Feb. 9	58	658
Caramels	J. J. Leech	20,585	Jan. 12	58	148
Carbonated drinks	J. T. Driscoll & Co	21,950	Nov. 8	61	882
Carbonated drinks	J. T. Driscoll & Co	21,983	Nov. 15	61	1013
Card-cloth	Mechanical Fabric Company	20,538	Jan. 5	58	2
Cards. Compositions applied with a brush in making ornamental	Thaddeus Davids Company	21,990	Nov. 15	61	1013
Cards. Playing	A. Dougherty	22,010	Nov. 22	61	1161
Cards. Playing	National Card Company	21,084	May 10	59	936
Cards. Playing	New York Consolidated Card Company.	21,093	May 10	59	937
Cards. Playing	New York Consolidated Card Company.	22,011	Nov. 22	61	1161
Cards. Playing	United States Printing Company	20,965	Apr. 12	59	295
Cards. Playing	United States Printing Company	20,966	Apr. 12	59	295
Cards. Playing	United States Printing Company	21,113	May 10	59	938
Cards. Playing	United States Printing Company	21,114	May 10	59	938
Cards. Playing	United States Printing Company	21,115	May 10	59	938
Cards. Playing	United States Printing Company	21,977	Nov. 15	61	1012
Carpets.	Lowell Manufacturing Company	22,234	Dec. 27	61	1943
Carriages. Two-seated	S. R. Bailey & Co	20,981	Apr. 19	59	459
Carts and carriages	Ketchum Wagon Company	20,735	Feb. 16	58	810
Cash-registering machine.	Columbia Cash Register Company	21,717	Sept. 6	60	1475
Cash-registering machines having visual indicators. Key-operated	Boston Cash Register Company	21,236	May 31	59	1429
Cashmeres and henriettas	J. J. Wysong & Co	20,595	Jan. 12	58	148
Castings. Malleable	Eberhard Manufacturing Company	21,059	Apr. 26	59	628
Catchup	Flaccus Bros	21,314	June 21	59	1914
Catsup. Tomato	J. Butler	21,258	June 7	59	1602
Catsup. Tomato	Dodson, Hils Manufacturing Company.	21,793	Sept. 27	60	1882
Catsup. Tomato	Dodson, Hils Manufacturing Company.	21,794	Sept. 27	60	1882
Catsup. Tomato	Dodson, Hils Manufacturing Company.	21,795	Sept. 27	60	1882
Cement.	Burham Brick, Lime and Cement Company.	20,950	Apr. 5	59	156
Cement.	Gibbs & Company	21,371	June 28	59	2068
Cement	R. M. Spencer	21,494	July 19	60	435
Catarrh-cream	M. Markendorf	20,556	Jan. 5	58	2
Cement. Hydraulic	C. A. Brockett Cement Company	20,600	Jan. 12	58	148
Cement. Liquid	C. L. Harthaway & Sons	21,151	May 17	59	1102
Cement. Portland	Gillingham Portland Cement Company.	22,244	Dec. 27	61	1944
Cement. Portland	T. Picha & Cie	21,385	June 28	59	2069
Cements. Hydraulic and other	Eisner & Mendelson Company	21,853	Oct. 4	61	150
Chains. Ornamental watch and neck	O. M. Draper	21,870	Oct. 18	61	421
Chains, rings, clips, hooks, and other carriage-hardware	Baker Chain and Wagon Iron Manufacturing Company.	21,496	July 19	60	435
Champagne	L. Girard & Cie	21,298	June 14	59	1759
Champagne	Kunkelmann & Co	21,729	Sept. 6	60	1476
Champagne	Kunkelmann & Co	22,247	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,248	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,249	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,250	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,251	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,252	Dec. 27	61	1945
Champagne	Kunkelmann & Co	22,253	Dec. 27	61	1945
Champagne-wines	E. P. Fagny	20,858	Mar. 22	58	1562
Cheese	McCord, Brady Company	21,621	Aug. 16	60	1047
Cheese	T. D. Millar	21,261	June 7	59	1603
Cheese	H. Prinz	22,210	Dec. 20	61	1787
Cheese. Fancy full-cream Canadian	S. R. Udell & Co	21,046	Apr. 26	59	628
Chemical products	A. F. MacLaren	21,000	Apr. 19	59	460
Chemical products derived from sugar	F. von Heyden	21,846	Oct. 4	61	150
Cheviots	Schering & Glatz	21,864	Oct. 11	61	284
Chicory	S. A. Crozer & Son	22,087	Nov. 29	61	1311
Chicory	G. Floto's Sons	21,720	Sept. 6	60	1475
Chicory	E. J. Gillies & Co	20,860	Mar. 22	58	1562
China-ware	T. Haviland	22,100	Dec. 6	61	1474
Chloride of sodium or common salt	T. Higgin & Co	21,600	Aug. 9	60	892
Chucks.	Oneida Manufacturing Chuck Company.	20,679	Feb. 2	58	526
Cider. Apple, grape, and orange	J. Manegold & Co	20,888	Mar. 22	58	1562

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Cider and cider-vinegar. Apple.....	Duffy, Mountfort & Greene Cider Company.....	20,817	Mar. 8	58	1262
Cigarette-paper.....	Braunstein Frères.....	21,362	June 28	59	2067
Cigarette-paper.....	H. Isaac.....	20,532	Jan. 12	58	148
Cigarettes.....	Baron & Co.....	21,021	Apr. 26	59	626
Cigarettes.....	National Cigarette and Tobacco Company.....	21,894	Oct. 25	61	562
Cigarettes.....	W. P. Ward.....	21,332	June 21	59	1915
Cigars.....	E. Aarons & Bro.....	21,203	May 31	59	1427
Cigars.....	C. Alvarez.....	20,902	Mar. 29	58	1698
Cigars.....	C. Alvarez.....	20,998	Apr. 19	59	460
Cigars.....	C. Alvarez.....	21,691	Aug. 23	60	1188
Cigars.....	S. Arnstein.....	21,135	May 17	59	1101
Cigars.....	C. J. Cooper.....	21,476	July 19	60	434
Cigars.....	C. Dachs.....	21,893	Oct. 25	61	562
Cigars.....	Diaz y Hermano.....	21,658	Aug. 23	60	1185
Cigars.....	D. S. Erb & Co.....	20,787	Mar. 1	58	1098
Cigars.....	C. S. Fish.....	21,137	May 17	59	1101
Cigars.....	Foster-Hilson Company.....	21,843	Oct. 4	61	150
Cigars.....	Hollenden Hotel Company.....	21,896	Oct. 25	61	562
Cigars.....	M. Hyman.....	21,270	June 7	59	1603
Cigars.....	R. Lahann.....	21,189	May 24	59	1256
Cigars.....	P. Le Francis.....	21,479	July 19	60	434
Cigars.....	R. López.....	21,661	Aug. 23	60	11-6
Cigars.....	W. G. Marshall & Co.....	20,988	Apr. 19	59	459
Cigars.....	Silver State Cigar Company.....	21,890	Oct. 25	61	562
Cigars.....	D. L. Trujillo & Sons.....	20,948	Apr. 5	59	156
Cigars and cigarettes.....	F. Hilson Company.....	21,606	Aug. 16	60	1046
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,213	Dec. 20	61	1787
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,214	Dec. 20	61	1788
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,215	Dec. 20	61	1788
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,216	Dec. 20	61	1788
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,217	Dec. 20	61	1788
Cigars, cheroots, and cigarettes, and smoking, fine-cut, and plug tobacco.....	S. C. Herbst Importing Company.....	22,218	Dec. 20	61	1788
Cigars. Labels or clips for indicating the price of.....	Imperial Metal Card Company.....	21,447	July 12	60	294
Clam bouillon.....	E. S. Burnham.....	20,829	Mar. 15	58	1420
Cleaning compound for removing grease from clothing.....	Magic Clothes Cleaner Co.....	21,011	Apr. 19	59	461
Cleaning preparations. Clothes.....	Reliance Manufacturing Company.....	22,205	Dec. 20	61	1787
Cleansing compound.....	Zizelman & Bartlett.....	22,065	Nov. 29	61	1309
Cleansing compounds of semi-liquid or liquid form. Fabric.....	W. J. Kayser.....	21,050	Apr. 26	59	628
Cloaks and suits. Ladies' and misses'.....	A. Popkin & Co.....	21,756	Sept. 20	60	1747
Cloth. Gray.....	T. L. Pomeroy.....	20,847	Mar. 15	58	1420
Clothes. Improved and reformed baby.....	Firm of Mrs. B. J. Gunn.....	21,287	June 14	59	1758
Clothes-sprinklers.....	Berry, Goss & Co.....	21,185	May 24	59	1255
Clothing for men, women, and boys, and for hats, caps, and flannel shirts.....	J. J. & W. Wilson.....	21,099	May 10	59	937
Clothing, hats, and furnishing goods. Men's, boys', and children's.....	J. Blach & Sons.....	20,811	Mar. 8	58	1262
Clothing, including coats, pants, vests, and overcoats. Men's and boys'.....	American Tailoring Co.....	21,097	May 10	59	937
Clothing, neckties, and underwear.....	Kuhn Bros.....	20,768	Feb. 23	58	952
Coal.....	Perkins & Co.....	20,634	Jan. 26	58	390
Coal.....	Perkins & Co.....	20,635	Jan. 26	58	390
Coal.....	Perkins & Co.....	21,254	June 7	59	1602
Coat-linings, composed of cotton, silk, wool, or a mixture thereof. Material for.....	J. W. Goddard & Sons.....	20,633	Jan. 26	58	390
Coat-linings. Woolen.....	J. W. Goddard & Sons.....	20,656	Jan. 26	58	390
Coat-linings. Woolen.....	J. W. Goddard & Sons.....	20,657	Jan. 26	58	390
Coats, pantaloons, overalls, shirts, and gentlemen's furnishing goods.....	Bean, La Due & Clawson.....	21,677	Aug. 23	60	1187
Codfish. Prepared.....	American Evaporated Codfish Co.....	22,130	Dec. 6	61	1477
Cod-liver oil and preparations of cod-liver oil.....	Southall Bros. & Barclay.....	21,106	May 10	59	938
Cod-liver oil and preparations of cod-liver oil.....	Southall Bros. & Barclay.....	21,107	May 10	59	938
Cod-liver oil and preparations of cod-liver oil.....	Southall Bros. & Barclay.....	21,108	May 10	59	938
Cod-liver oil. Substitute for.....	Danbury Pharmacal Association.....	21,533	Aug. 2	60	732
Coffee.....	H. A. Doan.....	20,691	Feb. 9	58	658
Coffee.....	H. A. Doan.....	20,765	Feb. 23	58	952
Coffee.....	Elmenhorst & Co.....	20,926	Apr. 5	59	154
Coffee.....	H. A. Fry & Co.....	20,913	Mar. 29	58	1698
Coffee.....	Royal Phosphoric Coffee Co.....	22,241	Dec. 27	61	1944
Coffee. Ground.....	W. Johnston.....	22,240	Dec. 27	61	1944
Coffee-hullers.....	M. Mason & Co.....	21,165	May 24	59	1254
Coffee-polishers.....	M. Mason & Co.....	21,164	May 24	59	1254
Coffee. Roasted.....	J. P. Dieter.....	21,558	Aug. 2	60	734
Coffee. Roasted.....	Midland Coffee and Spice Company.....	21,484	July 19	60	434
Coffee. Roasted.....	Thomson & Taylor Spice Company.....	20,807	Mar. 1	58	1098
Coffee. Roasted and self-settling.....	Griggs, Cooper & Co.....	21,483	July 19	60	434
Coffee. Roasted and ground.....	L. G. Dávalos & Co.....	20,745	Feb. 23	58	952
Collars and cuffs. Waterproof.....	Arlington Collar and Cuff Company.....	20,850	Mar. 15	58	1420
Collars and cuffs. Waterproof.....	Arlington Collar and Cuff Company.....	20,851	Mar. 15	58	1420
Collars and cuffs. Waterproof.....	Arlington Collar and Cuff Company.....	20,869	Mar. 22	58	1562
Collars and cuffs. Waterproof.....	Arlington Collar and Cuff Company.....	20,901	Mar. 29	58	1698
Collars and cuffs. Waterproof.....	Celluloid Company.....	21,573	Aug. 9	60	890
Collars and cuffs. Waterproof.....	Celluloid Company.....	21,619	Aug. 16	60	1047
Collars or pads. Sweat.....	E. L. McClain.....	22,071	Nov. 29	61	1310
Collars, riding-saddles, gig-saddles, back-pads, and all parts of harness. Horse.....	Cork Faced Collar Company.....	21,557	Aug. 2	60	734
Colognes.....	Rich & Manheimer.....	21,407	July 5	60	154

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Coloring matter. Wool.....	R. Holliday & Sons.....	21,105	May 10	59	938
Complexion-bleach	I. S. Pinney.....	20,560	Jan. 5	58	2
Complexion-cream.....	M. Van Buren.....	21,595	Aug. 9	60	892
Complexion. Liquid preparation for the.....	Persons & Allen.....	20,875	Mar. 22	58	1562
Complexion. Preparation to beautify the.....	E. C. Clay.....	20,937	Apr. 5	59	155
Composition tablets for female complaints.....	F. Plumb.....	21,375	June 23	59	2068
Compound for the cure of rheumatism and rheumatic gout.....	R. T. Lassiter.....	21,631	Aug. 16	60	1048
Compound of fruit and cascara-bark for the cure of dyspepsia and other diseases.....	E. T. Booth.....	21,460	July 19	60	433
Compounds. Antiseptic, antizymotic, deodorizing, and parasiticide.....	Buntin Drug Co.....	21,192	May 24	59	1256
Compounds for destroying insects and other pests, for disinfecting purposes, for curing diseases, and healing wounds.....	J. Rowbotham.....	22,039	Nov. 22	61	1163
Confectionery.....	A. L. Causse Manufacturing Company.....	21,757	Sept. 20	60	1747
Confectionery.....	Fobes, Hayward & Company.....	20,645	Jan. 26	58	390
Confectionery.....	Hall & Hayward Company.....	21,024	Apr. 26	59	626
Confectionery.....	Hall & Hayward Company.....	21,025	Apr. 26	59	626
Confectionery.....	Hall & Hayward Company.....	21,026	Apr. 26	59	626
Confectionery for coughs and colds.....	Smith Brothers.....	20,907	Mar. 29	58	1698
Confectionery or candies.....	E. F. Gavin & Co.....	20,939	Apr. 5	59	155
Confections and candies.....	Pan Confection Company.....	20,957	Apr. 12	59	294
Confections. Fruit.....	Walter M. Lowney Company.....	21,981	Nov. 15	61	1012
Cookers, baking-dishes, and coffee-makers.....	Enstis Manufacturing Company.....	21,427	July 5	60	156
Cookies, wafers, and similar articles, such as cakes and crackers.....	S. H. Childs Company.....	21,564	Aug. 2	60	734
Cordials, brandies, gins, and whiskies. Geneva.....	Blankenhym & Nolet.....	21,170	May 24	59	1254
Cords, lines, twines, and ropes.....	Samson Cordage Works.....	21,938	Nov. 8	61	881
Cords, lines, twines, and ropes.....	Silver Lake Company.....	21,347	June 21	59	1917
Cords, lines, twines, and ropes.....	Silver Lake Company.....	21,348	June 21	59	1917
Corks.....	Meyer Brothers Drug Company.....	21,209	May 31	59	1427
Corn for culinary purposes. Preparation of.....	E. C. Napheys.....	21,172	May 24	59	1254
Corn-starch or corn-flour. Preparation of.....	National Starch Manufacturing Company.....	21,751	Sept. 13	60	1608
Corset shields or supports.....	E. Pearl.....	22,187	Dec. 20	61	1785
Corset-springs.....	P. Lippmann.....	21,104	May 10	59	938
Corsets.....	J. Beckel & Co.....	21,457	July 19	60	433
Corsets.....	M. M. Bliss.....	21,035	Apr. 26	59	627
Corsets.....	E. Schweinburg.....	21,006	Apr. 19	59	461
Corsets.....	E. Schweinburg.....	21,349	June 21	59	1917
Corsets.....	E. Schweinburg.....	21,350	June 21	59	1917
Corsets.....	E. Schweinburg.....	22,186	Dec. 20	61	1785
Corsets.....	E. Schweinburg.....	21,934	Nov. 8	61	881
Corsets.....	J. M. Van Orden.....	21,799	Sept. 27	60	1882
Corsets.....	Wechsler & Abraham.....	20,758	Feb. 23	58	952
Corsets.....	Weingarten Bros.....	20,748	Feb. 23	58	952
Corsets for ladies' use.....	Bay State Corset Company.....	21,482	July 19	60	434
Corsets. Ladies' French.....	Syndicate Trading Company.....	21,816	Oct. 4	61	147
Corsets or stays. Ladies'.....	J. K. Ross.....	20,774	Feb. 23	58	952
Corsets, waists, and suspenders.....	Coronet Corset Company.....	21,758	Sept. 20	60	1747
Cosmetic.....	J. Grever.....	21,426	July 5	60	156
Cosmetic or liquid face preparation.....	C. W. Bippus and C. H. Breidenbach.....	21,225	May 31	59	1429
Cosmetics, both liquid and powder, and a liquid dentifrice.....	E. G. Hake.....	22,018	Nov. 22	61	1162
Cosmetics, lotions, perfumery, cream, and soap.....	Firm of William Rieger.....	22,062	Nov. 29	61	1309
Cosmetics, salves, and ointments.....	Blondeau et Cie.....	21,085	May 10	59	936
Cotton and linen textile goods.....	W. Dinkelaker.....	21,022	Apr. 26	59	626
Cotton fabrics. Corded.....	Sharpless Bros.....	21,531	July 26	60	573
Cotton goods. Bleached, gray, printed, and fancy domestic.....	Neuss, Hesselstein & Co.....	20,558	Jan. 5	58	2
Cotton goods, including tickings, chevrons, ginghams, and sheetings.....	J. Farnum & Co.....	21,186	May 24	59	1255
Cotton goods, such as sheetings, shirtings, dress goods, and cotton flannels.....	Tremont & Suffolk Mills.....	21,351	June 21	59	1917
Cotton goods, such as silesias, sateens, cambrics, and twills.....	Burton Bros. & Co.....	21,937	Nov. 8	61	881
Cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair. Sewing.....	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie.....	20,543	Jan. 5	58	2
Cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair. Sewing.....	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie.....	20,544	Jan. 5	58	2
Cotton, linen and hemp yarns and thread, jute yarns, silk, (spun, thrown, or sewing,) and yarns of wool, worsted, or hair. Sewing.....	Aktiengesellschaft für Textil-Industrie, vormals Dollfus-Mieg & Cie.....	20,786	Mar. 1	58	1098
Cotton or cotton thread. Spool.....	J. & P. Coats.....	20,625	Jan. 19	58	280
Cotton or cotton thread. Spool.....	J. & P. Coats.....	20,626	Jan. 19	58	280
Cotton. Spool.....	Clark Thread Company.....	20,616	Jan. 19	58	280
Cotton thread.....	J. Brook and Brothers.....	21,054	Apr. 26	59	626
Cotton thread.....	J. Brook and Brothers.....	21,055	Apr. 26	59	626
Cotton thread.....	Clark Thread Company.....	20,608	Jan. 19	58	280
Cotton thread.....	Clark Thread Company.....	20,609	Jan. 19	58	280
Cough-balm and remedy for throat and lung diseases.....	M. Markendorf.....	20,555	Jan. 5	58	2
Cough balsam.....	H. M. Henderson.....	22,193	Dec. 20	61	1786
Cough-cure.....	E. C. De Witt.....	20,750	Feb. 23	58	952
Cough remedy.....	C. E. Davis and A. Schindele.....	20,579	Jan. 12	58	148
Cough sirup.....	Foster, Milburn & Co.....	21,373	June 28	59	2068
Cough-tablets.....	J. Casani.....	20,676	Feb. 2	58	526
Crackers and cakes.....	Henderson, Laws & Co.....	21,300	June 14	59	1759
Creamers. Centrifugal.....	Aktiebolaget Separator.....	20,967	Apr. 12	59	295
Creamers. Centrifugal.....	Aktiebolaget Separator.....	20,968	Apr. 12	59	295
Creamers. Centrifugal.....	P. M. Sharples.....	22,149	Dec. 6	61	1478
Crystalline substance used as an abradant and for other purposes.....	Carborundum Company.....	21,317	June 21	59	1914
Culinary vessels.....	H. Aich.....	21,490	July 19	60	435
Cure. Ague.....	Firm of F. A. Dicks.....	22,110	Dec. 6	61	1475
Cure for drunkenness.....	A. Noteman.....	21,485	July 19	60	434

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Cure for nervous diseases and the liquor habit.....	Royal Medicine Company.....	21,797	Sept. 27	60	1882
Currants. Cleaned.....	Chapman & Smith Company.....	21,354	June 28	59	2069
Currants. Dried.....	W. H. Doble.....	21,712	Aug. 30	60	1324
Currants. Dried.....	W. H. Doble.....	21,869	Oct. 18	61	421
Currants or similar prepared fruits or vegetables. Cleaned.....	Crandall & Godley.....	20,938	Apr. 5	59	155
Currycombs. Spring.....	Spring Curry Comb Company.....	21,969	Nov. 8	61	884
Dairy products.....	M. Piowaty.....	22,085	Nov. 29	61	1311
Dandruff. Liquid solution for curing.....	J. A. Russo.....	20,824	Mar. 8	58	1262
Demulcents.....	Charles Truax, Greene & Company.....	20,636	Jan. 26	58	390
Dental plates and other uses. Aluminium solder for.....	C. Gérard and J. S. Letord.....	20,929	Apr. 5	59	154
Dental rubber.....	Excelsior Rubber Works.....	21,882	Oct. 18	61	422
Dentifrice.....	Florence Manufacturing Company.....	21,477	July 19	60	434
Dentifrice.....	Florence Manufacturing Company.....	21,733	Sept. 13	60	1607
Dentifrice.....	W. H. Hall.....	20,552	Jan. 5	58	2
Dentifrice.....	A. Lilly.....	20,999	Apr. 19	59	460
Dentifrices.....	H. B. Fould.....	22,250	Dec. 27	61	1946
Deodorizing-powder.....	C. W. Chancellor.....	21,963	Nov. 8	61	883
Dermal preparations, dermal soaps, curling cream, hair tonic, and tooth-powders.....	J. A. Maxim.....	22,267	Dec. 27	61	1942
Detergent compounds in liquid form.....	Peterson & Ruge.....	21,706	Aug. 30	60	1324
Detergent for toilet, bath, and household purposes. Liquid.....	Keystone Chemical Company.....	21,336	June 21	59	1916
Diphtheria and other throat troubles. Specific for.....	D. Peraza.....	21,422	July 5	60	156
Diphtheria specific.....	Hunt & Co.....	21,401	July 5	60	154
Dishes and plates.....	G. Borgfeldt & Co.....	21,120	May 17	59	1100
Dishes and plates.....	G. Borgfeldt & Co.....	21,121	May 17	59	1100
Dishes and plates.....	G. Borgfeldt & Co.....	21,122	May 17	59	1100
Dishes and plates.....	G. Borgfeldt & Co.....	21,123	May 17	59	1100
Dishes and plates.....	G. Borgfeldt & Co.....	21,124	May 17	59	1100
Dishes and plates.....	G. Borgfeldt & Co.....	21,125	May 17	59	1100
Disinfectant.....	E. R. Farren.....	21,443	July 12	60	294
Disinfectant.....	J. M. Raymond.....	22,044	Nov. 22	61	1164
Disinfectants.....	Odorless Disinfectant Co.....	21,988	Nov. 15	61	1013
Disinfectants, deodorizers, and vermin-destroyers.....	H. Ellison, Jr.....	20,825	Mar. 8	58	1262
Disinfectants, disinfecting apparatus, and vessels containing disinfectants.....	Taylors.....	20,598	Jan. 12	58	148
Disinfecting-paper.....	A. Ponsot.....	21,635	Aug. 16	60	1048
Doors, blinds, and shutters. Flexible.....	Flexible Door and Shutter Company.....	21,259	June 7	59	1602
Doors. Sugar-pine.....	Sierra Lumber Company.....	21,305	June 14	59	1760
Douche. Nose and throat.....	W. C. Downey & Co.....	21,628	Aug. 16	60	1048
Dress fabrics, such as prints, calicoes, poplins, and alpacas.....	Windsor Company.....	21,541	Aug. 2	60	732
Dress-shields.....	Canfield Rubber Company.....	21,118	May 17	59	1100
Dress-shields.....	Canfield Rubber Company.....	21,119	May 17	59	1100
Dress-shields.....	Levi Bros. & Blum.....	21,417	July 5	60	155
Dress-stays. Covered.....	Detroit Stay Company.....	21,783	Sept. 27	60	1881
Drugs and chemicals. Certain named.....	Bowman, Thompson & Company.....	20,596	Jan. 12	58	148
Dry goods. Certain named.....	J. D. Veir & Co.....	22,015	Nov. 22	61	1162
Dye-stuffs for dyeing textile fabrics.....	A. W. Neumann.....	21,141	May 17	59	1101
Dyes or colors.....	Färberei Glauchau, vormals O. Seyfert.....	21,842	Oct. 4	61	150
Edge tools.....	H. C. Marshall.....	21,622	Aug. 16	60	1048
Edge tools and cutlery of all kinds.....	McKnight & Co.....	20,976	Apr. 12	59	296
Edge tools, cutlery, and instruments and implements of steel for surgical, toilet, domestic, and other purposes.....	Jacoby & Wester.....	20,953	Apr. 5	59	156
Egg carriers and cases, egg-case fillers, and fruit-carriers.....	R. H. Weis.....	21,047	Apr. 26	59	628
Eggs.....	R. H. Horne Produce Company of Indiana.....	21,016	Apr. 19	59	462
Eggs.....	S. S. Long & Bro.....	20,693	Feb. 9	58	658
Eider-down cloth of a wavy appearance.....	H. H. Bell's Sons.....	21,696	Aug. 30	60	1323
Elastic endless sleeve-bands.....	E. Ashworth.....	20,668	Feb. 2	58	526
Elastic woven fabrics.....	Glendale Elastic Fabrics Company.....	20,788	Mar. 1	58	1098
Electric rings for the cure of disease.....	M. D. Peckham.....	21,736	Sept. 13	60	1607
Electrical appliance for body-wear.....	W. I. Smith.....	20,796	Mar. 1	58	1098
Electrical conduit-tubes.....	Interior Conduit and Insulation Company.....	20,709	Feb. 9	58	658
Electro-curative apparatus.....	Electrolibration Company.....	21,892	Oct. 25	61	562
Electrotypes, stereotypes, and wood-cuts.....	Vilmorin, Andrieux & Co.....	20,594	Jan. 12	58	148
Elevators. Operating machinery for passenger and freight.....	Cahill & Hall Elevator Company.....	22,001	Nov. 15	61	1014
Emollient or hoof-cure.....	Newton Horse Remedy Co.....	20,739	Feb. 16	58	810
Emulsion of cod-liver oil, creosote, and pancreatine.....	T. E. Fraser.....	20,712	Feb. 16	58	810
Emulsion of witch-hazel for the skin.....	M. H. Bachman.....	21,320	June 21	59	1914
Enamel for use on glass. Liquid.....	E. P. Gleason Manufacturing Company.....	22,024	Nov. 22	61	1162
Enamel for use on glass. Liquid.....	E. P. Gleason Manufacturing Company.....	22,025	Nov. 22	61	1162
English walnuts.....	Los Nietos and Ranchito Walnut Growers Association.....	20,895	Mar. 22	58	1562
Envelopes and making paper boxes. Machinery for pasting and folding.....	Lester & Wasley.....	22,074	Nov. 29	61	1310
Ethyl nitrite.....	Meyer Brothers Drug Company.....	21,146	May 17	59	1102
Eucalyptus products.....	Eucalyptus Manufacturing Company.....	20,870	Mar. 22	58	1562
Explosives.....	Westfälisch-Anhaltische Sprengstoff-Act.-Ges.....	22,099	Nov. 29	61	1312
Extract of wild cherry. Phosphated.....	A. G. Thompson.....	21,390	June 28	59	2069
Extract or coloring material for pastry.....	Confectioners' Vegetable Colours and Fruit Essences Company.....	21,127	May 17	59	1101
Extracts, colognes, sachet-powders, and toilet soap.....	Firm of Solon Palmer.....	21,397	June 28	59	2070
Extracts. Flavoring.....	Hance Bros. & White.....	22,133	Dec. 6	61	1477
Extracts. Flavoring.....	Hance Bros. & White.....	22,134	Dec. 6	61	1477
Extracts. Flavoring.....	A. J. Hilbert & Co.....	21,505	July 19	60	436
Extracts for food. Flavoring.....	Thomson & Taylor Spice Company.....	20,917	Mar. 29	58	1698
Extracts for foods. Flavoring.....	M. J. Chryst.....	20,955	Apr. 12	59	294
Extracts. Triple.....	Estate of Daniel Stewart.....	21,148	May 17	59	1102
Extracts. Triple.....	Estate of Daniel Stewart.....	21,149	May 17	59	1102

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Eye lotion	Sassafras Eye Lotion Co	20,890	Mar. 22	58	1562
Eye-washes	J. G. Fitzherbert	21,265	June 7	59	1603
Eyeglasses and spectacles	F. W. McAllister	22,102	Dec. 6	61	1474
Facing. Skirt	Meyerhof, Marx & Simonsen	21,642	Aug. 16	60	1049
Fence-pickets. Corrugated toothed metal	J. E. Emerson	20,741	Feb. 23	58	952
Fertilizer. Natural and artificial	Durham Fertilizer Company	21,598	Aug. 9	60	892
Fertilizers. Artificial	Baldwin Fertilizer Company	21,520	July 26	60	572
Fertilizers. Ground-bone	Sharpless & Carpenter	20,932	Apr. 5	59	155
Fertilizers. Manufactured	Western Union Chemical Company	21,970	Nov. 8	61	884
Fertilizers. Natural and artificial	Durham Fertilizer Company	21,550	Aug. 2	60	733
Fertilizers. Natural and artificial	Durham Fertilizer Company	21,551	Aug. 2	60	733
Fertilizing composition	J. D. Little	20,845	Mar. 15	58	1420
Files, chisels, gouge-chisels, sometimes known as scoopers, and gravers.	S. Vantier & Fils	22,147	Dec. 6	61	1478
Files, chisels, scopers, gravers, and similar tools	Grobet Frères	21,904	Nov. 1	61	719
Filters and coolers. Water	Improved Natural Stone Filter Company	21,177	May 17	59	1100
Filters. Water	C. Bühring & Co	21,274	June 7	59	1604
Finger-rings	W. Loeb & Co.	22,101	Dec. 6	61	1474
Finger-rings	F. A. Osborne	21,885	Oct. 18	61	422
Finger-rings	F. N. Osborne	21,972	Nov. 15	61	1012
Finger-rings	F. N. Osborne	21,973	Nov. 15	61	1012
Firearms, ammunition, and fishing-tackle	G. Freund	20,504	Mar. 1	58	1098
Firearms. Revolving	Smith & Wesson	20,627	Jan. 19	58	280
Fire-hose	F. Reddaway & Co.	21,386	June 28	59	2069
Fire-lighters	H. Hickman	22,208	Dec. 20	61	1787
Fireproof-backing slabs and sheets	N. H. Culver	21,327	May 31	59	1429
Fish, oysters, and other shell-fish packed in tin and glass	H. Ruge & Sons	21,863	Oct. 11	61	283
Fish. Whole, cut, and boneless	E. G. Hotchkiss	22,083	Nov. 20	61	1311
Flour	J. Butler	21,344	June 21	59	1917
Flour	S. Green	21,871	Oct. 18	61	421
Flour	S. Green	21,872	Oct. 18	61	421
Flour	S. Green	22,242	Dec. 27	61	1944
Flour	A. C. Klindtworth	21,979	Nov. 15	61	1012
Flour	C. T. Long	20,584	Jan. 12	58	148
Flour and meal	Bonestell & Turner	21,925	Nov. 1	61	720
Flour, cereals, and farinaceous goods in barrels, kegs, and sacks.	Strassheim & Jaeger	21,175	May 24	59	1255
Flour. Corn	Ontario Oriental Flour Company	21,653	Aug. 23	60	1185
Flour. Graham	F. T. Stimson	21,886	Oct. 18	61	422
Flour. Wheat	Buffalo Milling Company	21,906	Nov. 1	61	719
Flour. Wheat	M. Forchheimer & Co.	21,116	May 10	59	938
Flour. Wheat	J. C. Frye & Co	20,760	Feb. 23	58	952
Flour. Wheat	J. A. Graves & Co	21,582	Aug. 9	60	891
Flour. Wheat	Harrod Milling Co	22,686	Nov. 29	61	1311
Flour. Wheat	Kunhardt & Co	20,723	Feb. 16	58	810
Flour. Wheat	F. H. Leggett & Co	21,178	May 24	59	1255
Flour. Wheat	Minkota Milling Company	21,940	Nov. 8	61	881
Flour. Wheat	Northwestern Consolidated Milling Company	21,306	June 14	59	1760
Flour. Wheat	Northwestern Consolidated Milling Company	21,307	June 14	59	1760
Flour. Wheat	J. & M. Schwabacher	21,255	June 7	59	1602
Flour. Wheat	Snell & Makepeace	21,750	Sept. 13	60	1608
Flour. Wheat	W. H. Stokes	21,817	Oct. 4	61	147
Flour. Wheat	W. H. Stokes	21,818	Oct. 4	61	148
Flour. Wheat	W. H. Stokes	21,875	Oct. 18	61	421
Fly-paper	Fly Button Co	21,510	July 19	60	436
Food for animals	G. Macfadden	21,803	Sept. 27	60	1882
Food for animals. Prepared	Pratt Food Company	21,632	Aug. 16	60	1048
Food for horses and cattle. Prepared	Charles Marvin Stock Food Company	20,973	Apr. 12	59	295
Food for infants and invalids	F. B. Benger & Co	21,702	Aug. 30	60	1323
Food for poultry. Prepared	Pratt Food Company	21,633	Aug. 16	60	1048
Food. Prepared poultry	Pratt Food Company	21,634	Aug. 16	60	1048
Food-preservatives	E. F. Pearson	20,791	Mar. 1	58	1098
Foods, malt extracts, and medicated wines. Prepared	J. P. Liebe	21,517	July 26	60	572
Fruits, nuts, oranges, lemons, olive-oil, and pickled olives	L. J. Rose & Company	21,387	June 28	59	2069
Fuel. Certain chemically-prepared	American Safety Fuel Company	22,160	Dec. 13	61	1652
Furnaces. Heating	Howard Furnace Company	22,003	Nov. 15	61	1014
Game for outdoor and indoor use	J. C. Morrell	21,064	May 3	59	785
Game played with board, dice, and pieces	Kennard Novelty Company	20,624	Jan. 19	58	280
Games, game-boards, puzzles, dolls, rattles, balls, bats, and the like, excluding toy wheels	Hahne & Co.	21,978	Nov. 15	61	1012
Games. Parlor	G. E. Sovereign	21,555	Aug. 2	60	734
Garment-stays	Ferris & De Long	21,368	June 28	59	2068
Garments worn by men and boys. Outside	Steinhart, Heidelberg & Co	22,091	Nov. 29	61	1311
Gas and gasoline engines	Palmer & Rey	21,834	Oct. 4	61	149
Gas and gasoline engines	Palmer & Rey	21,835	Oct. 4	61	149
Gas and gasoline engines	Palmer & Rey	21,836	Oct. 4	61	149
Gas for heating and lighting purposes. Manufactured	G. M. S. Wilson	22,138	Dec. 6	61	1477
Gas. Liquefied carbonic-acid	Truslow & Co	21,848	Oct. 4	61	150
Gelatine	Cushman Bros	20,837	Mar. 15	58	1420
Gems. Artificial	F. H. Sadler & Co	21,759	Sept. 20	60	1747
Gilding. Liquid preparation for	Roessler & Hasslacher Chemical Company	20,797	Mar. 1	58	1098
Gin	R. Burnett & Co.	21,699	Aug. 30	60	1323
Gin	J. & W. Nicholson & Co	21,200	May 24	59	1256
Gin	J. S. Smith, Druce & Company	21,294	June 14	59	1759
Ginghams	Berkshire Manufacturing Company	20,971	Apr. 12	59	295
Ginghams	J. Farnum & Co	21,205	May 31	59	1427
Ginghams	J. Farnum & Co	21,370	June 28	59	2068
Ginghams	J. Farnum & Co	21,700	Aug. 30	60	1323
Glass bottles, jars, and other glass receptacles and tableware	Nelson Glass Company	20,931	Apr. 5	59	155

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Glass. Plate or cathedral	Jefferson Glass Co	21,704	Aug. 30	60	1323
Gloves	Dunham, Buckley & Co	21,581	Aug. 9	60	891
Gloves	Ormes, Upsdale & Co	20,922	Apr. 5	59	154
Gloves	Perrin Frères et Cie.	22,182	Dec. 20	61	1785
Gloves	Perrin Frères et Cie.	22,183	Dec. 20	61	1785
Gloves	Perrin Frères et Cie.	22,184	Dec. 20	61	1785
Gloves	Perrin Frères et Cie.	22,185	Dec. 20	61	1785
Gloves	H. Rothschild	20,751	Feb. 23	58	952
Gloves and mittens	J. I. McMartin's Sons	21,147	May 17	59	1102
Gloves and mitts. Base-ball players'	A. A. Irwin	22,230	Dec. 27	61	1943
Gloves. Kid and leather	Wertheimer & Co	20,675	Feb. 2	58	526
Gloves. Kid and other	Pings & Pinner	21,028	Apr. 26	59	626
Gloves. Kid and other	Pings & Pinner	21,037	Apr. 26	59	627
Gloves. Kid and other	Pings & Pinner	21,038	Apr. 26	59	627
Gloves. Kid and other	Pings & Pinner	21,039	Apr. 26	59	627
Gloves. Kid and other	Pings & Pinner	21,040	Apr. 26	59	627
Gloves. Kid and other	Pings & Pinner	21,041	Apr. 26	59	627
Gloves. Kid and other	Pings & Pinner	21,211	May 31	59	1427
Gloves. Kid and other	Pings & Pinner	21,212	May 31	59	1427
Gloves. Liquid preparation for cleaning	Glovine Manufacturing Co	21,585	Aug. 9	60	891
Glue	A. & C. W. Holbrook	21,435	July 12	60	293
Gold and silver plated flat and table ware and jewelry	W. B. Kerr & Co.	20,912	Mar. 29	58	1698
Gold for gilding and the porcelain to which it is applied. Mat.	M. and E. Healey	21,199	May 24	59	1256
Gold, silver, and plated articles, flat ware, and jewelry	A. Feldeuheimer	20,640	Jan. 26	58	390
Gold, silver, and plated articles, flat ware, and jewelry	Harris & Shafer	20,820	Mar. 8	58	1262
Gold, silver, plated, flat, and table ware and jewelry	W. B. Durgin	21,369	June 28	59	2068
Goods of woollen, silk, linen, cotton, jute, and mixed materials, rugs, horse-clothing, wools, worsteds, yarns, and threads. Piece	J. J. & W. Wilson	21,100	May 10	59	937
Grease. Axle	W. A. Disborough	20,537	Jan. 5	58	2
Grease. Axle	King Manufacturing Co.	22,096	Nov. 29	61	1312
Grease-spots and stains from fabrics, wood, glass, or marble. Compound for removing	L. E. Sutton	21,123	May 17	59	1101
Gum. Chewing	W. N. Brewer	21,020	Apr. 26	59	626
Gum. Chewing	O. G. Davison	21,955	Nov. 8	61	883
Gum. Chewing	G. A. Donnelly	20,733	Feb. 16	58	810
Gum. Chewing	Jones & Hill Company	21,112	May 10	59	938
Gum. Chewing	Jones & Primley Company	20,583	Jan. 12	58	148
Gum. Chewing	Rubber Paint Company	21,874	Oct. 18	61	421
Hair and wool clippers	American Shearer Manufacturing Company	22,050	Nov. 22	61	1164
Hair-clippers for toilet use. Certain	American Shearer Manufacturing Company	22,067	Nov. 29	61	1309
Hair-curling compounds	A. M. Petri	21,724	Sept. 6	60	1475
Hair-dressing	J. Jackson	21,987	Nov. 15	61	1013
Hair. Liquid dressing for curling, crimping, and frizzing the	A. L. Goetting	21,193	May 24	59	1256
Hair-pins	A. Angell	20,793	Mar. 1	58	1098
Hair-pins	S. Beaumont & Co	21,184	May 24	59	1255
Hair. Preparation for straightening and improving the	R. E. Elliott	20,742	Feb. 23	58	952
Hair-restorative and dandruff-cure	C. M. Brown	20,546	Jan. 5	58	2
Hair-restorative and dandruff-cure	H. D. Wagner & Co.	21,442	July 12	60	294
Hair-restorative consisting of a natural white oil	White Rock Oil Co.	20,934	Apr. 5	59	155
Hair-tonic	W. B. Logan	20,940	Apr. 5	59	155
Hams	Anglo-American Provision Company	20,599	Jan. 12	58	148
Hams, shoulders, and bacon. Smoked	Swift and Company	21,487	July 19	60	435
Hardware	Cash Buyers' Union	21,513	July 26	60	572
Hardware. Household, druggists', and butchers'	Enterprise Manufacturing Company of Pennsylvania	21,552	Aug. 2	60	733
Hardware, including locks and latches. Builders'	Reading Hardware Company	22,000	Nov. 15	61	1014
Harmonicas. Mouth	C. Messner & Co	21,001	Apr. 19	59	460
Harvesters and harvester-binders	Walter A. Wood Harvester Company	21,153	May 17	59	1102
Harvesters and harvester-binders	Walter A. Wood Harvester Company	22,150	Dec. 6	61	1478
Hat polishing-handkerchiefs	W. C. Van Vliet	21,342	June 21	59	1916
Hats	Cook, Lyman & Seixas	20,972	Apr. 12	59	295
Hats	Scott Force Hat Company	20,597	Jan. 12	58	148
Hats	Volk Hat Company	21,825	Oct. 4	61	148
Hats	R. G. Williams	20,661	Jan. 26	58	390
Hats and bonnets for ladies, misses, and young boys, and trimmings therefor	C. E. Taylor	22,090	Nov. 29	61	1311
Hats and bonnets for ladies, misses, and young boys, and trimmings therefor	H. J. Taylor	22,013	Nov. 22	61	1161
Hats and caps	Hart & Duff Hat Company	21,243	May 31	59	1430
Hats and caps	Hart & Duff Hat Company	21,282	June 14	59	1758
Hats and caps	Hart & Duff Hat Company	21,283	June 14	59	1758
Hats and caps	Hart & Duff Hat Company	21,284	June 14	59	1758
Hats and caps	Missoula Mercantile Company	20,761	Feb. 23	58	952
Hats and caps	C. B. Rantan & Co	20,540	Jan. 5	58	2
Hats, caps, and bonnets	J. A. Harrington	21,380	June 28	59	2069
Hats. Men's	Goodbar, White, Branch & Co	21,883	Oct. 18	61	422
Hats. Men's	McKibbin & Co.	20,800	Mar. 1	58	1098
Hats. Men's	McKibbin & Co.	20,801	Mar. 1	58	1098
Hats. Men's	McKibbin & Co.	20,802	Mar. 1	58	1098
Hay-carriers	H. E. Porter	22,055	Nov. 22	61	1164
Hay-fever and catarrh remedy	J. A. Rowland	20,653	Jan. 26	58	390
Headache-powders	H. J. Parker	20,874	Mar. 22	58	1562
Heaters, ranges, and stoves	Majestic Manufacturing Company	22,004	Nov. 15	61	1014
Henniettas. All-wool	M. Kiedel	21,865	Oct. 11	61	284
Hoes	G. B. Durell	21,013	Apr. 19	59	461
Hoes, forks, rakes, and other agricultural hand implements	Iowa Farming Tool Company	21,771	Sept. 20	60	1748
Hollow ware. Enameled	Boas Brothers	22,221	Dec. 20	61	1788
Hones	Escher & Co	20,986	Apr. 19	59	459
Hooks and eyes	Richardson & De Long Bros	20,994	Apr. 19	59	460
Hooks and eyes	Richardson & De Long Bros	20,995	Apr. 19	59	460

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Hooks and eyes	Richardson & De Long Bros	20,996	Apr. 19	59	460
Hooks and eyes	Richardson & De Long Bros	21,076	May 3	59	786
Hooks and eyes	Richardson & De Long Bros	21,787	Aug. 9	60	891
Hooks and eyes for garments	Richardson & De Long Bros	20,923	Apr. 5	59	154
Horse blankets or covers	Burlington Blanket Company	21,249	June 7	59	1602
Horseshoe-nails	New Process Nail Company	22,072	Nov. 29	61	1310
Hosiery	J. Black & Sons	21,831	Oct. 4	61	149
Hosiery	Sibley, Lindsay & Curr	21,567	Aug. 2	60	734
Hosiery	J. Smedley	20,906	Mar. 29	58	1698
Hosiery	Wayne Knitting Mills	20,993	Apr. 19	59	460
Hosiery, textile gloves, and underwear	L. Hermsdorf	22,231	Dec. 27	61	1943
Hot-air furnaces	May & Fieberger	21,241	May 31	59	1430
Hypnotic compounds for internal and external use	Burgoyne, Burbidges, Cyriax & Farries	21,295	June 14	59	1759
Ice-chests, coolers, and refrigerators	Challenge Corn Planter Company	21,810	Oct. 4	61	147
Ingots, slabs, blooms, billets, bars, rods, &c. Steel	A. C. Isaacs	21,449	July 12	60	294
Injectors and ejectors. Stationary and locomotive	Hayden & Derby Manufacturing Company	21,221	May 31	59	1428
Ink. Printers' and lithographers'	Ault & Wiborg Company	21,933	Nov. 8	61	881
Insect and vermin exterminators	W. Gottlieb	21,802	Sept. 27	60	1882
Insect-powder	Zacherl & Logothetti	20,764	Feb. 23	58	952
Insecticide	H. A. D. Siebenborn	21,218	May 31	59	1428
Insulated wire. Electric	Eastern Electric Cable Company	21,763	Sept. 20	60	1747
Insulated wires, insulated electric cables, and insulating material	Indiana Rubber and Insulated Wire Company	20,916	Mar. 29	58	1698
Insulating-oil for filling the casings of electric transformers	Thomson-Houston Electric Company	20,867	Mar. 22	58	1562
Insulating tape for wrapping electric conductors. Rubber or like	Thomson-Houston Electric Company	20,866	Mar. 22	58	1562
Insulators. Electric	A. & J. M. Anderson	22,148	Dec. 6	61	1478
Iron and steel, including hammer-steel and cast and pick steel	Dunham, Carrigan & Hayden Company	21,313	June 21	59	1914
Italian cloths, mohair serges, and similar goods	J. W. Goddard & Sons	21,889	Oct. 25	61	562
Ivory and articles made or formed thereof. Artificial	Eburnea Co	21,008	Apr. 19	59	461
Ivory and articles made or formed thereof. Artificial	Eburnea Co	21,053	Apr. 26	59	628
Jewelry	United Society of Christian Endeavor	21,469	July 19	60	434
Journal. Society	Town Topics Publishing Company	21,694	Aug. 30	60	1323
Kerosene	W. A. Chipman	20,630	Jan. 26	58	390
Kerosene	W. A. Chipman	20,682	Feb. 9	58	658
Key-rings	F. J. Tahl	20,868	Mar. 22	58	1562
Kidney and liver cure, blood-purifier, pills, and ointment	Wilkins & Beckner	20,977	Apr. 12	59	296
Knit fabrics	Murphy, Hibben & Co	22,014	Nov. 22	61	1161
Knit under vests or waists	Nazareth Manufacturing Company	22,106	Dec. 6	61	1474
Knit underwear	United Knitting Works Company	22,105	Dec. 6	61	1474
Knitted underwear	Glastenbury Knitting Company	22,188	Dec. 20	61	1785
Knives. Bread and cake	Christy Knife Company	20,610	Jan. 19	58	280
Knives, forks, and scissors and analogous small metal articles. Steel	Firm of G. Hammestahr	21,240	May 31	59	1430
Knives, forks, scissors, shears, files, and saws	William Wilkinson & Sons	20,725	Feb. 16	58	810
Knives, scissors, and forks	Graef & Schmidt	21,560	Aug. 2	60	734
Kumyss. Cream	American Milk and Kumyss Company	20,731	Feb. 16	58	810
Labels. Packages of printed	Jersey City Printing Company	21,777	Sept. 27	60	1881
Laces. Leather shoe	P. Goldstein	21,171	May 24	59	1254
Lamp and accessories pertaining thereto	Clark Bros. Lamp, Brass, and Copper Company	21,648	Aug. 16	60	1050
Lamps	Safety Car Heating and Lighting Company	20,678	Feb. 2	58	526
Lamps and burners	W. B. Robins	22,049	Nov. 22	61	1164
Lamps. Incandescent electric	W. Hood	20,646	Jan. 26	58	390
Lard	J. M. Ceballos & Co.	21,296	June 14	59	1759
Lard	J. M. Ceballos & Co.	21,523	July 26	60	573
Lard	J. M. Ceballos & Co.	21,732	Sept. 13	60	1607
Lard	Dunlevy & Bros.	20,631	Jan. 26	58	390
Lard	E. Godel & Sons	20,928	Apr. 5	59	154
Lard	Jersey City Packing Company	20,844	Mar. 15	58	1420
Lard	Robe & Brother	20,889	Mar. 22	58	1562
Lard	F. Sobrinho & Co	22,030	Nov. 22	61	1163
Lard	F. Sobrinho & Co	22,031	Nov. 22	61	1163
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,438	July 12	60	293
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,439	July 12	60	293
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,440	July 12	60	293
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,441	July 12	60	294
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,603	Aug. 9	60	892
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,675	Aug. 23	60	1187
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	21,980	Nov. 15	61	1012
Lard and its substitutes	W. J. Wilcox Lard and Refining Company	22,211	Dec. 20	61	1787
Lard, hams, and breakfast-bacon	George Fowler, Son & Company	20,777	Mar. 1	58	1098
Lard substitute	S. H. Read	21,769	Sept. 20	60	1748
Laxative	Davis Chemical Co	21,056	Apr. 26	59	628
Laxative	P. Steinhart	21,615	Aug. 16	60	1047
Lead. White	Jacobs & McCafferty	22,066	Nov. 29	61	1309
Lead. White	M. L. Wieder	21,668	Aug. 23	60	1186
Leads, colors, and oils	Buehler-Phelan Manufacturing Co	20,740	Feb. 23	58	922
Leather and boots and shoes	F. W. Clarke	20,578	Jan. 12	58	148

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Leather and boots and shoes made thereof.....	C. T. Roenitz Leather Company.....	21,003	Apr. 19	59	461
Leather, boots, shoes, and other footwear.....	East New York Boot, Shoe, and Leather Manufacturing Company.....	21,773	Sept. 20	60	1748
Leather. Cordovan.....	W. M. Eisendrath.....	21,697	Aug. 30	60	1323
Leather. Finished.....	E. G. Place & Co.....	21,381	June 28	59	2069
Leather for the uppers of boots and shoes and for boots and shoes.....	Allen, Field & Lawrence.....	20,959	Apr. 12	59	294
Leather for the uppers of boots and shoes and for boots and shoes.....	Allen, Field & Lawrence.....	21,235	May 31	59	1429
Leather. Harness.....	W. W. Mooney & Sons.....	21,781	Sept. 27	60	1881
Leather. Harness, sole, and belting.....	J. Groetzinger & Co.....	21,686	Aug. 23	60	1188
Leather, including belting.....	A. & C. W. Holbrook.....	21,445	July 12	60	294
Leather. Kid.....	Wm. Zahn Leather Company.....	22,190	Dec. 20	61	1786
Leather of all kinds.....	F. Blumenthal & Co.....	21,096	May 10	59	937
Leather of all kinds, skins unwrought and wrought, and articles made of leather.....	F. Meredith-Jones & Sons.....	21,070	May 3	59	785
Leather. Sole.....	Fayerweather & Ladew.....	20,692	Feb. 9	58	658
Lemons and oranges.....	G. Villari.....	22,209	Dec. 20	61	1787
Letter-boxes, drawers, and the like. Post-office.....	Keyless Lock Company.....	22,057	Nov. 22	61	1164
Linen fabrics.....	J. McCutcheon & Co.....	20,863	Mar. 22	58	1562
Linen goods.....	L. Thompson & Co.....	22,088	Nov. 29	61	1311
Liniment.....	S. Eskridge.....	21,958	Nov. 8	61	883
Liniment.....	W. E. Everitt.....	20,927	Apr. 5	59	154
Liniment.....	W. F. Grell.....	21,511	July 26	60	572
Liniment.....	A. Horn.....	21,400	July 5	60	154
Liniment.....	E. Landsman.....	20,650	Jan. 26	58	390
Liniments and ointments.....	F. P. Foltz.....	22,121	Dec. 6	61	1476
Liniments, embrocations, and like external remedies.....	W. F. Young.....	21,489	July 19	60	435
Liniments, ointments, and unguents.....	W. A. Collins.....	20,780	Mar. 1	58	1098
Liniments or lotions for external and internal use for man and animals.....	Powell & Gilbert.....	21,512	July 26	60	572
Linings embracing silesia, sateens, cambrics, and twills.....	Burton Bros. & Co.....	22,158	Dec. 13	61	1651
Liquors and cordials.....	Gordon & Co.....	21,734	Sept. 13	60	1607
Liquors except brandy. All spirituous and fermented.....	J. W. Nicholson & Co.....	21,571	Aug. 9	60	890
Liquors. Foam-promoting compound for malt.....	T. L. Strauss.....	20,658	Jan. 26	58	390
Liquors. Foam-promoting compound for malt.....	T. L. Strauss.....	20,659	Jan. 26	58	390
Liquors. Malt.....	R. Porter & Co.....	21,325	June 21	59	1915
Lithographs. Art.....	Art Lithographic Publishing Com- pany.....	21,154	May 17	59	1102
Liver-regulator and blood-purifier.....	A. H. Lewis Medicine Co.....	21,202	May 24	59	1256
Locking devices for securing two opposite members of arti- cles or things.....	B. Bernstein.....	20,577	Jan. 12	58	148
Lotion for the complexion.....	Sylvan Toilet Co.....	21,617	Aug. 16	60	1047
Lozenges or throat-tablets. Bronchial.....	Hance Bros. & White.....	20,604	Jan. 12	58	148
Lubricating compounds, oils, and grease.....	L. E. Atkinson.....	21,655	Aug. 23	60	1185
Lubricants.....	American Shaft Holder Co.....	22,206	Dec. 20	61	1787
Lumber. Sawed.....	Fischer & Burnett Lumber Company.....	22,098	Nov. 29	61	1312
Lye. Powdered.....	Champion Chemical Works.....	21,809	Oct. 4	61	147
Magazine. Monthly.....	Great Divide Publishing Company.....	21,770	Sept. 20	60	1748
Malt beverage. Brewed.....	R. W. Simms.....	20,681	Feb. 9	58	658
Malt liquors.....	S. Allsopp & Sons.....	21,204	May 31	59	1427
Matches.....	W. L. Anderson.....	21,790	Sept. 27	60	1832
Matches.....	E. Holmberg.....	20,662	Feb. 2	58	526
Matches. Parlor.....	F. F. Gumaer and L. Gustam.....	20,683	Feb. 9	58	658
Mattresses and other upholstery.....	G. W. Gill.....	21,701	Aug. 30	60	1323
Mead.....	J. McCloskey.....	21,506	July 19	60	436
Measures and rammers. Powder.....	Hartley & Graham Co.....	21,763	Sept. 20	60	1747
Meat choppers and presses.....	Enterprise Manufacturing Company.....	21,599	Aug. 9	60	892
Meat, hams, shoulders, bacon sides, and sausages. Packed.....	North Packing and Provision Com- pany.....	21,245	May 31	59	1430
Meat products, including packed and smoked beef and pork, hams, shoulders, sides, bacon, and sausage.....	North Packing and Provision Com- pany.....	22,128	Dec. 6	61	1476
Meats and fish.....	Bronson & Fitzgerald.....	22,239	Dec. 27	61	1944
Meats. Salted and pickled.....	Ferraz Sobrinho & Co.....	22,169	Dec. 13	61	1653
Meats, sausages, bolognas, and food products in which meat is the principal ingredient. Fresh, cured, and salt.....	Schwarzschild & Sulzberger.....	21,005	Apr. 19	59	461
Meats, smoked and unsmoked, and all kinds used for human food.....	Volunteer Chicago Beef Co.....	21,690	Aug. 23	60	1188
Meats, such as hams and bacon. Smoked.....	F. A. Ferris.....	22,129	Dec. 6	61	1477
Medallions to be secured to pins or shanks or suspending rings.....	Schott Brothers.....	20,752	Feb. 23	58	952
Medical capsules.....	A. Kinkead.....	21,098	May 10	59	937
Medical composition for removing fungus growths from the jaws and bones of animals and warts from persons.....	G. R. Wrage.....	20,933	Apr. 5	59	155
Medical compound for external and internal use for skin and blood diseases.....	E. McFarland.....	21,640	Aug. 16	60	1049
Medical compound for the cure of lung and throat diseases.....	Vapo-Cresolene Company.....	21,647	Aug. 16	60	1050
Medical preparation of sarsaparilla.....	L. Gerstle.....	22,059	Nov. 29	61	1309
Medical remedy for internal and external use.....	Botania Co.....	22,112	Dec. 6	61	1475
Medicated belts, pills, and salts.....	A. Loring.....	21,845	Oct. 4	61	150
Medicated beverages or tonics.....	Quirye Company.....	22,172	Dec. 13	61	1653
Medicated beverages or tonics.....	Quirye Company.....	22,256	Dec. 27	61	1945
Medicated cotton.....	J. W. Johnson.....	21,629	Aug. 16	60	1048
Medicated cotton.....	J. W. Johnson.....	21,630	Aug. 16	60	1048
Medicated gum drops.....	Sylvan Remedy Co.....	22,192	Dec. 20	61	1786
Medicated lotions and eye-waters.....	R. P. Stericker.....	21,775	Sept. 20	60	1748
Medicated plasters.....	Dr. David Kennedy Corporation.....	21,524	July 26	60	573
Medicated plasters.....	Raymond & Co.....	21,173	May 24	59	1254
Medicated snuff.....	A. M. Fisher.....	21,930	Nov. 1	61	720
Medicated soap.....	Cincinnati Soap Co.....	21,832	Oct. 4	61	149
Medicated tablets.....	G. P. Rowell.....	20,620	Jan. 19	58	280
Medicated toilet preparation for the skin.....	C. H. & J. Price.....	22,111	Dec. 6	61	1475
Medicinal beverage and sirnps and extracts for forming the same.....	F. H. Perkins.....	21,568	Aug. 2	60	734
Medicinal compounds for external use.....	J. Lauffer.....	21,784	Sept. 27	60	1831

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Medicinal compounds the basis of which is formed of vegetable extracts.	H. Kleindienst	22,113	Dec. 6	61	1475
Medicinal compound the basis of which is the chlorides of gold and sodium.	McCrory & Taylor	21,529	July 26	60	573
Medicinal eye-water.	John R. Dickey Drug Company	22,261	Dec. 27	61	1946
Medicinal herb-teas.	Moki Herb Remedy Company	21,922	Nov. 1	61	720
Medicinal plasters.	F. Merz	21,730	Sept. 6	60	1476
Medicinal preparation for diseases of the liver, stomach, or bowels.	J. S. Robinson	22,266	Dec. 27	61	1946
Medicinal preparation for the cure of piles, dysentery, and kindred complaints.	W. A. Winchester	22,034	Nov. 22	61	1163
Medicinal remedies. Certain named.	F. & D. Racicot	21,406	July 5	60	154
Medicinal remedies in the form of tablets, plasters, pills, ointments, suppositories, and powders.	Capital Drug Company	21,962	Nov. 8	61	883
Medicinal sirup.	W. H. Winslow	21,649	Aug. 16	60	1050
Medicinal tablets.	Latimer Medicine Co.	20,565	Jan. 5	58	2
Medicinal teas.	J. W. Moore	22,115	Dec. 6	61	1475
Medicinal tonic.	L. Mansfield	22,033	Nov. 22	61	1163
Medicinal tonics.	Allaire, Woodward & Company	22,257	Dec. 27	61	1945
Medicine for certain named diseases.	A. L. Worden	21,519	July 26	60	572
Medicine for coughs, bronchitis, asthma, and like diseases.	J. G. Laviolette	20,910	Mar. 29	58	1698
Medicine for dogs and other animals.	E. L. Scott	21,997	Nov. 15	61	1014
Medicine for fowls.	Orlando Medicine Company	21,833	Oct. 4	61	149
Medicine for internal use for dyspepsia, nausea, and all derangements of the enteric and urinary systems.	Salitonia Pharmacal Company	21,528	July 26	60	573
Medicine for rheumatism, gout, and lumbago. Prepared.	H. O. Price	21,995	Nov. 15	61	1014
Medicine for the blood and digestive system.	Miller & Newton	21,089	May 10	59	936
Medicine for the cure of headache. Proprietary.	J. L. McKee	20,987	Apr. 19	59	459
Medicine for the cure of rheumatism, dyspepsia, and diseases of the blood. Proprietary.	M. D. Brown	21,878	Oct. 18	61	422
Medicine for the cure of the alcohol habit.	T. S. Robertson	21,239	May 31	59	1430
Medicine for the local treatment of diseases peculiar to women.	Gyne Vita Manufacturing Co.	21,884	Oct. 18	61	422
Medicine for the treatment of drunkenness, opium, morphine, and tobacco habits and kindred diseases.	Chicago Dipsocura Company	21,311	June 14	59	1760
Medicine. Headache.	Cafazol Co.	21,069	May 3	59	785
Medicine. Laxative.	M. E. Oghorn	22,196	Dec. 20	61	1786
Medicine in tablet, lozenge, or other solid form.	L. A. Matos	21,416	July 5	60	155
Medicine to purify the blood and to cure rheumatism.	E. Gloude	21,277	June 7	59	1604
Medicines. Cathartic.	A. Weed	20,541	Jan. 5	58	2
Medicines. Certain named line of proprietary.	Turner-Shaker Medicine Co.	22,194	Dec. 20	61	1786
Medicines. Cough.	Dr. Seth Arnold Medical Corporation	21,761	Sept. 20	60	1747
Medicines for the cure of blood diseases.	G. L. Fowler	22,114	Dec. 6	61	1475
Medicines. Line of.	Arkwright Medicine Co.	21,731	Sept. 13	60	1607
Medicines. Line of.	H. D. Van Rensselaer	21,994	Nov. 15	61	1014
Medicines. Line of proprietary.	Koenig Medicine Company	21,103	May 10	59	937
Medicines. Line of proprietary.	F. M. Mares	20,779	Mar. 1	58	1098
Medicines. Proprietary.	Katharmon Chemical Company	21,996	Nov. 15	61	1014
Metal. Antifriction.	Electron Metal Company	21,708	Aug. 30	60	1324
Metal. Antifriction.	J. Ward & Son	20,639	Jan. 26	58	390
Metal. Babbitt.	A. W. Day	21,709	Aug. 30	60	1324
Metal-burnishing powder.	Diamond Lustre Polish Co.	21,031	Apr. 26	59	627
Metal polish.	S. Kidder	21,673	Aug. 23	60	1186
Metal-polishing composition.	Noble & Streeter	21,253	June 7	59	1602
Milk. Condensed.	W. Johnston	21,660	Aug. 23	60	1185
Mineral-spring water.	Bedford Mineral Springs Company	21,109	May 10	59	938
Mineral-spring water.	Lafayette Mineral Spring Company	20,554	Jan. 5	58	2
Mineral-spring water. Certain.	T. W. Porter	20,699	Feb. 0	58	658
Mineral-spring water. Certain natural.	J. S. Fay	20,755	Feb. 23	58	952
Mineral water.	R. Avenarius & Co.	22,220	Dec. 20	61	1788
Mineral water.	F. N. Blanc	20,601	Jan. 12	58	148
Mineral water.	Honeoye Falls Mineral Spring Company	20,551	Jan. 5	58	2
Mineral water.	Massanetta Park and Springs Company	22,080	Nov. 29	61	1310
Mineral water.	St. Leon Mineral Water Company	21,693	Aug. 30	60	1323
Mineral water. Natural.	Highland Mineral Spring Water Company	20,992	Apr. 19	59	460
Mineral water. Natural.	J. H. Peterson & Co.	21,180	May 24	59	1255
Mineral water. Natural.	J. Schnuettgen	21,741	Sept. 13	60	1607
Mineral waters.	Carse & Ohlweiler	21,475	July 19	60	434
Mineral waters and other non-alcoholic drinks.	S. C. Rogers and J. S. Pearson	21,318	June 21	59	1914
Mineral waters. Natural.	Almanaris Company	20,749	Feb. 23	58	952
Mirrors having their backs silvered, or colored white or some other color.	W. B. Denison & Co.	20,773	Feb. 23	58	952
Monthly fashion paper or magazine.	Domestic Sewing Machine Company	21,880	Oct. 18	61	422
Monthly serial or family paper.	E. J. Smith	21,468	July 19	60	433
Monuments, architectural trimmings, and various cut stones.	W. H. Perry	21,554	Aug. 2	60	733
Moth-exterminators.	T. Latham	20,569	Jan. 5	58	2
Mowers. Lawn.	Chadborn & Coldwell Manufacturing Company	20,936	Apr. 5	59	155
Musical instrument. Stringed.	J. A. MacKenzie	20,539	Jan. 5	58	2
Musical instruments.	J. Thibonville-Lamy	21,291	June 14	59	1759
Musical instruments.	J. Thibonville-Lamy	21,292	June 14	59	1759
Muslin. White.	Jacobs & Isenberg	21,088	May 10	59	936
Nails. Wire.	Baackes Wire Nail Company	21,389	June 28	59	2069
Necklaces made of medicinal substances, to be worn by infants.	F. Korn	20,898	Mar. 29	58	1698
Newspapers.	Burk & McFetridge	20,623	Jan. 19	58	280
Night-ropes.	E. Rosenfeld & Co.	21,359	June 28	59	2067
Nuts.	Hall & Hayward Company	21,302	June 14	59	1759
Oars, handspikes, and capstan-bars.	De Grauw, Aymar & Co.	21,081	May 10	59	936
Oats or oatmeal. Rolled.	H. R. Heath & Sons	20,669	Feb. 2	58	526
Oats. Rolled.	W. Johnston	22,167	Dec. 13	61	1652
Oats, velvet meal, corn grits, and self-rising griddle-cake flour.	Nebraska City Cereal Mills	22,212	Dec. 20	61	1757

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Oats, wheat, and buckwheat	J. Butler	21,030	Apr. 26	59	627
Oil and grease. Lubricating	Magie Brothers	22,159	Dec. 13	61	1651
Oil and grease. Lubricating and machine	C. H. Besly	21,669	Aug. 23	60	1186
Oil. Castor	Indianapolis Drug Co	21,436	July 12	60	293
Oil, crude and refined. Cotton-seed	M. Lieberman	21,052	Apr. 26	59	628
Oil fabrics	Lyon, Hall & Co	21,614	Aug. 16	60	1047
Oil for bicycles. Lubricating	A. Cook's Sons	21,891	Oct. 25	61	562
Oil for culinary purposes and for food. Cotton-seed	Occidental Oil Company	21,190	May 24	59	1256
Oil for toilet and medicinal use by external application	Sylvan Toilet Co	21,152	May 17	59	1102
Oil. Illuminating	Scotfield, Shurmer & Teagle	20,840	Mar. 15	58	1420
Oil. Illuminating or burning	C. Kimber	21,450	July 12	60	294
Oil. Kerosene or petroleum	Tide Water Oil Company	20,882	Mar. 22	58	1562
Oil. Lubricating	A. W. Harris	21,561	Aug. 2	60	734
Oil. Lubricating	H. W. Peabody & Co.	21,486	July 19	60	435
Oil. Olive	A. G. Belden	20,984	Apr. 19	59	459
Oil. Olive	L. Peirano	20,784	Mar. 1	58	1098
Oil. Refined	Devos Manufacturing Company	20,770	Feb. 23	58	952
Oil used as a remedy for rheumatism or pains in the back and limbs. Vegetable	Schaefer & Co	20,958	Apr. 12	59	294
Oils. Coal-tar	Geisenheimer & Co.	21,534	Aug. 2	60	732
Oils. Lubricating	Bliven & Carrington	21,049	Apr. 26	59	628
Oils, paints, varnishes, and lacquers. Anti-corrosive	E. Müller & Mann	20,799	Mar. 1	58	1098
Ointment	M. Wallace	20,671	Feb. 2	58	526
Ointment, face-cream, and other cosmetics	Hazeltine Co	20,827	Mar. 8	58	1262
Ointment or cream. Skin	G. Wagner	22,262	Dec. 27	61	1946
Ointments	W. Fairweather	22,043	Nov. 22	61	1163
Ointments, pills, and medicated soap	Livura Manufacturing Co	21,860	Oct. 11	61	223
Oleoresins	F. S. McIntyre	20,769	Feb. 23	58	952
Optical instruments for improving eyesight	J. J. Wood	21,032	Apr. 26	59	627
Oranges	Citra Fruit Company	20,611	Jan. 19	58	280
Oranges	Citra Fruit Company	20,611	Jan. 19	58	280
Oranges	R. S. Conover	20,673	Feb. 2	58	526
Oranges	Crescent Orange Grove Company	21,982	Nov. 15	61	1013
Oranges	D. Tillson	21,824	Oct. 4	61	148
Outer and under garments. Misses' and children's	I. D. Jaynes	21,570	Aug. 9	60	890
Outer garments for men and children	A. Kirschbaum & Co.	21,778	Sept. 27	60	1881
Overalls, pantaloons, suspenders, scarfs, collars, and cuffs. Men's	Plaut & Isaac	21,503	July 19	60	436
Overalls, shirts, coats, vests, and pantaloons	Liddle & Carter	20,586	Jan. 12	58	148
Overgaiters and leggins	A. Sessler	21,936	Nov. 8	61	881
Oysters. Raw and processed	W. A. Wheatley	22,131	Dec. 6	61	1477
Packages containing threaded needles	F. W. Hall	20,572	Jan. 12	58	148
Packings. Flange	A. W. Case	21,605	Aug. 16	60	1046
Paint and white lead. Mixed	W. A. Bailie	21,087	May 10	59	936
Paint for application to metallic surfaces	Rosenzweig & Bauman	20,876	Mar. 22	58	1562
Paint. Liquid	Hanna & Abbott Manufacturing Company	20,935	Apr. 5	59	155
Paints. Bronze	Fuchs & Lang	21,242	May 31	59	1430
Paints. Powdered	W. H. Kemp & Co	22,026	Nov. 22	61	1162
Paints, stains, and varnishes	Wolf & Randolph	21,143	May 17	59	1101
Painter's smalt	W. C. Estes	21,887	Oct. 25	61	562
Pantaloons and overalls. Men's	Cowan, Magill & Co	21,685	Aug. 23	60	1187
Pants and overalls	J. G. Lewis	21,718	Sept. 6	60	1475
Paper and envelopes. Fine writing	G. B. Hurd & Co	21,403	July 5	60	153
Paper and envelopes. Writing	G. B. Hurd & Co	20,756	Feb. 23	58	952
Paper and envelopes. Writing	G. B. Hurd & Co	20,766	Feb. 23	58	952
Paper and envelopes. Writing	G. B. Hurd & Co	21,132	May 17	59	1101
Paper and envelopes. Writing	G. B. Hurd & Co	21,138	May 17	59	1101
Paper and envelopes. Writing	G. B. Hurd & Co	21,155	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,156	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,157	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,158	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,159	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,160	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,161	May 17	59	1102
Paper and envelopes. Writing	G. B. Hurd & Co	21,187	May 24	59	1255
Paper and envelopes. Writing	G. B. Hurd & Co	21,206	May 31	59	1427
Paper and envelopes. Writing	G. B. Hurd & Co	21,402	July 5	60	154
Paper bags	Union Bag and Paper Company	21,454	July 12	60	294
Paper. Blotting	Eaton, Dikeman & Co	21,612	Aug. 16	60	1047
Paper. Blotting	Eaton, Dikeman & Co	21,613	Aug. 16	60	1047
Paper, envelopes, and fine card-board. Writing	Hard & Pike	21,754	Sept. 20	60	1747
Paper, envelopes, cards, blank books, and paper badges	B. A. Johnson	21,601	Aug. 9	60	892
Paper for printing and lining strawboards used in making boxes	W. H. Parsons & Co	20,947	Apr. 5	59	156
Paper for printing and writing purposes	J. B. Watkins	20,969	Apr. 12	59	295
Paper. Impression	H. C. Davison	21,868	Oct. 18	61	421
Paper shot-shells	Union Metallic Cartridge Company	21,222	May 31	59	1428
Paper shot-shells	Union Metallic Cartridge Company	21,341	June 21	59	1916
Paper shot-shells	Von Lengerke & Detmold	21,131	May 17	59	1101
Paper. Waterproofed carbolized	J. Jowitt & Son	21,310	June 14	59	1760
Paste. Dry	Diamond Paste Company	20,905	Mar. 29	58	1698
Patterns for baby-garments and undergarments. Improved	Firm of Mrs. J. B. Gunn	21,288	June 14	59	1758
Paving blocks. Street	Standard Construction Co	20,878	Mar. 22	58	1562
Pea-soup. Compressed	C. W. Kopf Company	21,508	July 19	60	436
Pea-soup. Compressed	C. W. Kopf Company	21,509	July 19	60	436
Pens. Fountain	M. Brown and C. Quesnal	21,297	June 14	59	1759
Pens. Fountain	W. A. Leary	22,151	Dec. 13	61	1651
Pens. Writing	I. Macowsky	21,179	May 24	59	1255
Pens. Steel and other	E. R. Oettinger & Co	21,907	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co	21,908	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co	21,909	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co	21,910	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co	21,911	Nov. 1	61	719

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Pens. Steel and other	E. R. Oettinger & Co.	21,912	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co.	21,913	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co.	21,914	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co.	21,915	Nov. 1	61	719
Pens. Steel and other	E. R. Oettinger & Co.	21,916	Nov. 1	61	720
Pens. Steel and other	E. R. Oettinger & Co.	22,068	Nov. 29	61	1309
Pens. Steel and other	E. R. Oettinger & Co.	22,069	Nov. 29	61	1309
Pencils, comprising lead-pencils and pencil and pen holders	American Lead Pencil Company	21,480	July 19	60	434
Pencils. Lead	American Lead Pencil Company	22,273	Dec. 27	61	1946
Perfumery	Bean & Vail Brothers	21,473	July 19	60	434
Perfumery	Bean & Vail Brothers	21,474	July 19	60	434
Perfumery	Bean & Vail Brothers	21,542	Aug. 2	60	732
Perfumery	Majestic Perfume Co.	21,251	June 7	59	1602
Perfumery	Winkelmann & Brown Drug Company.	21,033	Apr. 26	59	627
Perfumery	Winkelmann & Brown Drug Company.	21,034	Apr. 26	59	627
Perfumery	Winkelmann & Brown Drug Company.	21,142	May 17	59	1101
Perfumery	A. Wright	21,532	July 26	60	574
Perfumery. Certain	E. Moulé	21,090	May 10	59	936
Perfumery, soap, and toilet and tooth powder	Jordan, Marsh & Co.	20,830	Mar. 15	58	1420
Perfumery, soap, and toilet and tooth powder	Jordan, Marsh & Co.	20,831	Mar. 15	58	1420
Perfumes, powders, soaps, and toilet articles generally	Ladd & Coffin	21,437	July 12	60	293
Periodicals	J. L. Oberly	21,027	Apr. 26	59	626
Periodicals. Weekly	L. Rosenthal	21,928	Nov. 1	61	720
Perspiration-powders	G. T. Riefflin	21,079	May 3	59	786
Petroleum	Ferraz Sobrinho & Co.	22,161	Dec. 13	61	1652
Petroleum for internal and external use as a remedy for disease. Refined	Angier Chemical Company	21,224	May 31	59	1428
Petroleum. Refined	Arkell & Douglas	21,060	May 3	59	785
Petroleum. Refined	J. L. Thomas & Co.	20,703	Feb. 9	58	658
Phosphated beverages	Rose Bros	21,687	Aug. 23	60	1188
Photographic-card mounts	A. M. Collins Manufacturing Company.	21,932	Nov. 8	61	881
Photographic developers	Actien-Gesellschaft Für Anilin Fabrikation.	22,153	Dec. 13	61	1651
Photographic developers	Actien-Gesellschaft Für Anilin Fabrikation.	22,154	Dec. 13	61	1651
Photographic dry-plates	L. H. Baekeland	21,596	Aug. 9	60	892
Photographic dry-plates	Harvard Dry Plate Co.	20,647	Jan. 26	58	390
Photographic dry-plates	Harvard Dry Plate Co.	20,706	Feb. 9	58	658
Photographic dry-plates	Harvard Dry Plate Co.	20,707	Feb. 9	58	658
Photographic paper	A. I. Cohn	22,009	Nov. 22	61	1161
Photographic paper	E. Liesegang	21,430	July 12	60	293
Photographic paper	A. Schwarz	21,409	July 5	60	155
Photographic paper, plates, and chemicals	A. Schwarz	21,572	Aug. 9	60	890
Photographic prints	G. F. E. Pearsell	21,787	Sept. 27	60	1881
Piano and organ hardware	Blake & Johnson	21,965	Nov. 8	61	884
Pianos	D. H. Baldwin & Co.	20,903	Mar. 29	58	1698
Pianos	Siegel, Cooper & Company	22,176	Dec. 13	61	1654
Pianos	F. G. Smith	21,895	Oct. 25	61	562
Pianos	F. G. Smith	22,048	Nov. 22	61	1164
Pickles, catchup, and horse-radish	A. M. Aldrich & Co.	21,333	June 21	59	1916
Pigment filler. Liquid	David B. Crockett Company	21,879	Oct. 18	61	422
Pillow-shams	Wilkes-Barré Lace Manufacturing Company.	21,196	May 24	59	1256
Pillows	M. Lary	22,236	Dec. 27	61	1944
Pills	J. S. Abraham	21,048	Apr. 26	59	628
Pills	J. S. Abraham	21,280	June 14	59	1758
Pills	H. E. Bucklen	20,689	Feb. 9	58	658
Pills	G. T. Fulford	20,622	Jan. 19	58	280
Pills	G. T. Fulford	20,838	Mar. 15	58	1420
Pills	W. T. Hanson Company	21,652	Aug. 23	60	1185
Pills	Hattie & Mylius	21,299	June 14	59	1759
Pills	Kamame Medicine Co.	20,684	Feb. 9	58	658
Pills	M. Leprince	21,926	Nov. 1	61	720
Pills	M. Markendorf	20,557	Jan. 5	58	2
Pills	H. C. Wilkinson	20,642	Jan. 26	58	390
Pills	H. C. Wilkinson	21,312	June 14	59	1760
Pills	H. C. Wilkinson	21,957	Nov. 8	61	883
Pills and granules	L. D. Mereness	22,198	Dec. 20	61	1786
Pills, capsules, and tablets	McKesson & Robbins	21,755	Sept. 20	60	1476
Pills for diseases of the digestive organs and kindred diseases.	F. C. Fowler	22,120	Dec. 6	61	1747
Pills for human use.	J. Cockle & Co.	22,047	Nov. 22	61	1164
Pills used in kidney complaints	J. H. McKee	21,679	Aug. 23	60	1187
Pineapples	Indian River and Lake Worth Pine-apple Growers Association.	21,446	July 12	60	291
Pins	Kirby, Beard & Company	21,289	June 14	59	1758
Pins. Silvered metal pins and black	American Pin Company	21,264	June 7	59	1603
Pins. Silvered, safety, and mourning	American Pin Company	20,816	Mar. 8	58	1262
Pins. Straight	Plume & Atwood Manufacturing Company.	21,888	Oct. 25	61	562
Pipes and boilers. Non-heat-conducting coverings for steam and other	Magnesia Sectional Covering Co.	22,005	Nov. 15	61	1014
Pipes. Earthen sanitary	H. Knowles	21,898	Oct. 25	61	562
Pitch-pipes and tuning-forks	W. E. Wheelock	20,772	Feb. 23	58	952
Plaids for dresses	P. J. Willis & Bro	22,016	Nov. 22	61	1162
Plasters. Adhesive	A. H. Keller	21,566	Aug. 2	60	734
Plastic material composed in part of pyroxyline	Celluloid Company	21,682	Aug. 23	60	1187
Plastic material composed in part of pyroxyline	Celluloid Company	21,683	Aug. 23	60	1187
Flows	Deere & Company	20,974	Apr. 12	59	295
Flows	South Bend Iron Works	22,073	Nov. 29	61	1310

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Plowshares.....	L. A. Weyhurn Company.....	21,826	Oct. 4	61	148
Plush. Silk.....	Sir Titus Salt, Bart., Sons & Company.....	21,453	July 12	60	294
Plushes.....	L. C. Chase & Co.....	20,896	Mar. 29	58	1698
Plushes.....	Sir Titus Salt, Bart., Sons & Company.....	21,396	June 28	59	2070
Poison and sheep-dip for destroying vermin on animals. Liquid bug-.....	Fernoline Chemical Company.....	20,743	Feb. 23	58	952
Polish for wood and metal work.....	Manley & Turner.....	20,930	Apr. 5	59	154
Polish for wood, glass, and metal.....	R. A. Schultz.....	21,007	Apr. 19	59	461
Polishing paste, powder, and cloths and soaps for metals, and jewelers' soaps.....	Pyn-ka Syndicate.....	20,674	Feb. 2	58	526
Polishing-powder, not including stove-polish.....	D. W. Curtis.....	21,989	Nov. 15	61	1013
Polishing preparation.....	Zucker & Levett Chemical Company.....	21,518	July 26	60	572
Pop-corn. Shelled rice.....	Albert Dickinson Company.....	20,592	Jan. 12	58	148
Porcelain, crockery, earthenware, faience, or glass.....	Blondeau, Pichonnier & Dubouche-ron.....	20,700	Feb. 9	58	658
Poultry and eggs.....	M. Piowaty.....	21,822	Oct. 4	61	148
Powder. Face and skin.....	McBride & Hall.....	22,019	Nov. 22	61	1162
Powder for allaying fevers, for the treatment of febrile affections, and the cure of headache arising from fever.....	H. J. Parker.....	21,960	Nov. 8	61	883
Powder for causing the smoking out of rats, rabbits, &c.....	L. Bossle.....	21,670	Aug. 23	60	1186
Powders. Worm.....	McBride & Hall.....	22,041	Nov. 22	61	1163
Preparation for healing wounds, chaps, or other excoriations by external application.....	C. Ryan.....	21,181	May 24	59	1255
Preparation for prevention of diseases caused by infectious air.....	J. Schuch & Co.....	22,173	Dec. 13	61	1653
Preparations embodying a coal-tar derivative. Proprietary.....	Albemarle Chemical Company.....	22,036	Nov. 22	61	1163
Preparations for the complexion, including soaps, lotions, powder, and cream.....	L. Wilbert.....	22,020	Nov. 22	61	1162
Preparations for the cure of piles and kindred diseases.....	F. Eaton.....	21,857	Oct. 11	61	283
Preparations of sulphur in liquid form.....	Peters & Company.....	22,035	Nov. 22	61	1163
Preservative. Chemical.....	O. Hann & Bro.....	21,854	Oct. 4	61	150
Prints and reproductions by photomechanical processes.....	C. B. Woodward.....	21,547	Aug. 2	60	733
Publication. Monthly.....	M. N. Forney.....	21,721	Sept. 6	60	1475
Publications. Literary.....	R. Bonner's Sons.....	21,334	June 21	59	1916
Publications. Periodical.....	H. H. Chandler & Co.....	22,228	Dec. 27	61	1943
Puzzle.....	W. H. Culshaw.....	20,954	Apr. 12	59	294
Pyroxyline or its compounds. Material composed wholly or in part of.....	Arlington Manufacturing Company.....	20,252	Mar. 15	58	1420
Radiators. Steam and hot-water.....	Philadelphia Hardware and Malleable Iron Works.....	21,966	Nov. 8	61	884
Railway service. Air-brake apparatus for.....	Westinghouse Air Brake Company.....	20,849	Mar. 15	58	1420
Rainproof fabrics for garments.....	E. W. Beuthner.....	22,233	Dec. 27	61	1943
Razor-strops.....	W. M. Bowes.....	22,237	Dec. 27	61	1944
Razors.....	W. A. Shull.....	21,073	May 3	59	786
Razors.....	Broch & Thiebes Cutlery Co.....	21,472	July 19	60	434
Razors.....	Firm of Alexander Coppel.....	21,352	June 21	59	1918
Razors.....	Ransom & Randolph.....	21,077	May 3	59	786
Razors and pocket and carving knives.....	H. Boker & Co.....	21,478	July 19	60	434
Refrigerators and refrigerator-cars.....	J. F. Hanrahan.....	21,301	June 14	59	1759
Remedies. A line of.....	J. Williams, Jr.....	21,760	Sept. 20	60	1747
Remedies. Catarrh.....	O. P. Smith.....	21,589	Aug. 9	60	891
Remedies. Catarrhal and like.....	Birney Catarrhal Powder Company.....	21,095	May 10	59	937
Remedies. Certain named.....	D. M. Monteith, F. W. Seeley, and H. W. Knapp.....	20,751	Feb. 23	58	952
Remedies. Certain named.....	A. D. Mowry.....	20,619	Jan. 19	58	280
Remedies. Certain named.....	Od Chem. Company.....	21,339	June 21	59	1916
Remedies. Certain named.....	R. N. Pool.....	20,559	Jan. 5	58	2
Remedies for alcoholism, morphine, opium, and tobacco habit, consumption, and for diseases of the throat and lungs.....	Humanitas Company.....	21,183	May 24	59	1255
Remedies for coughs, colds, and all diseases of the throat and lungs.....	E. C. Marshall.....	22,269	Dec. 27	61	1946
Remedies for coughs, colds, cramps, bruises, and sprains. Internal and external.....	W. S. Rockey.....	21,993	Nov. 15	61	1013
Remedies for coughs, diseases of the blood, corns, and toothache, and dyspepsia-pills.....	I. Boksichizky & S. Rotkowitz.....	20,727	Feb. 16	58	810
Remedies for diseases. Internal and external.....	Howards & Sons.....	21,357	June 28	59	2067
Remedies for diseases of the blood, liver, kidneys, and stomach, and skin diseases.....	E. C. Vick.....	21,377	June 28	59	2068
Remedies for diseases of the stomach, blood, liver, and kidneys.....	G. W. Ridley.....	22,118	Dec. 6	61	1476
Remedies for diseases of the stomach, blood, liver, and kidneys, and nervous affections, and general debility.....	R. Richards & Co.....	22,119	Dec. 6	61	1476
Remedies for diseases of the stomach, liver, bladder and skin.....	W. H. Daniels.....	21,355	June 28	59	2067
Remedies for diseases of the throat, lungs, and kidneys.....	M. Van Every.....	21,992	Nov. 15	61	1013
Remedies for drunkenness.....	Eucrasv Co.....	20,591	Mar. 22	58	1562
Remedies for external use.....	S. L. Willard.....	21,849	Oct. 4	61	150
Remedies for fevers and headaches.....	Sultan Drug Company.....	20,879	Mar. 22	58	1562
Remedies for gonorrhoea, gleet, and similar diseases.....	J. Thompson.....	21,074	May 3	59	786
Remedies for gout and rheumatism.....	W. Hofert.....	20,724	Feb. 16	58	810
Remedies for internal and external use.....	McKesson & Robbins.....	20,873	Mar. 22	58	1562
Remedies for internal use which contain quinine.....	New York Quinine and Chemical Works.....	22,061	Nov. 29	61	1309
Remedies for neuralgia, rheumatism, headache, hay-fever, asthma, and female complaints.....	G. A. Hill.....	21,335	June 21	59	1916
Remedies for neurotic and similar complaints.....	C. Nehls.....	22,270	Dec. 27	61	1946
Remedies for purifying the blood.....	P. B. Monroe.....	20,778	Mar. 1	58	1098
Remedies for rheumatism and gout.....	E. Z. Brievogelle.....	22,178	Dec. 13	61	1654
Remedies for rheumatism and similar complaints.....	Farbenfabriken, vormals Fr. Bayer & Co.....	20,759	Feb. 23	58	952
Remedies for skin diseases and catarrhal affections. Internal and external.....	E. H. Purdy.....	20,652	Jan. 26	58	390
Remedies for the relief of diseases affecting the mucous membrane of throat, head, and lungs.....	E. J. St. Hilaire.....	21,410	July 5	60	155
Remedies for venereal diseases.....	F. E. Wilmot.....	20,815	Mar. 8	58	1262

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Remedies in the form of tablets for rheumatism and diseases of the kidneys.	W. Wilson	21,269	June 7	59	1603
Remedies. Neuralgic	C. H. Sagar	20,941	Apr. 5	59	155
Remedies put up in the form of a powder, liquid, and salve for catarrh, sore eyes, and diseases of the blood.	Dearth & Smith	21,276	June 7	59	1604
Remedies. Temperamental	J. H. Patty	21,767	Sept. 20	60	1748
Remedies. Topical	M. Gelhart & Son	21,372	June 28	59	2060
Remedy against blood-poisoning	D. A. Clippinger	20,951	Apr. 5	59	156
Remedy for acute and chronic inflammation	A. J. Pidgeon	22,174	Dec. 13	61	1633
Remedy for asthma, hay fever, bronchitis, croup, and nasal catarrh.	Capital Drug Company	21,150	May 17	59	1102
Remedy for catarrh and all diseases of the throat, lungs, and bowels.	R. M. Davis	21,762	Sept. 20	60	1747
Remedy for certain named diseases	G. W. Page	21,213	May 31	59	1428
Remedy for certain named diseases	G. W. Page	21,214	May 31	59	1428
Remedy for colds and throat and lung troubles	E. Heffernan	22,116	Dec. 6	61	1475
Remedy for constipation, diseases of the liver, kidneys, bowels, skin, and blood. Fluid	W. F. Harris	21,678	Aug. 23	60	1187
Remedy for consumption and all diseases of the lungs. Fluid	Mrs. S. D. Chapman	24,459	July 19	60	433
Remedy for diseases of the blood and kidneys	H. C. Southworth	21,433	July 12	60	293
Remedy for diseases of the blood, stomach, and nervous system.	H. J. Meyer	20,872	Mar. 22	58	1562
Remedy for diseases of the eye	Dr. David Kennedy Corporation	21,559	Aug. 2	60	734
Remedy for diseases of the kidneys and genital organs	J. C. Auchampaugh	21,850	Oct. 4	61	150
Remedy for diseases of the liver and skin	O. L. Mulot	21,862	Oct. 11	61	283
Remedy for diseases of the liver, kidneys, and stomach	A. Klein	22,038	Nov. 22	61	1163
Remedy for diseases of the stomach and bowels and other painful disorders.	Dr. David Kennedy Corporation	21,525	July 26	60	573
Remedy for diseases of the uterine organs and similar ailments.	H. K. Wampele & Co	21,233	May 31	59	1429
Remedy for diseases of women	F. A. Whitney	21,798	Sept. 27	60	1882
Remedy for deg-distemper	Taylor & Severance	21,597	Aug. 9	60	892
Remedy for dyspepsia	Keasbey & Mattison	22,117	Dec. 6	61	1475
Remedy for dyspepsia or stomach troubles	E. L. Bergstresser	20,923	Apr. 19	59	459
Remedy for general debility and for diseases of the genital organs.	R. Hudnut	21,535	Aug. 2	60	732
Remedy for gonorrhea and gleet	E. H. Davis	21,961	Nov. 8	61	883
Remedy for gonorrhea, gleet, and like diseases	H. W. Crolley	22,268	Dec. 27	61	1946
Remedy for gonorrhea, gleet, leucorrhea, and the like	W. L. Cochran	21,548	Aug. 2	60	733
Remedy for heart disease, rheumatism, and kindred ailments	C. Gardner	20,664	Feb. 2	58	526
Remedy for heaves, cough, or distemper	Newton Horse Remedy Co	20,814	Mar. 8	58	1262
Remedy for hernia or rupture	H. C. Nott	20,718	Feb. 16	58	810
Remedy for indigestion	W. M. Rawson	20,729	Feb. 16	58	810
Remedy for indigestion, in the form of chewing-gum, powders, pills, capsules, or liquid.	Aptite Manufacturing Company	20,813	Mar. 8	58	1262
Remedy for nervous disorders	W. H. Gannett	21,516	July 26	60	572
Remedy for nervous disorders	W. H. Gannett	21,583	Aug. 9	60	891
Remedy for neuralgia, rheumatism, headache, and fevers	H. Brinckerhoff	21,791	Sept. 27	60	1832
Remedy for phthisic	Farbwerke, vormals Meister, Lucius & Brüning	20,617	Jan. 19	58	280
Remedy for phthisic	Farbwerke, vormals Meister, Lucius & Brüning	20,618	Jan. 19	58	280
Remedy for rheumatism	W. H. and R. W. Crippen	20,798	Mar. 1	58	1098
Remedy for rheumatism	Estate of W. P. Dolloff	21,176	May 24	59	1255
Remedy for rheumatism	E. S. Powers	22,175	Dec. 13	61	1633
Remedy for rheumatism	Purinton Medicine Co	21,549	Aug. 2	60	733
Remedy for rheumatism	H. S. Searle	21,616	Aug. 16	60	1047
Remedy for rheumatism	J. J. Winsor	20,949	Apr. 5	59	156
Remedy for rheumatism, cystitis, and other diseases resulting from excess of acid in the secretions.	Keasbey & Mattison	22,037	Nov. 22	61	1163
Remedy for rheumatism. Liquid	Hafertepen Bros	20,908	Mar. 29	58	1698
Remedy for rheumatism, neuralgia, and headache	Cable Specialty Co	21,293	June 14	59	1759
Remedy for the croup	C. A. Beldin	21,565	Aug. 2	60	734
Remedy for the cure of headache, colds, neuralgia, or similar ailments.	C. B. Kingsley	21,051	Apr. 26	59	628
Remedy for the cure of rheumatism	Swiss Medicine Co	21,424	July 5	60	156
Remedy for the cure of rheumatism, gout, and lumbago	McKinnie & Chessman Manufacturing Co	21,273	June 7	59	1601
Remedy for the diseases of women	L. Gerstle	22,060	Nov. 29	61	1309
Remedy for the piles	W. T. Strong	21,814	Oct. 4	61	147
Remedy for the toothache	R. Arduvini	21,829	Oct. 4	61	149
Remedy for throat diseases	M. Scott	21,468	July 19	60	435
Remedy. Topical	C. Hesse	21,536	Aug. 2	60	732
Ribbons. Satin and velvet	Passavant & Co	21,711	Aug. 30	60	1324
Rope, cordage, and twine. Cotton	Porterdale Mills	21,740	Sept. 13	60	1607
Rosin	D. W. Ketchum	22,243	Dec. 27	61	1944
Rubber and leather goods. Certain named	Page Belting Company	21,924	Nov. 1	61	720
Rubber belting	Beston Woven Hose and Rubber Company	21,713	Aug. 30	60	1324
Rubber, including mats and matting. Articles of vulcanized	New York Belting and Packing Company	22,108	Dec. 6	61	1474
Rugs and carpetings	Abegg & Rensch	22,235	Dec. 27	61	1943
Saccharate similar to saccharine	Lehn & Fink	22,171	Dec. 13	61	1653
Sad-irons for domestic use	Colebrookdale Iron Company	22,130	Dec. 6	61	1477
Saddlery hardware	Eberhard Manufacturing Company	21,019	Apr. 26	59	626
Salt	Genesee Salt Company	21,198	May 24	59	1256
Salt. Dairy and table	Inland Crystal Salt Company	20,648	Jan. 26	58	390
Salt for table and other use	Kansas Salt Company	21,195	May 24	59	1256
Salt from Great Salt Lake for hatching purposes	M. W. Hopkins	21,429	July 12	60	293
Salts. Inorganic	M. C. Traub	21,326	June 21	59	1915
Salve	Bickmore Gall Cure Company	21,456	July 19	60	433
Salve	E. S. Parker	20,969	Apr. 19	59	459
Salve. Anal or rectal	A. B. Jamison	21,063	May 3	59	785
Salve for eye diseases	J. Spitteler and W. Drexler	22,197	Dec. 20	61	1786

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Salves, ointments, and liniments	F. J. Lockwood	22,122	Dec. 6	61	1476
Salves, ointments, or liniments, and cough mixture	E. B. Scheier	20,924	Apr. 5	59	154
Salves, ointments, or liniments, and cough mixture	F. B. Scheier	21,060	May 3	59	786
Saponaceous compound for cleansing carpets and for laundry purposes.	J. S. Silver	22,162	Dec. 13	61	1652
Sarsaparilla compound	H. L. and J. E. Woodcock	21,827	Oct. 4	61	149
Sash locks and fasteners	W. A. Bomar	21,840	Oct. 4	61	149
Sauce for fish, meats, &c. Table	H. B. Guinle	20,603	Jan. 12	58	148
Sauce for meats, fish, game, gravies, and soup	Lea & Perrins	21,208	May 31	59	1427
Sausage-meat, mustard, and pickles	H. B. Guinle	20,744	Feb. 23	58	952
Saws	W. B. Barry	21,902	Nov. 1	61	719
Saws	Shurly & Dietrich	21,688	Aug. 23	60	1188
Saws	Shurly & Dietrich	21,689	Aug. 23	60	1188
Saws of all kinds	E. C. Atkins & Company	21,623	Aug. 16	60	1048
Saws, tools, files, and steel	Henry Disston & Sons	21,515	July 26	60	572
Scales. Weighing	Jones of Binghamton	20,672	Feb. 2	58	526
Scalp-wash	L. A. Smith	21,654	Aug. 23	60	1185
Scissors	Milton Bradley Company	20,828	Mar. 15	58	1420
Scouring and cleaning powder	T. Armstrong	21,471	July 19	60	434
Sedlitz-powders	J. F. Gibson	21,764	Sept. 20	60	1747
Seeds and plants	Oasis Nursery Company	21,735	Sept. 13	60	1607
Sewing-machines	C. G. Akam	21,481	July 19	60	434
Sewing-machines	Cash Buyers' Union	21,650	Aug. 23	60	1185
Sewing-machines	Dives, Pomeroy & Stewart	21,321	June 21	59	1914
Sewing-machines	New York Sewing Machine and Manufacturing Company	21,897	Oct. 25	61	562
Sewing-machines and attachments	Johnson, Clark & Co.	20,832	Mar. 15	58	1420
Sewing-machines and attachments	New Home Sewing Machine Company	21,272	June 7	59	1604
Shade fabric. Window	Lyon, Hall & Co.	21,303	June 14	59	1759
Shaft and pole couplings for vehicles	H. A. Luttgens	20,603	Feb. 2	58	526
Shears, scissors, and pocket-knives	H. Boker & Co.	21,248	June 7	59	1602
Sheep-dip or cattle-wash	F. D. Banning	21,830	Oct. 4	61	149
Sheep-shears, garden-shears, and butchers' knives	William Wilkinson & Sons	20,726	Feb. 16	58	810
Sheep-shears, garden-shears, and butchers' knives	W. Wilkinson & Sons	20,771	Feb. 23	58	952
Sheet metal. All	E. L. Parker & Co.	22,143	Dec. 6	61	1478
Sheet metal and solder. All	E. L. Parker & Co.	22,140	Dec. 6	61	1477
Sheet metal and solder. All	E. L. Parker & Co.	22,141	Dec. 6	61	1478
Sheet metal and solder. All	E. L. Parker & Co.	22,142	Dec. 6	61	1478
Sheet-metal ware. Enameled	H. Aich	21,624	Aug. 16	60	1048
Sheetings, shirtings, muslins, and cotton dress fabrics	Montmorency Cotton Manufacturing Company	21,244	May 31	59	1430
Shellac. Substitute for	Burbank & Ryder	20,960	Apr. 12	59	294
Shingles. Cypress	Aucoin, Breaux & Renoudet	21,169	May 24	59	1254
Shirtings, cambrics, muslins, and dress goods	Paul Whitin Manufacturing Company	21,395	June 28	59	2070
Shirts, collars, and cuffs. Men's	Miller, Hall & Hartwell	21,405	July 5	60	154
Shirts, collars, cuffs, and blouses	C. H. McClellan	21,821	Oct. 4	61	148
Shirts. Dress and negligée	Missoula Mercantile Company	21,723	Sept. 6	60	1475
Shirts. Linen	N. Hannach	21,569	Aug. 9	60	890
Shirts. Men's	Burt Shirt Manufacturing Co.	21,133	May 17	59	1101
Shirts. Men's	J. Kyle & Co.	20,887	Mar. 22	58	1562
Shirts, overalls, and pantaloons for mechanics' working-clothes.	J. Levi	21,071	May 3	59	786
Shoe-dressing	Heller & Merz Company	21,130	May 17	59	1101
Shoes	R. H. Foerderer	20,721	Feb. 16	58	810
Shoes	C. Treadwell	21,646	Aug. 16	60	1049
Shoes	Tucker & Moulton	21,044	Apr. 26	59	627
Shoes and shoe-lasts	Heywood Boot and Shoe Company	21,134	May 17	59	1101
Shoes. Children's school	Carleton & Huckins	21,126	May 17	59	1101
Shoes and analogous articles of foot-wear	N. Koch & Co.	22,107	Dec. 6	61	1474
Shoes for children's wear	Kollok, Logan & Co.	22,017	Nov. 22	61	1162
Shoes, slippers, and shoe-uppers. Fine	John M. Moore Shoe Company	21,358	June 28	59	2067
Shoes. Women's, misses', and children's lace and button	G. F. Daniels & Co.	21,178	May 24	59	1255
Shot-shells and cartridge-shells. Loaded and unloaded	Creedmoor Cartridge Company	20,575	Jan. 12	58	148
Silks, ribbons, and silk threads. Broad	W. G. Hitchcock & Co.	21,415	July 5	60	155
Silks, velvets, satins, plushes, cords, and ribbons	A. Herzog	20,717	Feb. 16	58	810
Silver-polish	W. H. Lewis	21,338	June 21	59	1916
Silver-polish	P. C. Plasterer	21,947	Nov. 8	61	882
Silver-polish in the form of powder and soap	Electro Silicon Company	21,820	Oct. 4	61	148
Silverware. Solid table and other	Ludwig, Redlich & Co.	21,423	July 5	60	156
Sirup. Liquid cough	M. E. Van Arsdale	22,042	Nov. 22	61	1163
Sirup. Worm	Dr. David Kennedy Corporation	21,657	Aug. 23	60	1185
Skates and racing roller-skates. Ice racing	Union Hardware Company	20,654	Jan. 26	58	390
Skates and racing roller-skates. Ice racing	Union Hardware Company	20,660	Jan. 26	58	390
Skins and fur and clothing made or lined with skins or trimmed with fur	T. S. Jay	20,790	Mar. 1	58	1098
Smoking-pipes	Hirschl & Bendheim	21,578	Aug. 9	60	890
Snuff	H. M. H. Bolander	20,854	Mar. 22	58	1562
Snuff	Bruton & Condon	21,012	Apr. 19	59	461
Snuff	Bruton & Condon	21,604	Aug. 16	60	1046
Soap	W. Gossage & Sons	21,917	Nov. 1	61	720
Soap	W. Gossage & Sons	21,918	Nov. 1	61	720
Soap	W. Gossage & Sons	21,919	Nov. 1	61	720
Soap	W. Gossage & Sons	21,920	Nov. 1	61	720
Soap	W. Gossage & Sons	21,921	Nov. 1	61	720
Soap	W. Gossage & Sons	21,945	Nov. 8	61	882
Soap	W. Gossage & Sons	21,946	Nov. 8	61	882
Soap	W. H. Hall	21,812	Oct. 4	61	147
Soap and other cleaning and detergent preparations	J. T. Robertson Soap Company	21,425	July 5	60	156
Soap and perfumery. Perfumed	Zeno & Co.	20,836	Mar. 15	58	1420
Soap and soap powders	Mexican Amole Soap Company	22,203	Dec. 20	61	1787
Soap and washing compound. Laundry	Pacific Soap and Chemical Co.	20,685	Feb. 9	58	658
Soap and washing-powder. Laundry	M. F. Smith	22,064	Nov. 29	61	1309
Soap. Castile	J. Biechele Soap Co.	21,363	June 28	59	2067

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Soap. Castile.....	J. Biechele Soap Co.....	21,364	June 23	59	2067
Soap. Cleaning and disinfecting.....	H. C. Stewart.....	21,546	Aug. 2	60	733
Soap, cosmetics, cream, lotion, hair dye and bleach, and similar preparations. Toilet.....	Madame May & Co.....	21,210	May 31	59	1427
Soap, face-powder, face-cream, tooth-powder, and perfumes. Toilet.....	Bippus & Breidenbach.....	21,522	July 26	60	573
Soap for belt-dressing.....	M. F. Delnow.....	21,923	Nov. 1	61	720
Soap for cleaning and polishing metals and glass and for toilet and laundry use.....	C. H. Dixon.....	20,857	Mar. 22	58	1562
Soap for laundry and household use.....	T. Armstrong.....	21,455	July 19	60	433
Soap for laundry and household use.....	Maple City Soap Works.....	22,163	Dec. 13	61	1652
Soap for staining and cleansing leather.....	W. T. Gempp & Co.....	20,550	Jan. 5	58	2
Soap for the toilet and laundry. White.....	Ohio Soap Company.....	22,021	Nov. 22	61	1162
Soap. Hard.....	Stanton Manufacturing Company.....	21,376	June 23	59	2068
Soap. Harness.....	Capitol Manufacturing Company.....	20,946	Apr. 5	59	156
Soap. Laundry.....	J. W. and T. W. Alexander.....	21,839	Oct. 4	61	149
Soap. Laundry.....	Benjamin Brooke & Company.....	21,671	Aug. 23	60	1186
Soap. Laundry.....	Benjamin Brooke & Company.....	21,676	Aug. 23	60	1187
Soap. Laundry.....	Kendall Manufacturing Company.....	22,164	Dec. 13	61	1652
Soap. Laundry.....	Reade Manufacturing Co.....	21,749	Sept. 13	60	1608
Soap. Laundry.....	Reade Manufacturing Co.....	21,813	Oct. 4	61	147
Soap. Laundry and toilet.....	Beach Soap Co.....	21,738	Sept. 13	60	1607
Soap. Laundry and toilet.....	W. Gossage & Sons.....	22,201	Dec. 20	61	1786
Soap. Laundry and toilet.....	W. Gossage & Sons.....	22,202	Dec. 20	61	1787
Soap-powder.....	J. De Vine.....	20,754	Feb. 23	58	952
Soap. Soft or liquid.....	G. W. Dyarman.....	22,204	Dec. 20	61	1787
Soap. Toilet.....	H. E. Dick.....	21,366	June 23	59	2068
Soap. Toilet.....	Milheus & Kropff.....	22,063	Nov. 29	61	1309
Soap. Toilet.....	Oakley Soap and Perfumery Company.....	22,022	Nov. 22	61	1162
Soap. Toilet.....	Reed & Carnrick.....	20,812	Mar. 8	58	1262
Soap. Toilet.....	Souvenir Manufacturing Co.....	21,058	Apr. 26	59	628
Soap. Toilet.....	Sylvan Toilet Co.....	21,618	Aug. 16	60	1047
Soap. Toilet and laundry.....	H. C. Davis, Jr., & Co.....	21,493	July 19	60	435
Soap. Toilet and laundry.....	Kendall Manufacturing Company.....	20,649	Jan. 26	58	390
Soaps, washing fluids, and powders. Toilet, laundry, and scouring.....	Kendall Manufacturing Company.....	21,404	July 5	60	154
Soda. Bicarbonate of.....	N. Waterbury.....	21,575	Aug. 9	60	890
Soda-water preparation.....	W. A. Henninger.....	21,607	Aug. 16	60	1046
Soup preparations.....	Frederick King & Company.....	20,782	Mar. 1	58	1098
Specific for cholera infantum.....	L. A. Davidson.....	20,985	Apr. 19	59	459
Specific for gout, rheumatism, and kindred diseases.....	Renz & Henry.....	21,707	Aug. 30	60	1324
Specific for nerve exhaustion.....	C. Slaughter and D. D. Murray.....	20,964	Apr. 12	59	295
Specific for neuralgia, rheumatism, and gout.....	F. Alexe.....	21,234	May 31	59	1429
Specific for throat and lung troubles.....	J. B. Daniel.....	20,841	Mar. 15	58	1420
Spectacles and eyeglasses.....	American Optical Company.....	22,012	Nov. 22	61	1161
Spices. Ground.....	Thomson & Taylor Spice Company.....	20,918	Mar. 29	58	1698
Spool-cotton.....	William Clark Company.....	21,539	Aug. 2	60	732
Spool-cotton.....	William Clark Company.....	21,540	Aug. 2	60	732
Spoons, forks, knife-handles, and the like. Metal.....	F. C. Lamy.....	21,899	Oct. 25	61	562
Sporting-powder.....	Miami Powder Company.....	21,252	June 7	59	1602
Stamps for delivery by a coin-controlled machine. Frangible boxes containing postage.....	United States Postage Stamp Delivery Company.....	21,746	Sept. 13	60	1608
Stamps. Frangible boxes containing postage.....	United States Postage Stamp Delivery Company.....	21,788	Sept. 27	60	1881
Stamps. Rubber.....	H. E. Dick.....	21,367	June 28	59	2068
Starch. Laundry.....	National Starch Manufacturing Company.....	21,083	May 10	59	936
Starch. Laundry.....	National Starch Manufacturing Company.....	21,257	June 7	59	1602
Starch for laundry or food purposes. Preparation of.....	National Starch Manufacturing Company.....	20,943	Apr. 5	59	156
Statuettes.....	L. H. Aymé.....	21,931	Nov. 8	61	881
Steam-engines. Stationary.....	Stearns Manufacturing Company.....	21,256	June 7	59	1602
Steel in bars, rods, and sheets for tools, dies, and other purposes.....	F. Hobson, Seaman & Co.....	21,182	May 24	59	1255
Stone and its compositions. Artificial.....	Pyrolith Company.....	21,579	Aug. 9	60	890
Stone pavements, paving-blocks, copings, and analogous structures. Artificial.....	P. Stuart.....	21,015	Apr. 19	59	461
Stove-mats.....	J. L. Brown Co.....	22,002	Nov. 15	61	1014
Stove-polish.....	J. D. Butz.....	21,136	May 17	59	1101
Stove-polish.....	C. H. Cuflew.....	21,061	May 3	59	765
Stove-polish.....	Douglas & Kingsland.....	21,110	May 10	59	938
Stoves. Cooking.....	Bridge & Beach Manufacturing Company.....	21,029	Apr. 26	59	626
Stoves, heaters, and furnaces.....	Glazier-Strong Oil Stove Co.....	20,991	Apr. 19	59	460
Stoves. Oil and gas.....	Central Oilgas Stove Company.....	21,250	June 7	59	1602
Stoves. Oil or gas.....	Central Oilgas Stove Company.....	21,703	Aug. 30	60	1323
Stoves. Oil or gas.....	Page Bros. & Co.....	22,075	Nov. 29	61	1310
Stoves, ranges, and furnaces.....	Co-Operative Foundry Company.....	22,052	Nov. 22	61	1164
Straw lumber.....	A. S. Church.....	21,744	Sept. 13	60	1608
Suet or beef-fat and cotton-seed oil for cooking purposes. Compound of.....	R. B. Brown.....	20,944	Apr. 5	59	156
Sugar, sirup, and molasses.....	Strassberg & Jaeger.....	21,139	May 17	59	1101
Suits. Boys' and children's.....	A. Levy Co.....	21,337	June 21	59	1916
Suits. Boys' and children's.....	A. Levy & Co.....	21,927	Nov. 1	61	720
Suits. Boys' and children's.....	A. Levy & Co.....	21,935	Nov. 8	61	881
Supporter for ladies' underwear.....	L. P. Sigbee.....	21,674	Aug. 23	60	1187
Suppositories.....	F. C. Fowler.....	22,123	Dec. 6	61	1476
Suspenders for female use. Combination.....	Southall Bros. & Barclay.....	20,730	Feb. 16	58	810
Table-relish.....	J. Barues.....	20,547	Jan. 5	58	2
Table-relish.....	C. W. Morgan & Co.....	21,324	June 21	59	1915
Tablets for throat and lung diseases.....	Kutum Chemical Co.....	21,722	Sept. 6	60	1475
Tablets for use in dyspepsia and stomach troubles.....	Luyties Homeopathic Pharmacy Company.....	21,780	Sept. 27	60	1881
Tailors' braids.....	Dieckerhoff, Raffloer & Co.....	20,567	Jan. 5	58	2

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Tailors' buttons and buckles	H. Knobel & Co.	20,568	Jan. 5	58	2
Tailors' trimmings, including buttons, buckles, clasps, and hooks and eyes.	Beckermann & Co.	21,286	June 14	59	1758
Tanners' and curriers' tools, such as fleshers, workers, and bairing and carrier knives.	Geo. D. Ellis & Sons Company	20,819	Mar. 8	58	1262
Tarlatan, lace-net, and all other cotton dress goods	M. Landesmann	20,975	Apr. 12	59	296
Tea	L. H. Parke & Co.	21,432	July 12	60	293
Tea	Paxton & Gallagher	21,267	June 7	59	1603
Tea	Paxton & Gallagher	21,268	June 7	59	1603
Tea	Paxton & Gallagher	21,847	Oct. 4	61	150
Tea	Paxton & Gallagher	21,941	Nov. 8	61	881
Tea and coffee	F. J. Miler	21,942	Nov. 8	61	882
Tea. Blended	L. H. Parke & Co.	21,431	July 12	60	293
Tea, coffee, and spices	W. C. King	21,543	Aug. 2	60	733
Teeth. Filling or cement for	R. Richter	22,260	Dec. 27	61	1946
Terne plates	Morrison Tin Plate Co.	20,701	Feb. 9	58	658
Textile fabrics, such as cotton, linen, worsted, and silk goods and velvets and velveteens.	Albion Company	22,232	Dec. 27	61	1943
Thimbles	Stern Bros. & Co.	21,408	July 5	60	154
Threshing, stacking, and weighing machine, and a steam-engine.	Port Huron Engine and Thresher Company	21,991	Nov. 15	61	1013
Thread	Glasgo Yarn Mills Company	21,062	May 3	59	785
Thread for crocheting, embroidering, knitting, and sewing.	Kerr Thread Company	20,638	Jan. 26	58	390
Thread. Linen	Finlayson, Bousfield & Co.	20,705	Feb. 9	58	658
Thread. Linen	Finlayson, Bousfield & Co.	20,892	Mar. 22	58	1562
Thread. Linen	Finlayson, Bousfield & Co.	21,145	May 17	59	1102
Thread. Linen	Finlayson, Bousfield & Co.	21,315	June 21	59	1914
Thread. Linen	Finlayson, Bousfield & Co.	21,316	June 21	59	1914
Thread. Linen	Finlayson, Bousfield & Co.	21,420	July 5	60	155
Thread of cotton, silk, flax, and other fibrous material	Kerr Thread Company	21,976	Nov. 15	61	1012
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,327	June 21	59	1915
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,328	June 21	59	1915
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,330	June 21	59	1915
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,331	June 21	59	1915
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,353	June 21	59	1918
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,383	June 28	59	2069
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,411	July 5	60	155
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,412	July 5	60	155
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,664	Aug. 23	60	1186
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,665	Aug. 23	60	1186
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,666	Aug. 23	60	1186
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	21,667	Aug. 23	60	1186
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing.	Kerr Thread Company	22,103	Dec. 6	61	1474
Thread of cotton, silk, flax, and other fibrous materials for machine and hand sewing and for making buttonholes.	Kerr Thread Company	21,329	June 21	59	1929
Tickets. Printed	A. Dyson	22,179	Dec. 20	61	1785
Timber. Sawed	W. S. Keyser	21,448	July 12	60	294
Time-keeping and time-recording instruments	S. E. Thomas	21,624	Aug. 23	60	1187
Tin and other metal plates	Phelps, Dodge & Co.	20,956	Apr. 12	59	294
Tin and roofing plates	Cleveland Tin Plate Co.	21,656	Aug. 23	60	1185
Tin and terne plates	American Tin Plate Machine and Manufacturing Company	21,382	June 28	59	2069
Tin and terne plates	Merchant & Co.	21,705	Aug. 30	60	1324
Tin and terne plates	C. S. Mersick & Co.	20,651	Jan. 26	58	390
Tin and terne plates	C. S. Mersick & Co.	21,374	June 23	59	2069
Tin and terne plates	J. B. Scott & Co.	20,877	Mar. 22	58	1562
Tin and terne plate and coated and uncoated sheet metal.	N. & G. Taylor Co.	21,285	June 14	59	1758
Tin and terne plates, including roofing-plates and bright plates.	C. S. Mersick & Co.	21,507	July 19	60	436
Tin or terne plates	C. A. Conklin Manufacturing Co.	21,999	Nov. 15	61	1014
Tin-plate, terne-plate, and sheet metal, coated and uncoated.	N. & G. Taylor Co.	21,876	Oct. 18	61	421
Tin-plate, terne-plate, and sheet metal, coated and uncoated.	N. & G. Taylor Co.	21,877	Oct. 18	61	421
Tin-plate, terne-plate, and sheet metal, coated and uncoated.	N. & G. Taylor Co.	22,145	Dec. 6	61	1478
Tin-plate, terne-plate, and sheet metal, coated and uncoated.	N. & G. Taylor Co.	22,146	Dec. 6	61	1478
Tin-plate, terne-plate, and sheet metal coated with tin.	N. & G. Taylor Co.	22,238	Dec. 27	61	1944
Tin-plate, terne-plate, sheet metal, sheet-iron, or sheet-steel.	N. & G. Taylor Co.	20,542	Jan. 5	58	2
Tin-plate, terne-plate, sheet metal, sheet-iron, or sheet-steel.	N. & G. Taylor Co.	20,564	Jan. 5	58	2
Tin plates	Ashturnham Tin Plate Company	22,144	Dec. 6	61	1478
Tin plates, terne plates, and black plates	Llansamlet Tin Plate Company	20,571	Jan. 5	58	2
Tin. Roofing	N. & G. Taylor Co.	20,563	Jan. 5	58	2
Tires for bicycles. Pneumatic	Boston Woven Hose and Rubber Company	21,967	Nov. 8	61	884
Tobacco and cigar-boxes. Liquid for flavoring	G. H. Lueders	21,954	Nov. 8	61	883
Tobacco and cigars. Chewing and smoking	G. A., C. J., and W. J. Neff	21,855	Oct. 4	61	150
Tobacco. Chewing	P. H. Hanes & Co.	22,058	Nov. 22	61	1164
Tobacco, cigars, and cigarettes. Plug	Strassheim & Jaeger	21,219	May 31	59	1428
Tobacco, cigars, cigarettes, cheroots, and snuff	American Tobacco Company	22,094	Nov. 29	61	1312
Tobacco. Plug	A. Engelhard & Sons	21,953	Nov. 8	61	883
Tobacco. Plug	J. G. Penn, P. P. Watson, and A. D. Witten	21,768	Sept. 20	60	1748
Tobacco. Plug	Wright Brothers Tobacco Company	22,245	Dec. 27	61	1944

Alphabetical list of trade-marks—Continued.

Title.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Tobacco. Plug chewing.....	H. N. Martin & Co.....	21,345	June 21	59	1917
Tobacco. Plug, smoking, and fine-cut.....	Wellman & Dwire Tobacco Company.....	22,246	Dec. 27	61	1944
Tobacco. Smoking and chewing.....	E. R. W. Thomas.....	21,360	June 28	59	2067
Tobacco. Smoking and chewing.....	E. R. W. Thomas.....	21,361	June 28	59	2067
Tobacco. Smoking and chewing.....	Wellman & Dwire Tobacco Company.....	21,952	Nov. 8	61	883
Toilet articles. Certain named.....	American Entleurance Company.....	21,319	June 21	59	1914
Toilet cream for the skin.....	J. F. Hite.....	21,964	Nov. 8	61	883
Toilet cream, lotions, and powder deodorants.....	E. Lewis.....	21,779	Sept. 27	60	1881
Toilet lotion for the skin.....	G. Lemcke and E. C. Ruppel.....	20,763	Mar. 1	58	1098
Toilet powder. Violet.....	Southall Bros. & Barclay.....	20,629	Jan. 19	58	280
Toilet preparations.....	Footo & Jenks.....	21,067	May 3	59	785
Toilet preparations. Certain named.....	J. S. Lurie.....	21,544	Aug. 2	60	733
Toilet preparations for beautifying the complexion.....	J. C. Flowers and C. S. Witwer.....	21,659	Aug. 23	60	1185
Toilet preparations, not including face-powder.....	M. V. Boits.....	21,652	Aug. 23	60	1186
Toilet wash for the complexion.....	F. A. Jones.....	20,921	Apr. 5	59	151
Tongues, hams, shoulders, breasts, and bacon sides.....	Miller & Miller.....	20,762	Feb. 23	58	952
Tongues, hams, shoulders, breasts, and bacon sides, and lard.....	Miller & Miller.....	20,763	Feb. 23	58	952
Tonic.....	G. C. Stillson.....	20,785	Mar. 1	58	1098
Tonic beverages.....	H. C. Beermann.....	20,818	Mar. 8	58	1262
Tonic. Blackberry.....	E. Altschul.....	22,255	Dec. 27	61	1945
Tonic. Liquid.....	M. J. Olsen.....	21,553	Aug. 2	60	733
Tonic. Liver.....	H. M. Henderson.....	21,611	Aug. 16	60	1049
Tonic preparations, pills, and powders.....	J. Dienelt & Co.....	22,032	Nov. 22	61	1163
Tonics.....	McAvoy Brewing Company.....	21,785	Sept. 27	60	1881
Tonics.....	E. Salhey.....	21,644	Aug. 16	60	1049
Tonics, remedies for diseases of the liver and blood and for bilious disorders.....	F. P. Davis.....	22,195	Dec. 20	61	1726
Tonics. Sarsaparilla.....	A. C. & G. F. Weber.....	21,959	Nov. 8	61	883
Tooth-powder.....	W. E. Burrows.....	21,428	July 12	60	293
Towels. Sanitary.....	Southall Bros. & Barclay.....	20,803	Mar. 1	58	1098
Towels. Turkish.....	D. Howarth.....	21,323	June 21	59	1915
Toy.....	C. A. Bonner.....	21,852	Oct. 4	61	150
Toy resembling planchette.....	W. S. Reed Toy Company.....	20,566	Jan. 5	58	2
Toy teu-plus.....	W. S. Reed Toy Company.....	20,805	Mar. 1	58	1098
Trays. Tea.....	Estate of W. M. Conger, Jr.....	21,036	Apr. 26	59	627
Trees. Nursery-grown plum.....	Albaugh Nursery and Orchard Company.....	22,097	Nov. 29	61	1312
Trousers. Waistbands for.....	N. J. Schloss & Co.....	20,677	Feb. 2	58	526
Trucks for street-cars. Motor.....	J. G. Brill Company.....	20,704	Feb. 9	58	658
Trucks. Tramway.....	Sheffield Velocipede Car Company.....	21,057	Apr. 26	59	628
Twine.....	Sutherland & Edwards.....	20,714	Feb. 16	58	810
Type-writers. Single-keyed.....	Liberty Manufacturing Company.....	21,998	Nov. 15	61	1011
Type-writing machine.....	Wyckoff, Seamans & Benedict.....	21,819	Oct. 4	61	148
Umbrellas and parts thereof.....	Samuel Fox & Company.....	21,643	Aug. 16	60	1049
Umbrellas, umbrella-ribs, stretchers, and frames of metal.....	S. Fox & Company.....	20,692	Jan. 26	58	390
Underwear.....	Mattes & Lutz.....	20,746	Feb. 23	58	952
Underwear and the knit and woven fabrics of which it is composed.....	Dr. Jaeger's Sanitary Woolen System Company.....	21,500	July 19	60	436
Underwear, including hosiery.....	J. S. Lowrey & Co.....	21,766	Sept. 20	60	1748
Underwear. Swiss ribbed.....	Spielmann & Co.....	21,278	June 7	59	1004
Uniforms. Naval, military, society, and theatrical.....	Horstmann Bros. & Co.....	21,304	June 14	59	1760
Valves.....	Dunham, Carrigan & Hayden Company.....	21,322	June 21	59	1914
Vaporizers, volatilizers, and inhalers.....	C. L. Coulter.....	22,155	Dec. 13	61	1651
Varnish.....	Mayer & Loewenstein.....	21,949	Nov. 8	61	882
Varnish or polish. Furniture.....	H. B. Taylor.....	22,137	Dec. 6	61	1477
Varnish. Picture.....	G. H. Story.....	21,588	Aug. 9	60	891
Varnishes.....	G. L. Wood & Son.....	20,919	Mar. 29	58	1698
Varnishes and japans.....	National Varnish Company.....	21,610	Aug. 16	60	1046
Varnishes, paints, japans, and analogous materials or compounds.....	N. Z. Graves & Company.....	21,584	Aug. 9	60	891
Vaseline.....	Chesebrough Manufacturing Company.....	21,727	Sept. 6	60	1476
Vegetables and foods prepared thereof. Desiccated raw.....	D. Aigler.....	22,081	Nov. 29	61	1310
Vegetables and green and dried fruits.....	Ryan & Richardson.....	21,563	Aug. 2	60	734
Veils. Ladies' face.....	S. Oppenheimer & Levy.....	22,104	Dec. 6	61	1474
Velocipedes and parts thereof and wheels for use in light vehicles.....	Ames & Frost Company.....	21,828	Oct. 4	61	149
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,567	Jan. 12	58	148
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,694	Feb. 9	58	658
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,695	Feb. 9	58	658
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,696	Feb. 9	58	658
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,697	Feb. 9	58	658
Velveteen.....	Meyerhof, Marx & Simonsen.....	20,698	Feb. 9	58	658
Velveteen.....	Meyerhof, Marx & Simonsen.....	21,238	May 31	59	1430
Velveteens.....	Haslam's.....	21,393	June 28	59	2070
Vending-machines. Cylindrical frangible boxes for use in coin-controlled.....	National U. S. Stamp Delivery Company.....	21,271	June 7	59	1603
Vermifuge for animals.....	A. R. Olney and G. D. McDaid.....	20,826	Mar. 8	58	1362
Vermion on the human body. Preparation for destroying.....	F. W. Baker and H. Levy.....	21,365	June 28	59	2068
Veterinary medicines and preparations.....	S. Pettifer & Son.....	21,451	July 12	60	294
Veterinary medicines and preparations.....	S. Pettifer & Son.....	21,786	Aug. 9	60	891
Veterinary powders.....	A. Mitchell & Co.....	21,698	Aug. 30	60	1323
Veterinary remedies.....	Kentucky Veterinary Medicine Company.....	22,271	Dec. 27	61	1946
Veterinary remedies.....	H. Williams.....	21,009	Apr. 19	59	461
Veterinary remedies, including condition-powders for horses and cattle.....	E. A. Craighill & Co.....	21,492	July 19	60	435
Vinegar.....	Howard Bros.....	21,111	May 10	59	938
Vinegar. Cider.....	Duffy, Mountfort & Greene Cider Company.....	21,944	Nov. 8	61	882
Vinegar, pickles, catsups, chow-chow, mustard, and sauces.....	M. A. Gedney Pickling Company.....	21,742	Sept. 13	60	1607
Washing-machines.....	Bluffton Manufacturing Co.....	22,006	Nov. 15	61	1014
Washing-machines.....	L. H. Hespos.....	20,708	Feb. 9	58	658

Alphabetical list of trade-marks—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Washing-machines. Hand	Vandergrift Manufacturing Com- pany.	22,053	Nov. 22	61	1164
Washing-machines. Hand	Vandergrift Manufacturing Com- pany.	22,054	Nov. 22	61	1164
Washing-machines. Hand-power	Boss Washing Machine Company	21,651	Aug. 23	60	1185
Washing-powder	T. Armstrong	21,470	July 19	60	434
Washing-powder	N. K. Fairbank & Company	20,864	Mar. 22	58	1562
Washing-powder	Hurd & Lawrie	21,188	May 24	59	1255
Washing-powder	H. E. Paramore	20,736	Feb. 16	58	810
Watchcases	Dubois Watch Case Company	20,644	Jan. 26	58	390
Watchcases	Fahys Watch Case Company	20,613	Jan. 19	58	280
Watchcases	Fahys Watch Case Company	20,614	Jan. 19	58	280
Watchcases	Fahys Watch Case Company	20,990	Apr. 19	59	460
Watchcases and watch-movements	S. F. Myers & Co.	20,570	Jan. 5	58	2
Watch-springs	Sussfeld, Lorsch & Co.	20,738	Feb. 16	58	810
Watches	Elgin National Watch Company	21,461	July 19	60	433
Watches	Elgin National Watch Company	21,462	July 19	60	433
Watches	Elgin National Watch Company	21,463	July 19	60	433
Watches	Elgin National Watch Company	21,464	July 19	60	433
Watches	Elgin National Watch Company	21,465	July 19	60	433
Watches	Elgin National Watch Company	21,801	Sept. 27	60	1882
Watches	Hampden Watch Company	22,180	Dec. 20	61	1785
Watches	Waterbury Watch Company	22,070	Nov. 29	61	1309
Watches and jewelry	H. W. Wheeler & Co.	21,725	Sent. 6	60	1475
Watches and portable clocks	W. C. Ball	21,169	May 24	59	1254
Watches and portable clocks	W. C. Ball	21,308	June 14	59	1760
Watches and portable clocks	W. C. Ball	21,309	June 14	59	1760
Watches and portable clocks	W. C. Ball	21,625	Aug. 16	60	1048
Watches and portable clocks	W. C. Ball	21,626	Aug. 16	60	1048
Watches and portable clocks	W. C. Ball	22,181	Dec. 20	61	1785
Watches, watchcases, and movements	B. L. Strasburger & Co.	20,806	Mar. 1	58	1098
Water-closet tanks and back-boards therefor, water-closet seats, and bent-wood rims for bath-tubs.	Bnick & Sherwood	20,753	Feb. 23	58	952
Waterproof goods of india-rubber and cloth fabrics and gar- ments made therefrom.	Campbell, Achnach & Co.	20,690	Feb. 9	58	658
Wax. Artificial	J. Fottrell	20,549	Jan. 5	58	2
Whalebone. Raw and manufactured	New England Whalebone Manufac- turing Company.	21,939	Nov. 8	61	881
Wheat, corn, barley, and rye	F. H. Peavey & Co.	21,191	May 24	59	1256
Wheat. Flaked	T. B. Taylor	20,621	Jan. 19	58	280
Wheat. Rolled	Pettijohn California Breakfast Food Company.	21,166	May 24	59	1254
Wheat. Rolled	Pettijohn California Breakfast Food Company.	21,215	May 31	59	1428
Wheat. Rolled	Pettijohn California Breakfast Food Company.	21,216	May 31	59	1428
Wheat. Rolled	Pettijohn California Breakfast Food Company.	21,231	May 31	59	1429
Wheat. Rolled	Pettijohn California Breakfast Food Company.	21,232	May 31	59	1429
Wheelbarrows. Metallic	J. C. McNeil Company	21,602	Aug. 9	60	892
Whips	Pomeroy & Van Deusen	21,844	Oct. 4	61	150
Whisky	Wm. Berghental Company	21,594	Aug. 9	60	891
Whisky	Betterton & Co.	21,281	June 14	59	1758
Whisky	S. C. Boehm & Co.	21,807	Oct. 4	61	147
Whisky	S. C. Boehm & Co.	21,508	Oct. 4	61	147
Whisky	Boldrick, Callaghan Company	21,162	May 24	59	1254
Whisky	Boldrick, Callaghan Company	21,163	May 24	59	1254
Whisky	A. Cowan	21,514	July 26	60	572
Whisky	Dallemand & Co.	21,237	May 31	59	1430
Whisky	A. Dryfoos & Co.	20,961	Apr. 12	59	294
Whisky	Duncan, Alderdice & Company	21,275	June 7	59	1604
Whisky	Fible & Crabb Distilling Company	21,078	May 3	59	786
Whisky	C. H. Graves & Sons	22,076	Nov. 29	61	1310
Whisky	G. Gump & Sons	21,229	May 31	59	1429
Whisky	Heyman Brothers	20,823	Mar. 8	58	1262
Whisky	W. H. Jones & Co.	21,421	July 5	60	155
Whisky	W. H. Jones & Co.	21,537	Aug. 2	60	732
Whisky	S. L. Kuschewsky	22,125	Dec. 6	61	1476
Whisky	W. H. McBrayer	20,808	Mar. 1	58	1098
Whisky	W. H. McBrayer	20,809	Mar. 1	58	1098
Whisky	W. H. McBrayer	20,810	Mar. 1	58	1098
Whisky	Meyer Brothers Drug Company	20,670	Feb. 2	58	526
Whisky	J. Miller & Co.	21,266	June 7	59	1603
Whisky	J. Miller & Co.	21,545	Aug. 2	60	733
Whisky	J. Miller & Co.	21,748	Sept. 13	60	1608
Whisky	E. N. Monroe	21,140	May 17	59	1101
Whisky	J. Olwell & Co.	22,219	Dec. 20	61	1788
Whisky	T. Pease, Son & Co.	21,504	July 19	60	436
Whisky	Renauld & Niederstadt	21,662	Aug. 23	60	1186
Whisky	Renauld & Niederstadt	21,663	Aug. 23	60	1186
Whisky	Rich Grain Distillery Company	20,606	Jan. 12	58	148
Whisky	C. M. Roof	21,467	July 19	60	433
Whisky	C. D. Smith Drug Company	21,737	Sept. 13	60	1607
Whisky	Vincent, Hathaway & Co.	20,894	Mar. 22	58	1562
Whisky	Voneiff Bros	20,715	Feb. 16	58	810
Whisky	W. Walsmann	21,986	Nov. 15	61	1013
Whisky. Bourbon	Meyer Brothers Drug Company	22,126	Dec. 6	61	1476
Whisky. Irish	G. Stinson	21,246	May 31	59	1430
Whisky, rum, gin, cordials, and California wines and brandy.	DeLafield, McGovern & Co.	21,811	Oct. 4	61	147
Whisky. Rye	W. H. Jones & Co.	20,605	Jan. 12	58	148
Whisky. Rye	Mayer, Sons & Co.	22,127	Dec. 6	61	1476
Whisky. Rye	J. Simms & Co.	21,167	May 24	59	1254
Whisky. Rye and bourbon	Cnshman & Co.	20,910	Apr. 19	59	461

Alphabetical list of trade-marks—Continued.

Design.	Name.	No.	Date.	Official Gazette.	
				Vol.	Page.
Whisky. Rye and bourbon	I. Massman	21,418	July 5	60	155
Windmills	Baker Manufacturing Company	22,056	Nov. 22	61	1164
Wine. Bitter	J. Kolin	21,609	Aug. 16	60	1046
Wine. Sherry	E. Feldmann	21,466	July 19	60	433
Wines	Avérous Frères	20,686	Feb. 9	58	658
Wines	Avérous Frères	20,687	Feb. 9	58	658
Wines	Empire State Wine Co	20,842	Mar. 15	58	1420
Wines	Stone Hill Wine Co	20,747	Feb. 23	58	952
Wines and brandies	L. J. Rose & Company	21,217	May 31	59	1428
Wines and cordials	A. de Montebello & Co	20,859	Mar. 22	58	1562
Wines and distilled liquors. Sparkling and still	Delafield, McGovern & Co	20,856	Mar. 22	58	1562
Wines and liquors	Netter Bros	21,984	Nov. 15	61	1013
Wines and liquors. California	C. Schilling & Co	20,835	Mar. 15	58	1420
Wines and whiskies. Bottled	C. F. Bode	20,945	Apr. 5	59	156
Wines, brandies, and cordials	A. de Montebello & Co	20,776	Mar. 1	58	1098
Wines. Portuguese	Companhia Geral D' Agricultura dos Vinhos do Alto Douro	21,716	Sept. 6	60	1475
Wines. Vegetable ferment for the manufacture of	F. Chavauty	21,627	Aug. 16	60	1048
Wire. Barbed	Washburn & Moen Manufacturing Company	20,716	Feb. 16	58	810
Wooden ware for household use, and for buckets, tubs, and receptacles or work made by coopers. Hollow and other	Strassheim & Jaeger	21,220	May 31	59	1428
Woodworking machinery or machines	Berlin Machine Works	21,391	June 28	59	2070
Wool dress goods	F. Arnold	20,925	Apr. 5	59	154
Wool dress goods	Firm of Friedrich Arnold	21,075	May 3	59	786
Wool-fat	Norddeutsche Wollkammerei & Kammgarnspinnerei	22,095	Nov. 29	61	1312
Worsteds, corkscrews, union cassimeres, cheviots, satinets, and cottonades. Fancy	T. T. Hazard & Sons	20,767	Feb. 23	58	952
Wringers	American Wringer Company	21,590	Aug. 9	60	891
Wringers	American Wringer Company	21,591	Aug. 9	60	891
Wringers	American Wringer Company	21,592	Aug. 9	60	891
Wringers	American Wringer Company	21,593	Aug. 9	60	8-1
Wringers	American Wringer Company	22,224	Dec. 20	61	1788
Wringers	American Wringer Company	22,225	Dec. 20	61	1788
Wringers	American Wringer Company	22,226	Dec. 20	61	1788
Yarn and thread. Linen and hemp	Finlayson, Bousfield & Co	21,356	June 28	59	2067
Yarn and thread. Linen and hemp	Finlayson, Bousfield & Co	21,392	June 28	59	2070
Yarn. Cotton	Sanford Spinning Company	21,745	Sept. 13	60	1608
Yarns. Cotton	McConnel & Company	21,796	Sept. 27	60	1882
Yarns. Knitting and mending cotton	Tucker & Cook Manufacturing Company	21,801	Nov. 1	61	719
Yeast	C. E. Hill & Co	20,722	Feb. 16	58	810
Zwieback, (a twice-baked bread)	J. Stapenhorst	22,029	Nov. 22	61	1163

ALPHABETICAL LIST OF LABELS.

Title.	Name.	No.	Date.	Official Gazette.	
				Volume.	Page.
"Housekeepers' Gingham Aprons." (For aprons.)	Hope Mills Manufacturing Company	6,545	June 14	59	1612
"Palmer's Patent." (For hammocks)	I. E. Palmer	6,540	Mar. 15	58	1420
"Palmer's Patent." (For hammocks)	I. E. Palmer	6,541	Mar. 22	58	1562
"Palmer's Patent." (For hammocks)	I. E. Palmer	6,543	Mar. 22	58	1562
"Palmer's Patent." (For hammocks)	I. E. Palmer	6,544	Mar. 22	58	1562
"Palmer's Patent Hammock"	I. E. Palmer	6,542	Mar. 22	58	1562

DISCLAIMERS.

Invention.	Patentee.	No. of patent.	Date of patent.	Disclaimer filed.	Official Gazette.	
					Vol.	Page.
Air-pumps	H. and F. G. A. Schulze-Berge	428,628	May 29, 1890	Sept. 2, 1892	60	1484
Coloring and burnishing compositions	J. F. Thompson	473,679	Apr. 26, 1892	June 11, 1892	59	1768
Horse hay-rake	M. H. Kenega	259,550	June 13, 1882	May 14, 1892	59	1112
Hydraulic cranes	J. Kennedy and H. Aiken. (Re-issue.)	11,164	May 3, 1891	Dec. 12, 1892	61	1666
Manufacturing curled hair	P. Woll, Jr.	458,721	Sept. 1, 1891	May 5, 1892	59	794
Soldering-machine	F. G. Slemmer	466,580	Jan. 5, 1892	June 11, 1892	59	1612
Spectacle-bridges	T. McBride and E. Fisher	461,364	Oct. 13, 1891	Apr. 15, 1892	59	475





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